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About Online Help

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Get Started

Get Started with Dell Data Security

- Once your environment has been configured in the Server Configuration Tool, ensure that Dell services are .
- Log in to the Management Console.
- Add Client Access Licenses, as needed.
- Add domains from your directory server.
- If you require that users receive non-default policies upon activation, modify policies at the appropriate level.
- Add groups and users, as necessary.
- Assign administrators, as necessary.
- Deploy clients.

Log In

To perform a given administrative procedure, an administrator must first log in to the Management Console using an appropriate Dell administrator account.

The Dell Server installs with a default super administrator user name (superadmin) and password (changeit) that you can use to add additional Dell administrator accounts.

1. Open a supported browser and type http://<server.domain.com>:8443/webui/login.
2. If you are logging in for the first time, in the Username, enter superadmin. In the Password, enter changeit.
   If you are not logging in for the first time, enter your user name in one of the formats listed below. In Password, enter <your_case-sensitive_password>.
   user@domain.com (preferred format)
   sAMAccountName, such as jsmith
   <DOMAIN>\<Username> - You must specify your domain name as an alias to use this format. For more information, refer to Add Domains.
3. Click Sign in.

To log out, see Log Out.

Log Out

If you are an account administrator and make changes to your own account, you must log out and log back in to see the results.

- Click the gear icon in the top right corner of the Management Console and select Log out from the menu.
Dashboard

The dashboard displays an overview of status information for your enterprise. Access more detailed information directly from the dashboard by clicking its statistics, graphs, and chart legends.

In the top right, select the **Widgets** menu to add or remove the following widgets:

- Notifications
- Protection Status
- Threat
- Protection History
- Inventory History
- Summary Statistics

The images below reflect what may be seen in the dashboard, depending on widgets enabled. Content may vary based on the features installed and enabled on your Dell Server and endpoints.

Click an area below to view a description of the detail accessible by clicking the same area in the dashboard.
An Advanced Threat Prevention event is not necessarily a threat. An event is generated when a recognized file or program is quarantined, safe listed, or waived. Threats are a category of events that are newly detected as potentially unsafe files or programs and require guided remediation.
Get Started

Change Superadmin Password

1. In the masthead at the top of the screen, click the gear icon and select **Change superadmin password**.

2. Enter the current password.

3. Enter the new password.

   The new password must be at least 6 characters, contain at least one capital letter and one of these characters: ~@#$%^*()|?!{}[].

4. Confirm the new password.

5. Click **Update**.

After three failed login attempts, the superadmin account is locked for five minutes. To change these settings, see **Set or Change Account Lockout Settings**.
Components

Default Port Values

Compatibility Server: TCP/1099 (closed)
Compliance Reporter: HTTP(S)/8084
Identity Server: HTTPS/8445
Core Server: HTTPS/8888
Policy Proxy: TCP/8000/8090
Security Server: HTTPS/8443
Forensic Server: HTTPS/8448
Client authentication: HTTPS/8449 (If using Dell Encryption on a server operating system)
Management Console: HTTPS/8443
Client communication if using Advanced Threat Prevention: HTTPS/TCP/443
NTP time synchronization: TCP and UDP/123 (for more information, refer to https://help.ubuntu.com/10.04/serverguide/NTP.html.)

Proxy Servers

The proxy server installation, implementation, and deployment are fast and easy. The proxy server is a simplified web server with a single web application.

Types of Proxy Servers

- Security Server (defaults to 8443)
- Core Server (defaults to 8888)
- Device Server (defaults to 8081) see Note
The purpose of Device Server proxy is to support legacy Encryption clients (pre-v8.0) that communicate with port 8081. Newer Encryption clients (v8.0 and later) are configured by the client installer to communicate with the Security Server (or Security Server proxy) on port 8443. The full Device Server is not installed in v8.1. The Device Server proxy forwards all communications to the Security Server behind the firewall.
**Policy Proxy**

Policy Proxy serves as intermediary between Dell Server and Encryption client, delivering information from each to the other.

**Time Slotting**

To prevent Dell Server traffic jams, Policy Proxies use a time slotting mechanism that allows them to independently choose well-distributed time slots for communicating with the Dell Server.

**Polling**

On every poll, the endpoint authenticates, checks for policy updates, and uploads inventory. A successful authentication is required for the process to begin.

**Poll Triggers**

A user must be logged in to poll. On the next user login, another poll occurs. The poll information needed is only available per user, and when that user is logged in.

Other times a poll occurs:

- Immediately upon login, after encryption keys are unlocked.
- When a network status update is signaled by the operating system (cable plugged in, wireless network connected, VPN becomes active).
- When the polling period elapses, as specified by policy.

**Failed Poll Attempts**

Policy Proxy poll attempts are based on a timer. When a poll attempt fails, the timer is reset. The length of time set for the next attempt is based on when the attempt failed. If the device misses a poll when powered off, the timer is triggered when the device is next powered on.

If the poll attempt failed while making the attempt, the time is set to one tenth the policy value for the polling interval. For example, if the polling interval is 100 minutes, then the next interval after a failed attempt is 10 minutes. If it fails again, the next interval is still 10 minutes. The interval remains 10 minutes until a successful poll, after which it returns to 100 minute intervals.

**General Information**

- Policy Proxy is generally installed on only a few computers.
- Creates inventory information for the Dell Server.
- Passes on to the Dell Server device inventory it receives when the Encryption client successfully retrieves policies.
- Securely distributes security policies and encryption keys to devices via the network when contacted.
- May be in your DMZ.
- Always belongs to a group. By default, all Policy Proxies belong to the same group.
Navigate the Dell Server

Navigation

The Management Console is a central control center that the administrator can use to deploy and monitor security for the organization. It consists of security and configuration settings that are applied through policy to groups called Populations.

The menu pane allows access to the following:

Dashboard

The Management Console opens to the dashboard. The dashboard provides graphs and statistics on endpoints and threat protection as well as summary statistics on populations and operating systems.

Populations

A population is a grouping for which security policies, settings, and actions can be configured. For example, security policies can be applied at the Enterprise, Domain, User Group, User, Endpoint Group, and Endpoint levels. See Populations. See Manage Security Policies.

Reporting

Reporting menu items provide reports on the protection state of the environment and endpoints, deployment issues that require action, and devices within the network. Create and manage reports with the Manage Reports tool or by launching Compliance Reporter. This menu allows you to collect, view, and export audit events to a SIEM server.

Management

Commit policies, manage licenses, services, and alerts.

Masthead Icons

The following icons display on the masthead:

1. Logged in user - The user icon and name of the user that is currently logged on.
2. Gear icon - From the gear icon, you can Change the Superadmin Password, view information about the Dell, get Dell ProSupport contact information, and log out.
3. Question mark icon - Open a help topic that explains the current screen in the Management Console.

Disconnected Mode

Disconnected mode allows a Dell Server to manage Advanced Threat Prevention endpoints without client connection to the Internet or external network. Disconnected mode also allows the Dell Server to manage clients without Internet connection or a provisioned and hosted Advanced Threat Prevention service. The Dell Server captures all event and threat data in Disconnected mode.
To determine if a Dell Server is running in Disconnected mode, click the gear icon at the top right of the Management Console and select About. The About screen indicates that a Dell Server is in Disconnected mode, below the Dell Server version.

Disconnected mode is different than a standard connected installation of Dell Server in the following ways.

**Client Activation**

An install token is generated when the administrator uploads an Advanced Threat Prevention license, which allows the Advanced Threat Prevention client to activate.

**Management Console**

The following items are not available in the Management Console when Dell Server is running in Disconnected mode:

- The following areas specific to Advanced Threat Prevention: Advanced Threats by Priority, (Advanced Threat) Events by Classification, Advanced Threats Top Ten, and Advanced Threat Prevention Events.

- **Enterprise > Advanced Threats** tab, which provides a dynamic display of detailed events information for the entire enterprise, including a list of the devices on which events occurred and any actions taken on those devices for those events.

- (Left navigation pane) **Services Management**, which allows enabling of the Advanced Threat Prevention service and product notifications enrollment.

The following item is available to the Management Console when Dell Server is running in Disconnected mode:

- **Enterprise > Advanced Threat Events** tab, which list events information for the entire enterprise based on information available in the Dell Server, even when running in Disconnected mode.

**Functionality**

The following functionality is not available in the Management Console when Dell Server is running in Disconnected mode:

- Security Management Server upgrade, update, and migration
- Security Management Server Virtual auto update - an update must be done manually
- Advanced Threat Prevention auto update
- Upload of Unsafe or Abnormal Executable files for Advanced Threat Prevention analysis
- Advanced Threat Prevention file upload and log file upload

The following functionality differs:

- The Dell Server sends the Global Safe List, Quarantine List, and Safe List to client computers.
- The Global Safe List is imported to the Dell Server through the Global Allow policy. For more information, see the Global Allow policy.
- The Quarantine List is imported through Quarantine List policy. For more information, see the Quarantine List policy.
- The Safe List is imported through Safe List policy. For more information, see the Safe List policy.

**Dashboard**
Dashboard

The dashboard displays an overview of status information for your enterprise. Access more detailed information directly from the dashboard by clicking its statistics, graphs, and chart legends.

In the top right, select the **Widgets** menu to add or remove the following widgets:

- Notifications
- Protection Status
- Threat
- Protection History
- Inventory History
- Summary Statistics

The images below reflect what may be seen in the dashboard, depending on widgets enabled. Content may vary based on the features installed and enabled on your Dell Server and endpoints.

Click an area below to view a description of the detail accessible by clicking the same area in the dashboard.
An Advanced Threat Prevention event is not necessarily a threat. An event is generated when a recognized file or program is quarantined, safe listed, or waived. Threats are a category of events that are newly detected as potentially unsafe files or programs and require guided remediation.
Notifications List

The notifications list provides a configurable summary of news, alerts, and events to display on the dashboard or to be sent as email notifications. For more information, see Dashboard Field Descriptions and Notification Management.

Notification Types

Select the notification types to include in the list. Notifications of the remaining types are hidden.

Types include:

- **Update** - News of upcoming product updates. To view and receive product updates, you must enroll to receive them. Select Services Management > Product Notifications, click On, then click Save Preferences.

- **Config** - News about configuration changes.

- **Knowledge Base** - Summaries and links to knowledge base articles with in-depth technical information such as work arounds and configuration methods.

- **Announcement** - News of upcoming releases and new products.

- **Threat Protection** - A threat alert from Advanced Threat Prevention.

- **Advanced Threat Event** - An event detected by Advanced Threat Prevention. The summary contains a listing of Critical, Major, Minor, Caution, and Information events, with links to more detailed information.

- **Threat Event** - An event detected by Threat Protection.

Server Exceptions - A Dell Server communication issue is impacting deliveries of the following notifications: Threat Protection, Update, Config, Knowledge Base, and Announcement.

After selecting one or more types, click in the neutral space above the list to apply the selections.

Select Clear selected items to reset the selections in this list.

Priority Levels

Notification priority levels are not related to priority levels displayed on the dashboard other than in the notifications area.

Priorities are Critical, High, Medium, and Low. These priority levels are only relative to one another within a type of notification.

Select the priority levels of notifications to include in the dashboard notifications area or email notifications lists. Notifications of the remaining priority levels are not included in the dashboard or email notifications lists.

In the dashboard, after selecting one or more priority levels, click in the neutral space above the list to apply selections.

Select Clear selected items to reset the selections in this drop down list. All notifications will display (unless filtered elsewhere).

Endpoint Protection Status

In the Endpoint Protection Status section of the dashboard, view endpoint status by platform: Windows, Mac, and All Platforms with a numeric value and bar chart that shows the numbers of protected and unprotected endpoints. A pie chart representing total protected and unprotected endpoints displays on the left.

Click a value to display a list of the endpoints represented in the value.

Protection Status

To access this page, click a link in the dashboard’s Endpoint Protection Status graph. Click a specific platform type or All. The page provides protection details on the endpoints within that platform.

Platform - Windows, Mac, All, Protected, or Not Protected

Endpoint ID - Value that uniquely identifies the endpoint.

Protected - A green check mark indicates the endpoint is protected. The protection status of a Windows workstation is derived from the current encryption policies and encryption states of the Encryption client users, as well as the current device encryption policy and state of the endpoint. On the dashboard's Endpoint Protection Status graph, select endpoints by platform, protected endpoints, non-protected endpoints, or all endpoints. See Protected.

Shield Inventory Received - The date and time that the inventory was received and placed in the queue.

Shield Inventory Processed - The date and time that the inventory was picked up from the queue and processed. (Note: If the server is under load, the Processed and Received times may be different, but usually they are the same.)

Agent Inventory Received - The date and time that the inventory was received and placed in the queue.
Agent Inventory Processed - The date and time that the inventory was picked up from the queue and processed (Note: If the Dell Server is under load, the Processed and Received times may be different, but usually they are the same.)

Shield - If encryption is installed on the endpoint, an icon displays.

Manager (Windows only) - If installed on the endpoint, an icon displays. This includes endpoints with activated PBA, SED, or BitLocker Manager.

**Threat Protection Status**

Threat Protection monitors the network for viruses, spyware, unwanted programs, suspicious communications through the firewall, and unsafe websites and downloads.

The Threat Protection Status pane shows threats by category: Critical, Major, Minor, and Caution. Each category is listed in a colored bar chart with a numerical value for the corresponding number of threats found during the time frame.

The time frame is selectable, in days: 1, 7, 14, 30, 60, and 90 days.

Click a Threat Category value to display a detailed list of threats included in the category.

**Threat Protection Status for Severity Level**

To access this page, click a value on the dashboard's Threat Protection Status graph.

This page provides a detailed view of threats based on individual severity levels and devices that have a threat within that severity level. The columns list the specific counts for each type of threat event on a device.

List of severity levels - Select a another option from the list (Critical, Major, Minor, Caution, Information). **Critical** is the most dangerous threat to the endpoint, and **Information** is a notification of an event that is unlikely to harm the endpoint.

List of days - Select a time frame option: 1, 7, 14, 30, 60, and 90 days.

Platform - The platform type

Device ID - Value that uniquely identifies the target device. Click a link to view information about that endpoint.

Event Count columns - For each device, lists the number for each of the following threat events:

- Malware/Exploit - Includes counts for viruses, spyware, and unwanted programs. This could be exploited buffer overflows that seek to execute arbitrary code on a device or attempts to exploit browser vulnerabilities. Counts may include malware that executes from within memory space.

- Web Filter - Includes threats related to web browsing and downloads.

- Web Protection - Includes threats related to web browsing and downloads.

- Firewall - Includes suspicious communications related to incoming or outgoing traffic and any attacks.

- Uncategorized - Lists the number of threats that do not belong in other event counts.

**Advanced Threat Prevention Events**

The Advanced Threat Prevention Events pane displays a time line of Advanced Threat events over the course of a month, by file type as assigned by Advanced Threat Prevention.
Click a file type for details of the events of that type.

File types include:

**Unsafe** - A suspicious file with a high score (-60 to –100) likely to be malware

**Abnormal** - A suspicious file with a lower score (-1 to –59) less likely to be malware

**Quarantined** - A file that is moved from its original location, stored in the Quarantine folder, and prevented from executing on a specific device.

**Waived** - A file allowed to execute on a specific device.

**Cleared** - A file that has been cleared within the organization. Cleared files include files that are Waived, added to the Safe list, and deleted from the Quarantine folder on a device.

For more detail about events, see Advanced Threat Prevention Classifications and Advanced Threats Top Ten

### Advanced Threats by Priority

Advanced Threats by Priority classifies suspicious files by priority levels of High, Medium, and Low. This prioritization helps administrators determine which threats and devices to address first. To view a list of threats with the corresponding priority level, click a value in Advanced Threats by Priority on the dashboard.

Files are analyzed for the following attributes:

- The file has a Cylance score greater than 80.
  
  A score is assigned to each file that is deemed Abnormal or Unsafe. The score represents the confidence level that the file is malware. The higher the number, the greater the confidence.

- The file is currently running.
- The file has been run previously.
- The file is set to auto run.
- The file is detected by Execution Control.

Files are prioritized based on the number of the above attributes it has:

- Low = 0-1 attributes
- Medium = 2-3 attributes
- High = 4-5 attributes

As an example, following is the analysis of three threats:

### Threat 1

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Attribute Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylance score</td>
<td>90</td>
<td>+1</td>
</tr>
<tr>
<td>Currently running on any device</td>
<td>True</td>
<td>+1</td>
</tr>
<tr>
<td>Attribute</td>
<td>Attribute Value</td>
<td>Score</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Ever run on any device</td>
<td>True</td>
<td>+1</td>
</tr>
<tr>
<td>Set to auto run on any device</td>
<td>True</td>
<td>+1</td>
</tr>
<tr>
<td>Detected by Execution Control</td>
<td>False</td>
<td>+0</td>
</tr>
<tr>
<td><strong>Total score</strong></td>
<td></td>
<td><strong>5: High Priority</strong></td>
</tr>
</tbody>
</table>

**Threat 2**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Attribute Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylance score</td>
<td>20</td>
<td>+0</td>
</tr>
<tr>
<td>Currently running on any device</td>
<td>True</td>
<td>+1</td>
</tr>
<tr>
<td>Ever run on any device</td>
<td>False</td>
<td>+0</td>
</tr>
<tr>
<td>Set to auto run on any device</td>
<td>True</td>
<td>+1</td>
</tr>
<tr>
<td>Detected by Execution Control</td>
<td>False</td>
<td>+0</td>
</tr>
<tr>
<td><strong>Total score</strong></td>
<td></td>
<td><strong>2: Medium Priority</strong></td>
</tr>
</tbody>
</table>

**Threat 3**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Attribute Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylance score</td>
<td>20</td>
<td>+0</td>
</tr>
<tr>
<td>Currently running on any device</td>
<td>False</td>
<td>+0</td>
</tr>
<tr>
<td>Ever run on any device</td>
<td>False</td>
<td>+0</td>
</tr>
<tr>
<td>Set to auto run on any device</td>
<td>False</td>
<td>+0</td>
</tr>
</tbody>
</table>
Advanced Threat Prevention Classifications

Advanced Threat Prevention can provide details on the static and dynamic characteristics of files. This allows administrators to not only block threats, but also to understand threat behavior to further mitigate or respond to threats.

Type of Threat

Threats are classified by the type of threat - Malware, Dual Use, and Potentially Unwanted Program.

Malware

If the file is identified as a piece of malware, the file should be removed or quarantined as soon as possible. Verified malware can be further subclassified as one of the following:

<table>
<thead>
<tr>
<th>Subclass</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backdoor</td>
<td>Malware that provides unauthorized access to a system, bypassing security measures.</td>
<td>Back Orifice, Eleanor</td>
</tr>
<tr>
<td>Bot</td>
<td>Malware that connects to a central Command and Control (C&amp;C) botnet server.</td>
<td>QBot, Koobface</td>
</tr>
<tr>
<td>Downloader</td>
<td>Malware that downloads data to the host system.</td>
<td>Staged-Downloader</td>
</tr>
<tr>
<td>Dropper</td>
<td>Malware that installs other malware on a system.</td>
<td></td>
</tr>
<tr>
<td>Exploit</td>
<td>Malware that attacks a specific vulnerability on the system.</td>
<td></td>
</tr>
<tr>
<td>FakeAlert</td>
<td>Malware that masquerades as legitimate security software to trick the user into fixing fake security problems at a price.</td>
<td>Fake AV White Paper</td>
</tr>
<tr>
<td>Generic</td>
<td>Any malware that does not fit into an existing category.</td>
<td></td>
</tr>
<tr>
<td>InfoStealer</td>
<td>Malware that records login credentials and/or other sensitive information.</td>
<td>Snifula</td>
</tr>
<tr>
<td>Ransom</td>
<td>Malware that restricts access to system or files and demands payment for removal of restriction, thereby holding the system for ransom.</td>
<td>CryptoLocker, CryptoWall</td>
</tr>
<tr>
<td>Remnant</td>
<td>Any file that has malware remnants post removal attempts.</td>
<td></td>
</tr>
<tr>
<td>Rootkit</td>
<td>Malware that enables access to a computer while protecting itself or other files to avoid detection and/or removal by administrators or security technologies.</td>
<td>TDL, Zero Access Rootkit</td>
</tr>
<tr>
<td>Trojan</td>
<td>Malware that disguises itself as a legitimate program or file.</td>
<td>Zeus</td>
</tr>
</tbody>
</table>
Virus  Malware that propagates by inserting or appending itself to other files.  Sality, Virut

Worm  Malware that propagates by copying itself to another device.  Code Red, Stuxnet

**Dual Use**

Dual Use indicates the file can be used for malicious and non-malicious purposes. Caution should be used when allowing the use of these files in your organization. For example, while PsExec can be a useful tool for executing processes on another system, that same benefit can be used to execute malicious files on another system.

<table>
<thead>
<tr>
<th>Subclass</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crack</td>
<td>Technologies that can alter (or crack) another application to bypass licensing limitations or Digital Rights Management protection (DRM).</td>
<td></td>
</tr>
<tr>
<td>Generic</td>
<td>Any Dual Use tool that does not fit into an existing category.</td>
<td></td>
</tr>
<tr>
<td>KeyGen</td>
<td>Technologies which can generate or recover/reveal product keys that can be used to bypass Digital Rights Management (DRM) or licensing protection of software and other digital media. Technologies that track a user's online activities without awareness of the user by logging and possibly transmitting logs of one or more of the following:</td>
<td></td>
</tr>
</tbody>
</table>
| MonitoringTool  | • user keystrokes  
• email messages  
• chat and instant messaging  
• web browsing activity  
• screenshot captures  
• application usage | Veriato 360, Refog Keylogger |
| Pass Crack      | Technologies that can reveal a password or other sensitive user credentials either by cryptographically reversing passwords or by revealing stored passwords. Technologies that can access another system remotely and administer commands on the remote system, or monitor user activities without user notification or consent. | l0phtcrack, Cain & Abel |
| RemoteAccess    | Programs that offer administrative features but can be used to facilitate attacks or intrusions. | Putty, PsExec, TeamViewer |
| Tool            |                                                                           | Nmap, Nessus, P0f       |

**Potentially Unwanted Programs**

The file has been identified as a Potentially Unwanted Program. This indicates that the program may be unwanted, despite the possibility that users consented to download it. Some PUPs may be permitted to run on a limited set of systems in your organization (EX. A VNC application allowed to run on domain administrator devices). A Dell Server administrator can choose to waive or block PUPs on a per device...
Navigate the Dell Server

basis or globally quarantine or safelist based on company policies. Depending on how much analysis can be performed against a PUP, further subclassification may be possible. Those subclasses are shown below and will aid an administrator in determining whether a particular PUP should be blocked or allowed to run:

<table>
<thead>
<tr>
<th>Subclass</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adware</td>
<td>Technologies that provide annoying advertisements (example: pop-ups) or provide bundled third-party add-ons when installing an application. This usually occurs without adequate notification to the user about the nature or presence of the add-on, control over installation, control over use, or the ability to fully uninstall the add-on.</td>
<td>Gator, Adware Info</td>
</tr>
<tr>
<td>Corrupt</td>
<td>Any executable that is malformed and unable to run.</td>
<td>Steam Games, League of Legends</td>
</tr>
<tr>
<td>Game</td>
<td>Technologies that create an interactive environment with which a player can play.</td>
<td>Steam Games, League of Legends</td>
</tr>
<tr>
<td>Generic</td>
<td>Any PUP that does not fit into an existing category.</td>
<td></td>
</tr>
<tr>
<td>HackingTool</td>
<td>Technologies that are designed to assist hacking attempts.</td>
<td>Cobalt Strike, MetaSp0it</td>
</tr>
<tr>
<td>Portable Application</td>
<td>Program designed to run on a computer independently, without needing installation.</td>
<td>Turbo</td>
</tr>
<tr>
<td>Scripting Tool</td>
<td>Any script that can run as if it were an executable.</td>
<td>AutoIT, py2exe</td>
</tr>
<tr>
<td>Toolbar</td>
<td>Technologies that place additional buttons or input fields on-screen.</td>
<td>Nasdaq Toolbar, Bring Me Sports</td>
</tr>
</tbody>
</table>

Score

A **Score** is assigned to each file. Negative scores, from -1 to -100 denote files that are deemed Abnormal or Unsafe. The score represents the confidence level that the file is malware. The higher the negative number, the greater the confidence.

File Type

The file is assigned a type, based on the score.

**File Types:**

- **Unsafe**: A file with a score ranging from -60 to -100. An Unsafe file is one in which the Advanced Threat Prevention agent finds attributes that greatly resemble malware.

- **Abnormal**: A file with a score ranging from -1 to -59. An Abnormal file has a few malware attributes but fewer than an unsafe file, thus is less likely to be malware.

**Note:** Occasionally, a file may be classified as Unsafe or Abnormal even though the score displayed doesn't match the range for the classification. This could result from updated findings or additional file analysis after the initial detection. For the most up-to-date analysis, enable **Auto Upload** in the Device Policy.

Priority Level
The file is given a priority level. The priority level helps administrators determine which threats and devices to address first. For more information, see Advanced Threats by Priority.

Advanced Threats Top Ten

Click Threats to view the threats found on the largest number of devices.

- Click a threat to display additional information about the threat. Details display on a new page.

Click Devices to view a list of devices that have the largest number of threats.

- Click a device to display additional information about the device. Details display on a new page.

Endpoint Protection History

This graph gives a time line snapshot of the past 90 days of the total number of endpoints that are protected and total number that are not protected. This graph is especially useful during initial deployment, when moving toward complete protection.

The green bars represent the total number of protected endpoints. The red bars represent the total number of endpoints that are not protected.

Endpoint Inventory History

This graph gives a time line snapshot of the past 90 days of the total number of endpoints that have communicated with and sent inventory to the Dell Server and the total number that have not sent inventory.

Summary Statistics

Summary Statistics provides a breakdown of the following:

- Domains
- User groups
- Endpoint groups
- AD users
- Local users
- Endpoints
- Protected
- Not protected
- Shields
- Managers
- Modified policies

Summary Statistics provides a breakdown of endpoints by platform, with a link to a detailed report for the selected platform:

- Windows
Navigate the Dell Server

- Mac
- All

Endpoint OS Report

To access this page, click a platform link on the dashboard's Summary Statistics. If you click All and the Platform Report page opens, click view in the OS Report column.

- OS/Version - Operating system name and version as reported in the endpoint's inventory
- Count - Number of endpoints or devices
- Shielded - Number of encrypted endpoints for that OS and version
- Unshielded - Number of endpoints for that OS and version that are not encrypted

Platform Report

- Click view for a report based on each operating system/version for that platform
- Endpoint List - Click the icon to navigate to the Endpoints page and the list of endpoints for that OS and version

Platform Report

To access this page, click All on the dashboard's Summary Statistics. If you click a specific platform link and access the Endpoint OS Report page, click view in the Platform Report column.

- Platform - Windows or Mac
- Count - Number of endpoints or devices Platform Report for that platform
- Shielded - Number of encrypted endpoints for that platform
- Unshielded - Number of endpoints for that platform that are not encrypted

Populations

A population is a grouping for which policies, settings, and actions can be configured.

To access a Populations page, click Populations in the left pane and select a Population. For example, Populations > Enterprise.

Tabs available on each Populations page provide information, allow you to edit details of the Population, and provide configuration options for that Population. The table lists the tabs available for each Population.
To access the tabs for each Population:

- **Enterprise** - Click Populations > Enterprise.
- Populations other than Enterprise - Click a Population link, then search for or click a Domain, User Group, User, Endpoint Group, Endpoint, or Administrator link.

The tabs available for an administrator may vary, depending on the role.

### Enterprise

#### View or Modify Enterprise Policies

To view or modify Enterprise policies, follow these steps:

1. In the left pane, click Populations > Enterprise.
2. Click the Security Policies tab.
3. Select the technology group, such as Windows Encryption, or policy group, such as Policy-Based Encryption, to view or modify.

#### View Threat Events

Threats are categorized as Malware/Exploit, Web Filter, Firewall, or Uncategorized events. The list of threat events can be sorted by any of the column headers. You can view threat events for the entire enterprise or for a specific endpoint. To view threat events of a specific endpoint, from the Enterprise Threat Events tab, select the endpoint's device in the Device ID column.

To view threat events in the enterprise, follow these steps:

1. In the left pane, click Populations > Enterprise.
2. Click the Threat Events tab.
3. Select the desired severity level and time period to display events.

To view threat events on a specific endpoint, follow these steps:

1. In the left pane, click Populations > Endpoints.
2. Search or select a hostname, then the Threat Events tab.
Manage Enterprise Advanced Threats

Advanced Threats tab

If the Advanced Threat Prevention service is provisioned and licenses are available, the Advanced Threats tab provides a dynamic display of detailed events information for the entire enterprise, including a list of the devices on which events occurred and any actions taken on those devices for those events. For information about provisioning the service, see Provision Advanced Threat Prevention Service.

To access the Enterprise Advanced Threats tab, follow these steps:

1. In the left pane, click Populations > Enterprise.
2. Select the Advanced Threats tab.

Information about events, devices, and actions are organized on the following tabs:

- **Protection** - Lists potentially harmful files and scripts and details about them, including the devices on which the files and scripts are found.
- **Agents** - Provides information about devices running the Advanced Threat Prevention client as well as the option to export the information or remove devices from the list.
- **Global List** - Lists files in the Global Quarantine and Safe list and provides the option to move files to these lists.
- **Options** - Provides a way to integrate with Security Information Event Management (SIEM) software using the Syslog feature as well as export Advanced Threat data.
- **Certificate** - Allows certificate upload. After upload, certificates display on the Global List tab and can be Safe listed.

Tables on the tabs can be organized in these ways:

- Add or remove columns from the table - Click the arrow next to any column header, select Columns, then select the columns you want to display. Clear the check box of columns to hide.
- Sort the data - Click a column header.
- Group by a column - Drag the column header up, until it turns green.
- Filter based on data of one column - click the down-arrow on any column to display the context menu, and select Filter.

Advanced Threat Events tab

The Advanced Threat Events tab displays information about events for the entire enterprise based on information available in the Dell Server.

The tab displays if the Advanced Threat Prevention service is provisioned and licenses are available.

To export data from the Advanced Threat Events tab, click Export and select Excel or CSV file format.

**Note:** Excel files are limited to 65,000 rows. CSV files have no size limit.

For a list of fields and filters on the tab, see Advanced Threat Events tab fields and filters.

Domains

Domains
On the Domains page, you can add a domain or search and select a domain to View or Modify Domain Information.

**Add a Domain**

To add a Domain, follow these steps:

1. In the left pane, click **Populations > Domains**.
2. On the Domains page, click **Add**.
3. Complete the fields on the Add Domains page.
   - **Domain DNS Suffix** - Enter the fully qualified host name or the computer name and domain portion of the hostname (for example, `<computer_name>.<domainname>.com`) for the enterprise directory server.
   - **Port** - Enter a port for the directory server. If you do not specify a port, the default port of 389 is used. The secure port, 636, uses an SSL connection instead of clear text. Global catalog ports are 3268 (clear-text) and 3269 (secure).
   - **Distinguished Name** - Populated when you tab from the completed Host Name field or refresh the URL. If necessary, correct the entry to reflect the domain (for example, DC=domainname, DC=com).
   - **User Name** - Enter a user name with rights for the domain to read and run queries on the enterprise directory server. The format must be UPN, such as user@domain.com. The credentials are domain-specific. Dell Server does not fully observe trusted relationships between domains.
   - **Password** - Enter a password with rights for the domain to read and run queries on the enterprise directory server. The credentials are domain-specific. Dell Server does not fully observe trusted relationships between domains.
4. In the Domain Alias area, enter the domain name or other alias and click **Add**. It is recommended that you add a pre-Windows 2000 domain name as an alias. You may enter any UPN suffixes that are allowed for the domain and are configured in the enterprise directory server.
   - A Domain Alias is a mapping the Dell Server uses to select which domains to search to locate users that might match the suffix in the UPN.
5. Click **Add Domain**.

**Users**

Users are added through reconciliation. Reconciliation is the automated process the Dell Server uses to compare user data in the Dell Server database with user data in the enterprise directory server and update the Dell Server database when necessary.

In the left pane, click **Populations > Users** and then click a user name, to view details about the user. Click the arrow next to a User Name to view the Common Name, sAM Account Name, and User Principal Name.

**Add a User by Domain**

1. In the left pane, click **Populations > Users**.
2. On the Users page, click **Add Users by Domain**.
3. In the Add Users by Domain dialog, select a domain from the pull-down list.
4. In *Full name*, enter the exact text for the user name or use the wildcard character (*).

5. Select Common Name, Universal Principal Name, or sAMAccountName from the list.

   A Common Name, Universal Principal Name, and sAMAccountName must be defined in the enterprise directory server for every user. If a user is a member of a domain or group but does not display in the domain or group members list in the Management Console, ensure that all three names are properly defined for the user in the enterprise directory server.

6. Click **Search**. Depending on the size, this may take a few minutes to populate.

   If the query is too large, a dialog prompts you to revise the query.

7. Select users from the directory user list to add to the Domain. The user names are added to the field below the list.

8. Click **X** to remove the user name or click **Add**.

---

**User Groups**

Add a user group, edit User Group priority, or search and select a user group to View or Modify User Group Policies and Information.

**Add a User Group**

1. In the left pane, click **Populations > User Groups**.

2. On the User Groups page, click **Add**.

3. Select the type of User Group from the list: **Active Directory User Group** or **ADMIN-DEFINED User Group**

4. Select a domain from the list.

5. For Active Directory User Groups, follow these steps:

   a. Enter the exact text for the group name or use the wildcard character (*).

   b. Click **Search**. Depending on the size, this may take a few minutes to populate.

   c. Select a group from the list to add to the domain. The group name is added to the field below the list.

      Click the **X** in the group name to remove the group name.

   d. Click **Add**.

6. For ADMIN-DEFINED User Groups, follow these steps:

   a. Enter the exact text for the group name or use the wildcard character (*).

   b. Enter a description for the group.

   c. Click **Add Group**.

**Notes:**

1. Universal security groups are only supported for domains that connect through the Global Catalog port.

   Nested groups are not supported.
Add Non-Domain Users

To add non-domain users, the non-domain activation feature can be enabled by contacting Dell ProSupport and requesting instructions.

View or Modify Domain Policies and Information

1. In the left pane, click Populations > Domains.
2. Search or select the appropriate Domain Name to display Domain Detail.
   When you click a Domain, the Domain Detail page displays.
3. Click the tab that corresponds with the action to perform:
   - Details & Actions - To view properties of the Domain, click Details & Actions
   - Members - To view, add, or modify information for groups and users within the domain. For instructions on how to perform these tasks, refer to the appropriate topic:

Add Users to Domain
Add User Groups
View or Modify User Information
View or Modify User Group Information
Settings - To configure LDAP settings for the domain, click Settings. Refer to Add Domains for instructions.

Domain Details & Actions

The Domain Details & Actions tab lists the properties of a domain.

To access the Domain Details & Actions tab, follow these steps:
1. In the left pane, click Populations > Domains.
2. Search or select a Domain Name, then the Details & Actions tab.

Details displayed on the Domain Details & Actions tab:

Domain Name - Name of the domain server. This should match the domain name in the title of the page.
Location - The location (path) of the domain within the enterprise structure. This information is derived from the fully qualified hostname or the computer name and domain portion of the hostname entered when the domain was added. Example: /com/enterpriseserver
LDAP Url - URL to the active directory. This field is populated after adding the domain. The information is derived from the completed hostname.
Example - LDAP://domainname.com:portnumber/DC=domainname,DC=com
To configure LDAP settings for the domain, click the Settings tab.
Status - Describes the health of the domain server (Good, Fair, Poor).

Domain Members
This page allows you to view, add, or modify information for groups and users within the domain.

To access the Domain Members tab, follow these steps:
1. In the left pane, click **Populations > Domains**.
2. Search or select a Domain Name, then the **Members** tab.

From this tab, you can perform these actions:
- **Add Users to Domain** - Allows you to add users by domain
- **Add Group** - Allows you to add a user group by domain

Select to view the following information about groups & users, users only, or groups only:
- **User/Group** - Each user or user group in the domain. Click an entry to view details.
- **Distinguished Name**
  - **CN** is the common name, either a user or group name.
  - **OU** is the organizational unit name, for example, Dallas.
  - **DC** are domain components, for example, DC=Organization, DC=com
- **Common Name** - For a user, the user name; for a group, the group name
- **User** - Column displays a green checkmark
- **Group** - Column displays a green checkmark

Domain Settings
This page allows you to configure or modify LDAP settings for the Domain.

To access the Domain Settings tab, follow these steps:
1. In the left pane, click **Populations > Domains**.
2. Search or select a Domain Name, then the **Settings** tab.

On the Domain Settings tab, you can view this information:
- **Directory URL** - Lists the current URL for the enterprise directory server. If you modify the settings, click **Refresh URL**.
- **Host Name** - The fully qualified hostname or the computer name and domain portion of the hostname (for example, <computer_name>.<domainname>.com) for the enterprise directory server.
- **Port** - The port for the directory server. If you do not specify a port, the default port of 389 is used. The secure port, 636, uses an SSL connection instead of clear text. Global catalog ports are 3268 (clear-text) and 3269 (secure).
- **Distinguished Name** - This field is populated when you tab from the completed hostname or refresh the URL. If necessary, correct the entry to reflect the domain (for example, DC=domainname, DC=com).
- **Secure LDAP** - Select this check box for LDAPS.
User Name - The user name with rights to read and run queries on the enterprise directory server. The format must be UPN, such as user@domain.com.

Password - Enter a password with rights to read and run queries on the enterprise directory server.

Alias - A mapping that the Dell Server uses to select which domains to search to locate users that might match the suffix in the UPN. The domain name or other alias. It is recommended that you add a pre-Windows 2000 domain name as an alias. You may enter any UPN suffixes that are allowed for the domain and are configured in the enterprise directory server.

Click Add, and the entry populates the field below.

Select an alias in the list, and click Remove Selected.

Update Domain - Click to update changes.

User Groups

Add a user group, edit User Group priority, or search and select a user group to View or Modify User Group Policies and Information.

Add a User Group

1. In the left pane, click Populations > User Groups.
2. On the User Groups page, click Add.
3. Select the type of User Group from the list: Active Directory User Group or ADMIN-DEFINED User Group
4. Select a domain from the list.
5. For Active Directory User Groups, follow these steps:
   a. Enter the exact text for the group name or use the wildcard character (*).
   b. Click Search. Depending on the size, this may take a few minutes to populate.
   c. Select a group from the list to add to the domain. The group name is added to the field below the list.
   Click the X in the group name to remove the group name.
   d. Click Add.
6. For ADMIN-DEFINED User Groups, follow these steps:
   a. Enter the exact text for the group name or use the wildcard character (*).
   b. Enter a description for the group.
   c. Click Add Group.

Notes:

1. Universal security groups are only supported for domains that connect through the Global Catalog port.

   Nested groups are not supported.
Remove User Groups

1. In the left pane, click **Populations > User Groups**.
2. Click a group name link or enter a filter to search for available groups. The wildcard character (*) is supported.
3. Select a row to highlight it.
4. At the top, click **Delete**.

As another option, click a group name link and select the **Details & Actions** tab. Click **Remove Group**.

If you remove a user group that has administrative privileges and later re-add the group, it remains an Administrator Group.

Find User Groups

1. In the left pane, click **Populations > User Groups**.
2. Enter a filter to search for available Groups. The wildcard character (*) is supported.
3. Click **Search**.

A Group or list of Groups displays, based on the search filter.

View or Modify User Group Policies and Information

1. In the left pane, click **Populations > User Groups**.
2. Search or select the appropriate group name to display the User Group Detail page. The wildcard character (*) is supported.

Click a group name to display the User Group Detail page.
3. Click the tab that corresponds with the action to perform:

   **Security Policies** - To view or modify policies of the Group, click **Security Policies**.

   **Details & Actions** - To view properties of the Group, click **Details & Actions**. Viewable information includes:
   
   - Group Name: Group1 (DOMAIN\Group1)
   - Distinguished Name: CN=Group1, OU=Dallas, DC=Organization, DC=com
   - Common Name: Group1
   - Last Modified in Directory - date and time stamp
   - Last Reconciled - date and time stamp
   - AG Enabled - is configured for a user group when selected

   **Members** - To view or modify the information of a user in the group, click **Members**. The list of users in the group displays. Click a user to view the user’s Security Policies, Details & Actions, Endpoints, User Groups, and Admin. For instructions on how to view or modify User information, refer to **View or Modify User Information**.

   **Admin** - To view, assign, or modify administrator roles assigned to the group, click **Admin**. Select or deselect administrator roles to modify administrator roles assigned to the Group. For
more information about privileges available to each administrator role, refer to Administrator Roles.

4. If modified, click **Save**.

**VDI User Policies**

To manage policy for users in a VDI environment, create a Windows domain group, associate domain users with that group, and then import the group into Dell Server. This allows Dell Server to manage the users and their policies.

Policy settings differ, based on whether persistent or non-persistent VDI is deployed in the environment. For an explanation of the differences between persistent and non-persistent VDI, see Persistent vs. Non-Persistent VDI.

**Policy and Configuration Requirements for VDI Users**

The policy requirements below are for VDI users running Advanced Threat Prevention. The list includes only policies that are significant for VDI users. VDI endpoint group policy settings must also meet certain requirements. See Policy and Configuration Requirements for VDI Endpoint Groups.

**Note:** Ensure that you turn off Advanced Threat Prevention Agent Auto Update. In the left pane of the Management Console, select Management > Services Management > Advanced Threats - Agent Auto Update, then select **Off**.

**Note:** With Persistent VDI groups, ensure that roaming user profiles are configured.

These policy and configuration settings for VDI users must be configured before VDI client activation:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Category</th>
<th>Policy or Setting</th>
<th>Persistent VDI group setting</th>
<th>Non-Persistent VDI group setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Policy-Based Encryption</td>
<td>On</td>
<td>Off</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Encrypt Outlook Personal Folders</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Encrypt Temporary Files</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Encrypt Temporary Internet Files</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Encrypt User Profile Documents</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Force Logoff/Reboot on Policy Updates</td>
<td>Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Removable Media Encryption</td>
<td>Windows Media Encryption</td>
<td>Windows Media Encryption</td>
<td>On</td>
<td>On</td>
</tr>
<tr>
<td>Removable Media Encryption</td>
<td>Windows Media Encryption</td>
<td>EMS Scan External Media</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
</tbody>
</table>
Navigate the Dell Server
User Group Details & Actions
The User Group Details & Actions tab lists the properties of a selected user group.
1.

In the left pane, click Populations > User Groups.

2.

Search or select a group name, then the Details & Actions tab.
Remove Group
The Remove Group command permanently removes this user group from the Dell Server.
Details:
Group Name - Name of the user group <user group>(<domain name>\<user group>). This should
match the user group name in the title of the page.
Distinguished Name - CN=Group1, OU=Dallas, DC=Organization, DC=com
CN is the common name
OU is the organizational unit name
DC are domain components
Common Name - non-technical name of the user group
Last Modified - Date/time stamp of the last time this information changed.
Last Reconciled - Date/time stamp of the last time this information was reconciled.
s Enabled - is configured for a user group when selected.

User Group Members
This page displays information about each user within the user group.
1.

In the left pane, click Populations > User Groups.

2.

Search or select a Group Name, then click the numeral in the Members column.

User - Each user in that user group
Distinguished Name - CN=Group1, OU=Dallas, DC=Organization, DC=com
CN is the common name
OU is the organizational unit name
DC are domain components
Common Name - non-technical name of the user group
Add Users to the Group
1.

On the Members tab, click Add Users to Group.

2.

Search or select a user, then select the check box to the left of the user name.

3.

Click Add Selected Users to Group.
OR
Select Upload Multiple User from File, then click Browse to select a CSV file and click
Upload.

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Valid CSV requirements:

- The file must be in valid CSV format and contain a maximum of 999 endpoints.
- The first column must contain valid fully qualified host names. All columns except the first column are ignored.
- Only activated endpoints are added to the group.

Remove Users from the Group

1. In User Group Detail, search or select a user, then select the check box to the left of the user name.
2. Click Remove Users from Group.
3. Click OK.

Users can also be removed from the ADMIN DEFINED Groups.

User Group Admin

Assign, modify, or view Administrator roles for a group.

1. In the left pane, click Populations > User Groups.
2. Search or select a Group Name, then the Admin tab.
   Administrator Roles - Assign or modify roles for a group membership and click Save.
   Delegated Roles - Delegate Administrator rights for the Group to a User.

Related topics:
 Administrator Roles
 Assign or Modify Administrator Roles
 Delegate Administrator Roles

Edit Group Priority

The Group priority feature is used to determine policy precedence for effective policies that affect multiple groups. Group priority creates a weight associated with the specific group it is assigned to, and that weight is used to determine which policy setting is applied to an endpoint that is a member of more than one Endpoint Group when policy settings differ between those groups. Policy overrides are used from the group with higher priority when two (or more) separate groups have different priority levels.

Edit Endpoint Group Priority

Endpoint Group Priority can be changed only for Rule-Defined, Admin-Defined, and Active Directory Groups. System-Defined Group priority cannot be modified. In general, the Endpoint Group at the top of the list of Endpoint Groups has highest priority. The Endpoint Group at the bottom of the list has lowest priority.
**Precedence Ranking**

The System Defined Non-Persistent VDI Endpoint Group has the highest priority level, followed by the Persistent VDI Endpoint Group.

**Order of priority:**

1. Non-Persistent VDI Endpoint Group
2. Persistent VDI Endpoint Group
3. Highest ranked Active Directory/Rule-Defined/Admin-Defined Endpoint Group
4. Second and subsequent highest ranked Active Directory/Rule-Defined/Admin-Defined Endpoint Groups
5. Opt-in Endpoint Group
6. Default Endpoint Group

To change Active Directory/Rule-Defined/Admin-Defined Endpoint Group priority:

1. In the left pane, click **Populations > Endpoint Groups**.
2. Click **Edit Priority**.
3. Select the row of the appropriate group and drag it to the location in the list of Endpoint Groups that reflects its new priority level.
4. Click **Save**.

**Edit User Group Priority**

The user group at the top of the list has highest priority. The user group at the bottom of the list has lowest priority.
To edit User Group priority:

1. In the left pane, click **Populations > User Groups**.
2. Click **Edit Priority**.
3. Select the row of the appropriate group and drag it to the location in the list of Endpoint Groups that reflects its new priority level.
4. Click **Save**.

**Assign or Modify Administrator Roles**

View or modify existing administrator privileges.

1. In the left pane, click **Populations > Administrators**.
2. Search or select the row that displays the user name of the appropriate administrator to display User Detail.
3. View or modify administrator roles in the pane at the right.
4. Click **Save**.

Dell recommends assigning administrator roles at the Group level rather than at the User level.

1. In the left pane, click **Populations > User Groups**.
2. Search or select a group name, then the **Admin** tab.
3. Select or deselect administrator roles assigned to the group.
4. Click **Save**.

If you remove a group that has administrative privileges and later re-add the group, it remains an administrator group.

To view, assign, or modify administrator roles at the User level, see [User Admin](#).

**Related topics:**
Navigate the Dell Server

Administrator Roles

User Admin

Delegate Administrator Roles

View Reconciliation Date

To view the date and time a user group’s or user’s information was last reconciled with Active Directory, click the Details & Actions tab for the group or user, and refer to last reconciled. For instructions, refer to View or Modify User Group Policies and Information and View or Modify User Policies and Information.

View Policy Proxy State

The Management Console tracks the Policy Proxy’s policy updating state.

1. In the left pane, click Populations > Endpoints.
2. Select an endpoint type, for example, Workstation.
3. If you know the full endpoint hostname, enter it into Search and click .
   For Windows and Mac, enter the full endpoint hostname if you know it. Leave the field blank to display all Windows and Mac endpoints.
   If you do not know the full hostname, scroll through the list of available endpoints to locate the endpoint.
4. Click an endpoint in the list to display the endpoint detail.
5. Click the Details & Actions tab of the endpoint to view information.

Users

Users

Users are added through reconciliation. Reconciliation is the automated process the Dell Server uses to compare user data in the Dell Server database with user data in the enterprise directory server and update the Dell Server database when necessary.

In the left pane, click Populations > Users and then click a user name, to view details about the user. Click the arrow next to a User Name to view the Common Name, sAM Account Name, and User Principal Name.

Add a User by Domain

1. In the left pane, click Populations > Users.
2. On the Users page, click Add Users by Domain.
3. In the Add Users by Domain dialog, select a domain from the pull-down list.
4. In Full name, enter the exact text for the user name or use the wildcard character (*).
5. Select Common Name, Universal Principal Name, or sAMAccountName from the list.
   A Common Name, Universal Principal Name, and sAMAccountName must be defined in the enterprise directory server for every user. If a user is a member of a domain or group but does not display in the domain or group members list in the Management
console, ensure that all three names are properly defined for the user in the enterprise directory server.

6. Click **Search**. Depending on the size, this may take a few minutes to populate.

   If the query is too large, a dialog prompts you to revise the query.

7. Select users from the directory user list to add to the Domain. The user names are added to the field below the list.

8. Click **X** to remove the user name or click **Add**.

---

**Remove Users**

In general, a user cannot be removed in the Management Console. Instead, you must remove the user from Active Directory.

---

**Find Users**

1. In the left pane, click **Populations > Users**.

2. Do one of these:

   - Enter the user name or a filter in **Search** and click **Search**.
   - Enter Common Name, Universal Principal Name, or sAMAccountName. The wildcard character is supported.
   - Scroll through the user name list.

3. Click a link in the user name column.

   The User Detail page opens, displaying the Security Policies tab.

---

**Deactivate/Suspend Users**

If the user to deactivate is no longer associated with your organization, be sure the **Current Shield State** policy is set to a value other than **Activate**, and ensure that the policy commit is complete and successful prior to your enterprise directory server. The user does not need to be in your enterprise directory server, but the policy does need to be delivered to be their device for it to take effect.

**Best Practice** - Deleting users from the enterprise directory server is not recommended. If a user leaves the organization, the account should be moved to a disabled group. With that said, if a deletion occurs, the user is simply marked “removed”, rather than deleted. The user does not display in the Management Console, but their encryption keys and other information are still available in the Dell Server database.

1. In the left pane, click **Populations > Users**.

2. Click a user name link or enter a filter to search for available users.

   Enter Common Name, Universal Principal Name, or sAMAccountName. The wildcard character (*) is supported. On the User Detail > Security Policies tab in the **Windows Encryption** technology group, click the Policy-Based Encryption policy group.

3. Click **Show advanced settings**.

4. Change the **Current Shield State** policy to **Suspension**.
5. Click **Save**.

6. **Commit Policies**.

To reactivate a deactivated Windows user, follow the instructions in **Reinstate Suspended Users**.

### Reinstate Suspended Users

To reinstate a suspended user, follow these steps:

1. In the left pane, click **Populations > Users**.

2. Click a user name link or enter a filter to search for available users.

   To Search, enter Common Name, Universal Principal Name, or sAMAccountName. The wildcard character (*) is supported.

3. On the **User Detail > Security Policies** tab in the *Windows Encryption* technology group, click the **Policy-Based Encryption** policy group.

4. Click **Show advanced settings**.

5. Change the **Current Shield State** policy to **Activate**.

6. Click **Save**.

7. **Commit Policies**.

   Repeat these steps for each type of device the user was suspended from.

8. To reinstate a suspended Dell Encryption user, perform the preceding steps and then run WSDeactivate on the computer that was suspended for that particular user. WSDeactivate and its instructions are located in the Dell installation media. When using WSDeactivate, existing local encryption keys, credentials, and policy material are no longer accessible to Dell Encryption, and all managed users are forced to reactivate upon their next log on.

### View or Modify User Policies and Information

1. In the left pane, click **Populations > Users**.

2. Click a user name or enter a filter to search for available users. The wildcard character (*) is supported.

   Click a user name to display the User Detail page.

3. Click the tab that corresponds with the action to perform:

   **Security Policies** - Click to view or modify policies of the user.

   **Details & Actions** - Click to view properties of the user. Viewable information includes:

   - **User Name**: (username@organization.com)
   - **Distinguished Name**: CN=User Name, OU=Dallas, DC=Organization, DC=com
   - **Common Name**: User Name
   - **User Principal Name**: username@organization.com
   - **sAM Account Name**: username
   - **User Type** - possible values are AD or local
User Details & Actions

The user Details & Actions tab lists the properties of the selected user.

1. In the left pane, click Populations > Users.
2. Search or select a user name, then the Details & Actions tab.

Details:

- User Name - (username@organization.com)
- Distinguished Name - CN=User Name, OU=Dallas, DC=Organization, DC=com
- Common Name - User Name
- Universal Principal Name - username@organization.com
- sAMAccountName - username
- Email - User email address
- User Type - possible values are AD or local
- Last Modified - Date/time stamp
- Last Reconciled - Date/time stamp

User Endpoints

This page displays information about a user's endpoints, listed by platform type.

1. In the left pane, click Populations > Users.
2. Search or select a user name, then the Endpoints tab.

Shield

- Platform - The platform type
- Device ID - Value that uniquely identifies the target device
- Last Successful Login - Date/time stamp, per endpoint
- Last Unsuccessful Login - Date/time stamp, per endpoint
Last Gatekeeper Sync - Date/time stamp, per endpoint

Effective Policies - Click **view** for a simple layout view of the effective endpoint policies

Actions - Click **Recover** to proceed to the Recover Data page

Last Encryption Sweep Start - Date/time stamp, per user

Sweep End - Date/timestamp, per user

Encryption Failure - Click **view** for a simple list of files that could not be encrypted, per user

States (Date/time stamp, per endpoint):

- Policy Updating
- User Encryption Profile Updating
- EMS Encryption Profile Updating
- User Data Encryption On
- Deactivation Pending
- Suspension Pending
- Suspended

**User Groups**

If the user belongs to a user group, this page displays information about the group and provides a link to the group.

1. In the left pane, click **Populations > Users**.
2. Search or select a user name, then the **Users Groups** tab.

**User Group** - Group to which the user belongs

- **Distinguished Name** - CN=Group1, OU=Dallas, DC=Organization, DC=com
  - CN is the common name
  - OU is the organizational unit name
  - DC are domain components

- **Common Name** - non-technical name of the user group

**User Admin**

This page allows you to assign, modify, or view administrator roles for the user.

1. In the left pane, click **Populations > Users**.
2. Search or select a user name, then the **Admin** tab.

- **Administrator Roles** - Assign or modify roles for the user and click **Save**.
Inherited Group Roles - A read-only list of roles that the user inherited from a group. To modify the roles, click the User Groups tab for that user and select the group name.

Delegated Roles - Delegate administrator rights to a user.

Related topics:

Administrator Roles
Assign or Modify Administrator Roles
Delegate Administrator Roles

View Reconciliation Date

To view the date and time a user group's or user's information was last reconciled with Active Directory, click the Details & Actions tab for the group or user, and refer to last reconciled. For instructions, refer to View or Modify User Group Policies and Information and View or Modify User Policies and Information.

View Policy Proxy State

The Management Console tracks the Policy Proxy's policy updating state.

1. In the left pane, click Populations > Endpoints.
2. Select an endpoint type, for example, Workstation.
3. If you know the full endpoint hostname, enter it into Search and click 
   For Windows and Mac, enter the full endpoint hostname if you know it. Leave the field blank to display all Windows and Mac endpoints.
   If you do not know the full hostname, scroll through the list of available endpoints to locate the endpoint.
4. Click an endpoint in the list to display the endpoint detail.
5. Click the Details & Actions tab of the endpoint to view information.

Issue a User Decryption Policy

1. In the left pane, click Populations > Users.
2. Click a user name link or search for a user and then click a link to display the user detail.
   Enter Common Name, Universal Principal Name, or sAMAccountName. The wildcard character (*) is supported.
4. Set the value of Policy-Based Encryption to Off.
5. Click Save.
   Once this policy reaches the specified Encryption client, decryption begins.

Endpoint Groups
Navigate the Dell Server

Endpoint Groups

On the Endpoint Groups page, you can add or remove an Endpoint Group, edit Endpoint Group priority, or search and select an Endpoint Group to view or modify Endpoint Group information.

Types of Endpoint Groups

System - Endpoint Group maintained by Dell Server. System groups include Default Endpoint Group, Opt-In Endpoint Group, Persistent VDI Endpoint Group, and Non-Persistent VDI Endpoint Group. For more information about VDI Endpoint Groups, see VDI Endpoint Groups.

Rule-Defined - Dynamic Endpoint Group based on a specification, or rule set, defined by the administrator.

Admin-Defined - Static endpoint group for which the administrator can select specific endpoints for inclusion. The group remains unchanged unless the administrator adds or removes an endpoint. For more information, see Add Endpoints to an Admin-Defined Endpoint Group or Remove Endpoints from an Admin-Defined Endpoint Group.

Active Directory Group - Endpoint group for which the administrator can select a group from Active Directory for inclusion. The Active Directory group scope must be Global, and type must be Security. At least one endpoint in the Active Directory group must be running a Dell Data Security product and be managed by Dell Server. For more information about adding Active Directory endpoint groups to the Dell Server, see KB article SLN306875.

Add an Endpoint Group

Before you add the first Endpoint Group see Endpoint Groups Specification, which explains fields and expressions used in Group Specifications.

1. In the left pane, click Populations > Endpoint Groups.
2. Click Add.
3. In Select the type of Endpoint Group, select RULE-DEFINED Group, ADMIN-DEFINED Group, or Active Directory Group.
4. In Group Name, enter a name for the new Endpoint Group.
5. In Description, enter a description for the new Endpoint Group.
6. (For Rule-Defined Groups only) In Specification, enter the rule that describes the Endpoint Group. Specifications can be up to 20,000 characters and are case insensitive.
7. (For Active Directory Groups only) In Choose AD Group, enter the beginning characters of an Active Directory group name (Example: Accounting), and select the desired group.
8. (For Rule-Defined and Active Directory Groups only) Click Preview to view the endpoints to be included in the group.
9. Click Add Group to save the group definition.
10. After the group is added, modify the group priority if necessary.

Remove an Endpoint Group

1. In the left pane, click Populations > Endpoint Groups.
2. Select the group to remove.
3. Click Delete, then click OK.

Modify an Endpoint Group
1. In the left pane, click **Populations > Endpoint Groups**.
2. Select the group to modify.
3. Click the **Details & Actions** tab.
4. Click **Modify**.
5. Make changes as desired.
6. Click **Update Group**.

**VDI Endpoint Groups**

Upon activation, a VDI endpoint is added to the appropriate VDI Endpoint Group on Dell Server, and policies are sent to the endpoint. Persistent VDI Endpoint Groups and Non-Persistent VDI Endpoint Groups are System Endpoint Groups, which are maintained by Dell Server.

Policy settings differ, based on whether persistent or non-persistent VDI is deployed in the environment. For an explanation of the differences between persistent and non-persistent VDI, see [Persistent vs. Non-Persistent VDI](#).

**Policy and Configuration Requirements for VDI Endpoint Groups**

The policy requirements below are for VDI endpoints running Advanced Threat Prevention. The list includes only policies that are significant for VDI endpoints. VDI User policy settings must also meet certain requirements. See [Policy and Configuration Requirements for VDI Users](#).

*Note:* Ensure that you turn off Advanced Threat Prevention Agent Auto Update. In the left pane of the Management Console, select **Management > Services Management > Advanced Threats - Agent Auto Update**, then select **Off**.

*Note:* With Persistent VDI Groups, ensure that roaming user profiles are configured.

These policy and configuration settings for VDI Endpoint Groups must be configured before VDI client activation:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Category</th>
<th>Policy or Setting</th>
<th>Persistent VDI Group setting</th>
<th>Non-Persistent VDI Group setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Encryption</td>
<td>Self-Encrypting Drive (SED)</td>
<td>Self-Encrypting Drive (SED)</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Hardware Crypto Accelerator (HCA)</td>
<td>Hardware Crypto Accelerator (HCA)</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>SDE Encryption Enabled</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Common Encrypted Folders</td>
<td>&lt;retain default settings&gt;</td>
<td>&lt;retain default settings&gt;</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Encrypt Windows Paging File</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Secure Windows Credentials</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Windows Encryption</td>
<td>Policy-Based Encryption</td>
<td>Block Unmanaged Access to Domain Credentials</td>
<td>Not Selected</td>
<td>Not Selected</td>
</tr>
</tbody>
</table>
Persistent vs. Non-Persistent VDI

Persistent and Non-Persistent VDI endpoints differ in the following ways:

<table>
<thead>
<tr>
<th>Persistent VDI</th>
<th>Non-Persistent VDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistent endpoints may exist for many days to years.</td>
<td>Non-persistent endpoints usually exist only for a few days or weeks.</td>
</tr>
<tr>
<td>Persistent endpoints retain the configurations that are set for the VM, until</td>
<td>Non-persistent endpoints revert to baseline settings after a user logs off.</td>
</tr>
<tr>
<td>the VM clone pool is removed and rebuilt.</td>
<td></td>
</tr>
<tr>
<td>A persistent endpoint is dedicated to a single user.</td>
<td>After reverting to baseline settings, a non-persistent endpoint is available for</td>
</tr>
<tr>
<td></td>
<td>another user.</td>
</tr>
</tbody>
</table>

Endpoint Groups Specification

To skip to instructions about how to add an endpoint, see Add Endpoint Groups.

At deployment time, all endpoints belong to a default endpoint group, which is generally sufficient for most deployments. This feature is used to assign policy to a specific group of endpoints. For instance, you may want to create an endpoint group based on the locale that the operating system sends up in
inventory. Once that endpoint group is established, you could then apply a specific policy set to just the endpoints in your specified locale.

Conversely, creating an endpoint group based on a platform type would not be useful because policies are already grouped by platform.

Endpoint groups are created using a group specification. This specification allows you to define the endpoint characteristics used to add endpoints to a group. You cannot manually add endpoints to endpoint groups. The system, based on the characteristics in the endpoint group specification, automatically manages endpoints and endpoint group membership.

Endpoints can be members of many endpoint groups simultaneously, as there is no mutual exclusion requirement for endpoints in groups. All endpoints are included in the default endpoint group in addition to any defined endpoint groups that they may be a member of. This is similar to the way users are a member of the domain they are a part of, in addition to any security groups. Like the user group mapping, the endpoint group mapping creates a potential policy arbitration problem for endpoints. To resolve this problem, the default endpoint group has the lowest possible precedence, and cannot be altered. The endpoint groups that you create have medium precedence by default. For more information on group precedence, see Modify Group Precedence.

**Endpoint Group Specification**

The endpoint group specification is a domain specific language that allows you to define groups. The endpoint group specification consists of a set of operators and a set of data fields that these operators can be applied to. A group specification is a Boolean expression that is evaluated per endpoint to determine whether or not a endpoint is a member of a group.

The information obtained to assign endpoints to endpoint groups happens when inventory is received, not at activation time. If you set up endpoint groups, all endpoints will stay only in the default endpoint group until inventory is received.

Group specifications are created using the following fields and expressions. Multiple fields and operators can be used in a single group specification.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATEGORY</td>
<td>Endpoint category: WINDOWS, MAC, SED</td>
</tr>
<tr>
<td>UID</td>
<td>Windows hostname</td>
</tr>
<tr>
<td>DISPLAYNAME</td>
<td>Fully qualified hostname</td>
</tr>
<tr>
<td>OSVERSION</td>
<td>Operating system version as reported in inventory. Dell recommends using other available fields, as discrepancies in operating system versions may reduce the usefulness of this field.</td>
</tr>
<tr>
<td>OS</td>
<td>Operating system name as reported in the endpoint's inventory</td>
</tr>
<tr>
<td>PROCESSOR</td>
<td>System processor information</td>
</tr>
<tr>
<td>SERIALNUMBER</td>
<td>Endpoint serial number</td>
</tr>
<tr>
<td>LOCALE</td>
<td>The current locale of the endpoint. This is typically only reported by Encryption Enterprise.</td>
</tr>
<tr>
<td>WINCOMPUTERNAME</td>
<td>Fully qualified hostname</td>
</tr>
<tr>
<td>ASSETAG</td>
<td>Asset tag of the computer manufacturer</td>
</tr>
<tr>
<td>SHIELDVERSION</td>
<td>Version of Encryption client</td>
</tr>
<tr>
<td>AGENTVERSION</td>
<td>Agent version for Manager</td>
</tr>
<tr>
<td>PLUGINVERSION</td>
<td>Plugin version for Manager</td>
</tr>
<tr>
<td>MEMBEROFGROUP</td>
<td>Active Directory group name</td>
</tr>
<tr>
<td>MEMBEROFDOMAIN</td>
<td>Active Directory domain name</td>
</tr>
<tr>
<td>SEDPRESENT</td>
<td>All SED clients</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>BITLOCKERPRESENT</th>
<th>TRUE/FALSE value for BitLocker Manager, indicating if BitLocker is enabled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTALMEMORY</td>
<td>Total memory available on the computer</td>
</tr>
<tr>
<td>TPMENABLED</td>
<td>TRUE/FALSE value for TPM, indicating if TPM is enabled</td>
</tr>
<tr>
<td>TPMPRESENT</td>
<td>All TPM clients</td>
</tr>
</tbody>
</table>

**Operators and Expressions**

The basic operators are the binary operators that return a Boolean value.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td>Boolean, Integer, and String equality operator</td>
</tr>
<tr>
<td>&gt;, &gt;=</td>
<td>Greater than, greater than or equal, integer operator</td>
</tr>
<tr>
<td>&lt;, &lt;=</td>
<td>Less than, less than or equal, integer operator</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Not equal, integer string operator</td>
</tr>
<tr>
<td>AND</td>
<td>Logical AND for Boolean expression</td>
</tr>
<tr>
<td>OR</td>
<td>Logical OR for Boolean expression</td>
</tr>
<tr>
<td>NOT</td>
<td>Logical NOT for Boolean expression</td>
</tr>
</tbody>
</table>

The logical operators follow the standard Boolean operator precedence (NOT, AND, OR). String fields have the following string operators that return Boolean values:

- BEGINWITH
- ENDWITH
- CONTAINS

These operators can be used on the string fields:

- `UID BEGINSWITH "A1850502"`
- `ASSETTAG CONTAINS "007"`

String fields also have the following string operators that return substrings of the field:

- `LEFT(string, int)`
- `RIGHT(string, int)`
- `MID(string, int, int)`

The substring operators can be used in the string operators that return Boolean values:

- `LEFT(DISPLAYNAME, 4 ) = "A185"`

There is one additional string operator that returns an integer value that is the length of the string:

- `LEN(string)`

This can be used in a Boolean expression:
Rule Specifications in the Management Console allows users to combine rules to filter a unique set of devices. For queries that contain multiple options, isolate sub-rules in parenthesis to ensure they are run separately before they are combined with the larger specification.

This query selects all devices with an operating system named Windows 10 Pro or Windows 10 Ent and DESKTOP in the hostname:

\[
\text{OS CONTAINS "Windows 10 Pro" OR OS CONTAINS "Windows 10 Ent" AND UID CONTAINS "DESKTOP"}
\]

This query selects any device containing Windows 10 Pro and only devices with the hostname containing DESKTOP that running an operating system with the name containing Windows 10 Ent:

\[
\text{OS CONTAINS "Windows 10 Pro" OR (OS CONTAINS "Windows 10 Ent" AND UID CONTAINS "DESKTOP")}
\]

- Using the FQDN of the client computer to attach it to a device group can be done by keying on any commonality amongst the desired client computers. In the example below, a child domain of ORGANIZATION, AMERS, represents a domain in America. Additionally, a 2nd child domain, EMEA, represents non-American based clients.

\[
\text{DISPLAYNAME ENDSWITH "AMERS.ORGANIZATION.COM"}
\]

This group will contain all clients that are in the AMERS domain according to their FQDN.

\[
\text{DISPLAYNAME ENDSWITH "EMEA.ORGANIZATION.COM"}
\]

This group will contain all clients that are in the EMEA domain according to their FQDN

- If the hostname of the client computers contain several notations that indicate desired ways in which to create a group, those specific portions can be captured as long as their location is consistent.

Looking at the hostname: A12345jdoe.AMER.ORGANIZATION.COM

A denotes an asset, while the following 5 digits denotes the asset’s assigned value. The user that was assigned the asset has their SAM account appended to the end.

You can capture the assigned number of the asset, and that it is within a certain subsection of assets. This example shows how to look for assets that have a value less than 1000.

\[
\text{MID(DISPLAYNAME , 2, 5) < 1001}
\]

This example targets user’s computer where their last name begins with ‘r’.

\[
\text{MID(DISPLAYNAME , 8, 1) = "r"}
\]

For instructions about how to add an endpoint, see Add Endpoint Groups.

**Edit Group Priority**

The Group priority feature is used to determine policy precedence for effective policies that affect multiple groups. Group priority creates a weight associated with the specific group it is assigned to, and that weight is used to determine which policy setting is applied to an endpoint that is a member of more
than one Endpoint Group when policy settings differ between those groups. Policy overrides are used from the group with higher priority when two (or more) separate groups have different priority levels.

**Edit Endpoint Group Priority**

Endpoint Group Priority can be changed only for Rule-Defined, Admin-Defined, and Active Directory Groups. System-Defined Group priority cannot be modified. In general, the Endpoint Group at the top of the list of Endpoint Groups has highest priority. The Endpoint Group at the bottom of the list has lowest priority.

**Precedence Ranking**

The System Defined Non-Persistent VDI Endpoint Group has the highest priority level, followed by the Persistent VDI Endpoint Group.

**Order of priority:**

1. Non-Persistent VDI Endpoint Group
2. Persistent VDI Endpoint Group
3. Highest ranked Active Directory/Rule-Defined/Admin-Defined Endpoint Group
4. Second and subsequent highest ranked Active Directory/Rule-Defined/Admin-Defined Endpoint Groups
5. Opt-in Endpoint Group
6. Default Endpoint Group

To change Active Directory/Rule-Defined/Admin-Defined Endpoint Group priority:

1. In the left pane, click **Populations > Endpoint Groups**.
2. Click **Edit Priority**.
3. Select the row of the appropriate group and drag it to the location in the list of Endpoint Groups that reflects its new priority level.
4. Click **Save**.

**Edit User Group Priority**

The user group at the top of the list has highest priority. The user group at the bottom of the list has lowest priority.
To edit User Group priority:

1. In the left pane, click **Populations > User Groups**.
2. Click **Edit Priority**.
3. Select the row of the appropriate group and drag it to the location in the list of Endpoint Groups that reflects its new priority level.
4. Click **Save**.

**View Endpoints in an Endpoint Group**

This page displays the endpoints included in information for every user of the specified endpoint.

1. In the left pane, click **Populations > Endpoint Groups**.
2. Click a Group Name link or enter a filter to search for available Groups. The wildcard character (*) is supported.

   When you click a Group Name, the Endpoint Group Detail page displays.
3. If applicable, **View or Modify Endpoint Information**.

**View or Modify Endpoint Group Policies and Information**

1. In the left pane, click **Populations > Endpoint Groups**.
2. Click a Group Name or enter a filter to search for available Endpoint Groups. The wildcard character (*) is supported.

   When you click a Group Name, the Endpoint Group Detail page displays.
3. Click the tab that corresponds with the action to perform:

   **Security Policies** - To view or modify policies of the Group, click **Security Policies**.
   **Note:** Before modifying VDI Endpoint Group policies, see [Policy Requirements for VDI Endpoint Groups](#).
**Details & Actions** - To view properties of the Group, click **Details & Actions**. Viewable information includes:

- **Group Name**: Group1 (DOMAIN\Group1)
- **Description**: The description provided when the Group was added.
- **(For Rule-Defined groups) Specification**: The endpoint group specification that defines endpoints as members of the group.

**PBA Device Control** - The PBA Unlock command for this endpoint group is carried out in the PBA Device Control area. This command unlocks the PBA screen after it has been locked – either by sending a Lock command or by exceeding the maximum number of authentications attempts allowed by policy.

**Members** - To view or modify the information of an endpoint in the group, click **Members**. The list of endpoints in the group displays. Click an endpoint to view the endpoint's Security Policies, Details & Actions, Users, Endpoint Groups, Threat Events, and Advanced Events.

4. If modified, click **Save**.

---

**Endpoint Group Details & Actions**

This page lists the properties of the selected Endpoint Group.

1. In the left pane, click **Populations > Endpoint Groups**.
2. Search or select a Group Name, then the **Details & Actions** tab.

**Details:**

- **Group Name** of the endpoint group
- **A description of this endpoint group**
- **The specification that was used to create this endpoint group** (applies only to Rule-Defined Groups)
- **Active Directory Group** (applies only to Active Directory Groups)

**PBA Device Control**

The PBA Unlock command for this endpoint group is carried out in the PBA Device Control area. This command unlocks the PBA screen after it has been locked – either by sending a Lock command or by exceeding the maximum number of authentications attempts allowed by policy.

---

**Endpoint Group Members**

This page lists the endpoints within an endpoint group. Information displays based on the group specification used to create the endpoint group.

1. In the left pane, click **Populations > Endpoint Groups**.
2. Search or select a Group Name, then the **Members** tab.

- **Category** - WINDOWS, MAC, SED
- **Hostname** - Endpoint hostname
- **OS/Version** - Endpoint operating system and version

---

**Add Endpoints to an Admin-Defined Endpoint Group**
1. In the left pane, click **Populations > Endpoint Groups**.
2. Select the group to which to add endpoints.
3. Click the **Members** tab.
4. Select **Add Endpoints to Group**, then search for specific endpoints or select endpoints in the list, and click **Add Selected Endpoints to Group**.

OR

Select **Upload Multiple Endpoints from File**, then click **Browse** to select a CSV file and click **Upload**.

Valid CSV requirements:

- The file must be in valid CSV format and contain a maximum of 999 endpoints.
- The first column must contain valid fully qualified hostnames. All columns except the first column are ignored.
- Only activated endpoints are added to the group.

### Remove Endpoints from an Admin-Defined Endpoint Group

1. In the left pane, click **Populations > Endpoint Groups**.
2. Select the group in which to add endpoints.
3. Click the **Members** tab.
4. Search for specific endpoints or select endpoints in the list. To select more than one endpoint, press **Shift** and select the endpoints.
5. Click the red **X** in the right column for each endpoint, or select the endpoints and click **Remove Endpoints from Group**.

### Endpoints

On the Endpoints page, you can add an endpoint to a group, remove an endpoint, or search and select an endpoint to View or Modify Endpoint Information. You can also quickly view the following summary information about each endpoint:

- **Hostname** - Endpoint hostname.
- **OS/Version** - Operating system and version running on the endpoint (Example: Microsoft Windows 10 Enterprise).
- **Category** - Category of endpoint (Example: Windows or Mac).
- **Protected** - A green check displays if the endpoint is protected. If the endpoint is not protected, the column is blank.
- **Serial Number** - Manufacturer assigned serial number.
- **Win Computer Name** - Computer name Windows uses to identify the computer on the network.
- **Enabled Technologies** - Security technologies enabled on the endpoint.
- **Hardware ID** - A unique identifier sent to the server from the client.
* Click the column header to sort by column label.

Click a hostname to view additional details about the endpoint. Click an arrow at the left of a hostname to view the Category, Unique ID, and Processor.

**Add Endpoint to Group**

To add an endpoint to an Endpoint Group:

1. In the left pane, click **Populations > Endpoints**.
2. Select the check box next to a hostname in the list or enter a filter to search for available endpoints. The wildcard character (*) is supported.
   
   For Windows and Mac, if you know the endpoint hostname, enter it in **Search**. Leave the field blank to display all Windows and Mac endpoints.
3. At the top left, click **Add Endpoints to Group**.

An endpoint is added to inventory when a user who is in the Dell Server database activates the endpoint.

If the user is not found in the Dell Server database, they is located in Active Directory.

**Remove Endpoints**

Endpoint removal is permanent. Once an endpoint is removed, the action cannot be undone.

To remove an endpoint:

1. In the left pane, click **Populations > Endpoints**.
2. Select the appropriate endpoint type, for example, **Workstation**.
3. Click the box next to a hostname in the list or enter a filter to search for available endpoints. The wildcard character (*) is supported.
   
   For Windows and Mac, if you know the hostname of the endpoint, enter it in **Search**. Leave the field blank to display all Windows and Mac endpoints.
4. At the top left, click **Remove**.
5. Click **OK** to confirm removal of the endpoint.

As another option, click an endpoint and select the **Details & Actions** tab. Under **Endpoint Detail**, click **Remove**.

**Find Endpoints**

1. In the left pane, click **Populations > Endpoints**.
2. Navigate the list of endpoints using the scroll bar or page navigation controls at the bottom of the page or enter a filter into **Search** to search for available endpoints. The wildcard character (*) is supported.
   
   For Windows and Mac, if you know the endpoint hostname, enter it in **Search**. Leave the field blank to display all Windows and Mac endpoints.

**View or Modify Endpoint Policies and Information**

1. In the left pane, click **Populations > Endpoints**.
2. Select the appropriate endpoint type, for example, **Workstation**.

3. Click a hostname in the list or enter a filter to search for available endpoints. The wildcard character (*) is supported.

   For Windows and Mac, if you know the endpoint hostname, enter it in **Search**. Leave the field blank to display all Windows and Mac endpoints.

   Click a hostname or endpoint serial number to display the Endpoint Detail page.

4. Click the tab that corresponds with the action to perform:

   - **Security Policies** - Click **Security Policies** to view or modify policies of the endpoint.
   - **Details & Actions** - Click **Details & Actions** to view properties of the endpoint, including Inventory Information. Viewable information includes hardware information, effective policies, inventory and protection status, threat protection and Advanced Threat Prevention detail, and SED Device Control commands.
   - **Users** - Click **Users** to view a list of users who store and access data on the endpoint. These statistics of users may be available on the Endpoint Detail page: login, last Gatekeeper sync, effective policies, and states. You can also recover data from this page.
   - **Endpoint Groups** - Click **Endpoint Groups** to view a list of Endpoint Groups to which this endpoint belongs. All endpoint belong to at least one endpoint group, the Default Endpoint Group.
   - **Threat Events** - Click **Threat Events** view information about threat events on the endpoint. The following information is displayed for events: severity, category (malware, web filtering, web protection, and firewall), event ID, event description, user name, and received.
   - **Advanced Threat Events** - Click **Advanced Threat Events** view, export, quarantine, or waive unsafe files. Events are grouped by Status (unsafe, quarantined, or abnormal), and the following information is displayed for events: file name, file paths, score, classification, first found time stamp, running, auto run, and detected by.

5. If modified, click **Save**.

---

**View Effective Policy**

When you view Effective Policies, you are viewing the policies and settings that are enforced on an endpoint.

1. In the left pane, click **Populations > Endpoints**.

2. Click a hostname in the list or enter a filter to search for available endpoints. The wildcard character (*) is supported.

   For Windows and Mac, if you know the endpoint hostname, enter it in **Search**. Leave the field blank to display all Windows and Mac endpoints.

   Click a hostname or endpoint serial number to display the Endpoint Detail page.

3. On the Endpoint Detail page, click the **Details & Actions** tab.

4. Under **Manager Detail**, click **View Effective Policies**.

Related topics:

- [Manage Security Policies](#)
Endpoint Details & Actions

The Details & Actions page lists the details for the selected endpoint as well as commands, such as Remove Endpoint. Available details and commands vary, depending on the endpoint platform.

To access Endpoint Details & Actions, follow these steps:
1. In the left pane, click Populations > Endpoints.
2. Search or select a hostname, then the Details & Actions tab.

Endpoint Detail

**Command:**
Remove - Endpoint is removed.

Endpoint removal is permanent. Once an endpoint is removed, the action cannot be undone.

**Details:**

**Windows**

Category - Windows

OS/Version - Example: Microsoft Windows 10 Enterprise

Processor

Serial Number - Manufacturer assigned serial number

Host ID - Endpoint identifier

Unique ID - Dell assigned unique identifier

Hardware ID - A unique identifier sent to the server from the client.

Protected - Date and time stamp

**Mac**

Category - Mac

OS/OS Version - Example: Mac OS X 10.11.0

Processor

Serial Number - Manufacturer assigned serial number

Host ID - Endpoint identifier

Unique ID - Dell assigned unique identifier

Hardware ID - A unique identifier sent to the server from the client.

Protected - Date and time stamp

Shield Detail

**Commands:**

To view the policies of the endpoint, click View Effective Policies.

Obtain the endpoint's recovery keys:
1. Click Device Recovery Keys.
2. Enter a Recovery Password and click Download.
The recovery bundle containing this endpoint's encryption keys is downloaded. You must remember the this recovery password to access the recovery keys.

**Detail:**

**Windows**

- Policy Proxy Group (typically CMGREMOTE)
- Recovery ID of the specific endpoint
- Version (core/edition)
- Activation Method (typically Mandatory)
- HCA Enabled: True or False
- TPM Present: True or False
- Edition: Dell or CREDANT

**States:**

- Policy Updating: Date and timestamp
- Device Encryption Updating: Date and timestamp
- Device Data Encryption On: Date and timestamp
- Sweep Started: Date and timestamp
- Sweep Completed: Date and timestamp
- Inventory Received: Date and timestamp
- Inventory Processed: Date and timestamp
- Manager Inventory Received: Date and timestamp
- Manager Inventory Processed: Date and timestamp

**Protected:**

- Protection Status Tab:
  - Disk Name
  - Capacity (storage)
  - Protection Status (Protected, Protecting, Unknown)
  - Interface type
  - Model number of the endpoint

- GPE Tab:
  - GPE Available (True or False)
  - GPE Driver Version
  - GPE Functional (True or False)
  - GPE Lifecycle Remaining (number)
  - GPE Lifecycle Owner Remaining (number)
  - GPE Provisioned Status
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TPM Tab:
- TPM Present (True or False)
- TPM Activated (True or False)
- TPM Owned (True or False)
- TPM Functional Status (True or False)
- TPM Spec Version (version number)

HCA Tab:
- HCA Functional Status
- HCA Provision State
- Preboot Present (True or False)
- Preboot Set (True or False)

Actions: Effective policies on the specific endpoint and Recovery Keys for the specific endpoint

Mac
- Policy Proxy Group (typically CMGREMOTE)
- Recovery ID of the specific endpoint
- Version (core/edition)
- Activation Method (typically Mandatory)
- Edition (Dell or Credant)

States:
- Policy Updating: Date and timestamp
- Device Encryption Updating: Date and timestamp
- Device Data Encryption On: Date and timestamp
- Sweep Started: Date and timestamp
- Sweep Completed: Date and timestamp
- Inventory Received: Date and timestamp
- Inventory Processed: Date and timestamp

Protected:

Protection Status Tab:
- Disk Name
- Capacity (storage)
- Protection Status (Protected, Protecting, Unknown)
- Interface type
Model number of the endpoint

Actions: Effective policies on the specific endpoint and Recovery Keys for the specific endpoint

Manager Detail (Windows only)

Command:
Click View Effective Policies to go to the effective policy page for this endpoint.

States

The client gathers the following information via a Windows Management Instrumentation (WMI) call to the Operating System. It is updated with each inventory update.

Inventory Received - the date and time that the inventory was received by the Dell Server and placed in the queue.

Inventory Processed - the date and time that the inventory was picked up from the queue and processed. (Note: If the Dell Server is under load, the Processed and Received times may be different, but usually they is the same.)

Agent Version - the version of Manager the endpoint is running.

Protected - the date and time that the device was protected.

Protection Status

Disk - number of the disk
Partitions - number of partitions the disk has
Capacity - capacity of the disk
Encryption Technology - encryption technology in use
Protection Status - Protected or unprotected
Interface - Disk interface (Examples: IDE, SATA)
Model - Manufacturer name and model of the disk

Click the small black arrow on the left to expand the disk details to view information for each partition of the disk.

Logical Disk - The name of the logical disk.
ID - The identifying number of the logical disk.
Encryption % - The percentage of the partition that has been encrypted.
Capacity - The capacity of the partition.
Protection Status - Protection status for the partition: Protected, Unprotected, Locked

Providers

Agent - SED, FDE, Authentication Proxy, Preboot Authentication, Windows Authentication, BitLocker, TPM, Threat Protection, Advanced Threat Prevention

Plugin Functional Status (green check mark or red "x") - This indicates whether the Agent has been enabled via policy. To get more detail on whether each plugin is working as expected, look at Plugin State column.
Navigate the Dell Server

Plugin State:

- BitLocker Plugin:
  
  Starting - Manager is starting up. Because this is a fairly quick process, it is unlikely an inventory update would capture this so you would probably never see this state in the Management Console.

  Disabled - Manager is disabled by policy and not enforcing any previously received policy.

  Active - Manager is running normally and enforcing policies.

  No Policy - Initial policy has not been received so the plugin is not actively enforcing any policy. This is only relevant the very first time you install the Manager client. Manager does not start a plugin until an initial policy is received from the Dell Server, versus starting the plugin with some default policy placed on the client during install. After an initial policy has been received from the Dell Server, via the activation process, plugins are always started with the last policy the client is aware of.

  OpSys Not Supported - Manager does not support this operating system. Manager is not actively enforcing policy related to this plugin, due to this plugin-specific exception.

- TPM Plugin:
  
  Starting - Manager is starting up. Because this is a fairly quick process, it is unlikely an inventory update would capture this so you would probably never see this state in the Management Console.

  Disabled - Manager is disabled by policy and not enforcing any previously received policy.

  Active - Manager is running normally and enforcing policies.

  TPM Services Not Started – In the Enterprise Server Console this is listed as *TPM Base Services Failed*. It means something is preventing the TPM service from starting as expected. The Manager is not actively enforcing policy related to this plugin, due to this plugin-specific exception.

  No TPM Device – The TPM device is not present or is not detectable in the indicated computer. The Manager is not actively enforcing policy related to this plugin, due to this plugin-specific exception.

  No Policy - Initial policy has not been received so the plugin is not actively enforcing any policy. This is only relevant the very first time you install the Manager client. Manager does not start a plugin until an initial policy is received from the Dell Server, versus starting the plugin with some default policy placed on the client during install. After an initial policy has been received from the Dell Server, via the activation process, plugins are always started with the last policy the client is aware of.

- SED Plugin:
  
  Initialized - Manager is initialized waiting for delayed startup

  Starting - Manager is starting up. Because this is a fairly quick process, it is unlikely an inventory update would capture this so you would probably never see this state in the Management Console.

  Disabled - Manager is disabled by policy and not enforcing any previously received policy.

  Active - Manager is running normally and enforcing policies.

  No Policy - Initial policy has not been received so the plugin is not actively enforcing any policy. This is only relevant the very first time you install the Manager client. Manager does not start a plugin until an initial policy is received from the Dell Server, versus starting the plugin with some default policy placed on the client during install. After an initial policy has been received from the Dell Server, via the activation process, plugins are always started with the last policy the client is aware of.
Dell Server, via the activation process, plugins are always started with the last policy the client is aware of.

Waiting For Escrow - Manager is waiting for keys to escrow
Waiting For Server Public Key - Manager is waiting for public key to proceed with activation
No Opal Drive Present - Manager did not detect an OPAL drive

Plugin Version - The version of the plugin, which is taken from the plugin's version information
Vendor version - The version of the underlying framework. For example, BitLocker is Microsoft’s technology, therefore Vendor Version is Microsoft's version for BitLocker.

**Threat Protection Detail (Windows only)**

Scan Engine Version - Lists the version of the engine that performed the last scan.
DAT File Version - Lists the version of the DAT file.
Last Scan Started - Date/time stamp that the last scan was started.
Last Scan Completed - Date/time stamp that the last scan was completed.

**Advanced Threat Prevention Detail**

Device ID - Lists the identifier of the device as it pertains to Advanced Threat Prevention.
Agent Version - Lists the version of the agent.
Update Date - Date/time stamp that the agent was updated.
Provisioned Date - Date/time stamp that the client was provisioned.

**FDE Device Control (Windows only)**

**Current State of the Endpoint** - Unlocked or Locked

**Commands:**

PBA commands for a specific endpoint are carried out in the PBA Device Control area. Each command has a priority ranking. A command with a higher priority rank cancels commands of lower priorities in the enforcement queue. For a list of command priority rankings, see [Priority of Commands for Self-Encrypting Drives](#).

**Lock** - Locks the PBA screen and prevents any user from logging into the computer.

**Unlock** - Unlocks the PBA screen after it has been locked on this endpoint, either by sending a Lock command or by exceeding the maximum number of authentications attempts allowed by policy.

**Remove Users** - Removes all users from the PBA.

**Bypass Login** - Bypasses the PBA screen one time to allow a user into the computer without authenticating. The user will still need to login to Windows after PBA has been bypassed.

**Wipe** - The Wipe command functions as a “restore to factory state” for the FDE drive. The Wipe command can be used to re-purpose a computer or, in an emergency situation, wipe the computer, making the data permanently unrecoverable. When the wipe command is consumed by the client, all history and details about this endpoint are removed from the Dell Server. Ensure that this is the desired behavior before invoking this command.

**The FDE Device Control Table**

The table lists the commands most recently sent to the PBA Device.

To sort the table, click a column header.
PBA Device Control (Windows only)

Current State of the Endpoint - Unlocked or Locked

Commands:

PBA commands for a specific endpoint are carried out in the PBA Device Control area. Each command has a priority ranking. A command with a higher priority rank cancels commands of lower priorities in the enforcement queue. For a list of command priority rankings, see Priority of Commands for Self-Encrypting Drives.

Lock - Locks the PBA screen and prevents any user from logging into the computer.

Unlock - Unlocks the PBA screen after it has been locked on this endpoint, either by sending a Lock command or by exceeding the maximum number of authentications attempts allowed by policy.

Remove Users - Removes all users from the PBA.

Bypass Login - Bypasses the PBA screen one time to allow a user into the computer without authenticating. The user will still need to login to Windows after PBA has been bypassed.

Wipe - The Wipe command functions as a “restore to factory state” for the SED drive. The Wipe command can be used to re-purpose a computer or, in an emergency situation, wipe the computer, making the data permanently unrecoverable. When the wipe command is consumed by the client, all history and details about this endpoint are removed from the Dell Server. Ensure that this is the desired behavior before invoking this command.

The PBA Device Control

Lists the commands most recently sent to the PBA device.

To sort, click a column header.

Protected Status

Protected status is indicated if any of the following criteria are met:

- Advanced Threat Prevention is installed and enabled.
- Self-Encrypting Drive Management is installed, enabled, and the PBA is enabled.
- BitLocker Manager is installed, enabled, and encryption has completed.
- Dell Encryption (Mac) is installed and enabled, and policy-based encryption has been enforced.
- Dell Encryption (Windows) is installed, enabled, Policy-Based Encryption has been set for the endpoint, and the most recent policy has been applied for the last logged on user.

To check Protected Status of an endpoint:

1. In the left pane, click Populations > Endpoints.
2. Click a hostname in the list or enter a filter to search for available endpoints. The wildcard character (*) is supported.
   - For Windows and Mac, if you know the endpoint hostname, enter it in the Search field. Leave the field blank to display all Windows and Mac endpoints.
   - Click a hostname or endpoint serial number to display the Endpoint Detail page.
3. A green check mark displays in the Protected column if any of the criteria for Protected status are met.
**Endpoint Users**

This page displays information for every user of the specified endpoint. The user information differs for each technology group or policy category.

1. In the left pane, click **Populations > Endpoints**.
2. Search or select a hostname, then the **Users** tab.

**Shield**

User - Each user on the specific endpoint

Last Successful Login - Date/time stamp, per user

Last Unsuccessful Login - Date/time stamp, per user

Last Gatekeeper Sync - Date/time stamp, per user

Effective Policies - Click **view** for a simple layout view of the effective user policies

Actions - Click **Recover** to proceed to the Recover Data page

Last Encryption Sweep Start - Date/time stamp, per user

Sweep End - Date/time stamp, per user

Encryption Failure - Click **view** for a simple list of files that could not be encrypted, per user

States (Date/time stamp, per user):

- Policy Updating
- User Encryption Profile Updating
- EMS Encryption Profile Updating
- User Data Encryption On
- EMS Data Encryption On
- Deactivation Pending
- Suspension Pending
- Suspended

**Endpoint Threat Events**

This page lists information on threat events for the selected endpoint.

1. In the left pane, click **Populations > Endpoints > Workstation**.
2. Search or select a Hostname, then the **Threat Events** tab.

**Threat Event Data**

Severity - Severity of the threat, where Critical is the most dangerous threat to the endpoint, and Information is just a notification of an event that is unlikely to harm the endpoint. (Critical, Major, Minor, Caution, Information)

Category - Category of the threat. Upon identification, threats are sorted into these categories: Malware, Web Filtering, Web Protection, and Firewall.
Event ID - Unique number assigned to each threat event.
Description - Description of the last preventative action taken to handle the threat.
User Name - The DOMAIN\Username associated with the endpoint where the threat was identified.
Received - Date/time stamp when the last action was taken to handle a threat.

Navigate the Threat Event Data
To sort the data, click a column header.
Use the controls at the bottom of the page to:
- Advance to the top of the data.
- Go back one page.
- Go forward one page.
- Advance to the end of the data.
- Increase or reduce the items per page.
- View the range of items currently displayed.
- Refresh the data.

Endpoint Advanced Threats
This page allows you to view, export, quarantine, or waive unsafe files that trigger events on the selected endpoint.
An event is not necessarily a threat. An event is generated when a recognized file or program is quarantined, safe listed, or waived. Threats are a category of events that are newly detected as potentially unsafe files or programs and require guided remediation.
1. In the left pane, click Populations > Endpoints.
2. Search or select a hostname, then the Advanced Events tab.

List of Events
The list presents all files that have triggered events found on this device.

Columns
- Icon - An icon displays in this column, when available.
- Name - File triggering the event.
- File Paths - The location of the file on the device.
- Cylance Score - A score is assigned to each file that is deemed Abnormal or Unsafe. The score represents the confidence level that the file is malware. The higher the number, the greater the confidence.
- Status - Indicates whether the file has been quarantined or waived.
- Classification - Classification of the threat: High, Medium, or Low. For details, see Advanced Threat Protection Classifications.
- First Found - Date/timestamp that the file was first found.
- Running - Indicates whether the file that triggered the event is running or not.
Auto Run - Indicates whether the file was set to automatically run upon startup.

Detected By - Indicates whether the file was detected by Execution Control or by Memory Protection.

Configure the Threat List

Add or Remove Columns

Click an arrow next to any column header and select **Columns** to add columns to, or remove columns from, the table.

Filter on Column Data

To filter the list based on column data, click the down-arrow on any column to display the context menu, and select **Filter**.

The filter options vary, depending on the type of data in the column. For example, you may want to filter the list so that it shows only high priority threats.

Group by a Column

Drag a column header, such as Status, to the area directly above the column headers to group the data by Status. When you drag a column header, it turns green, indicating that the table can be grouped by that data. You can drag additional headers over the table to group the data even further.

For each group, a number displays in parentheses to indicate the total number of threats that share that group's attribute.

Commands:

Select the check box next to a file name to perform an action on the file. To select all files, select the check box in the column heading row.

**Export** lets you export selected data to a .CSV file so that you can view the data in Excel or a similar application which has powerful sorting/organizing features.

After selecting the data to export, click **Export** to save the data in a .CSV file.

Click **Quarantine** to add the file to the Quarantine list.

Quarantining a file will prevent the file from being executed on this device.

**Note**: Quarantining a file will move the file from its original location to the Quarantine directory (C:\ProgramData\Cylance\Desktop\q).

Click **Waive** to allow the file to run on this device.

**Note**: Occasionally, a "good" file could be quarantined or reported. This could happen if the features of that file strongly resemble those of malicious files. Waiving or globally safe listing the file can be useful in these instances.

Exploit Attempts

This section lists the detection of attempts to exploit running processes, or malware that executes from within memory space.

A number displays the total number of events, followed by the number in each subcategory.
Check box - Select all events by selecting the check box in the column heading row, or select individual events. When you select a check box, Quarantine and Waive are activated.

Added - Date and time when the exploit attempt was added.

Process Name - Name of the process identified as an exploit attempt.

Process ID - Unique number associated with the exploit attempt.

Type - Type of memory exploit: Exploitation, Process Injection, Escalation.

Action - Action taken to protect the system from the exploit attempt:

- Ignore - The agent does not take any action against identified memory violations.
- Alert - The agent will record the violation and list the incident on this page.
- Block - If an application attempts to call a memory violation process, the agent will block the process call. The application that made the call is allowed to continue to run.
- Terminate - If an application attempts to call a memory violation process, the agent will block the process call and will also terminate the application that made the call.

User Name - Name of the user who was logged in when the exploit attempt was identified.

Endpoint Advanced Threat Events

The Advanced Threat Events tab displays if the Advanced Threat Prevention service is provisioned and Advanced Threat Prevention is enabled on the endpoint.

The tab displays information about events for the endpoint based on information available in the Dell Server.

To access the Enterprise Advanced Threats tab, follow these steps:

1. In the left pane, click Populations > Endpoints.
2. Search or select a hostname, then the Advanced Threat Events tab.

Use the following filters to select content to display on the Advanced Threat Events tab:

- **Type** - Threat Found, Threat Blocked, Threat Terminated, Memory Violation Blocked, Memory Violation Terminated, Memory Violation (Detected), Threat Removed, Threat Quarantined, Threat Waived, Threat Changed, Protection Status Changed.
- **Severity** - Severity level of the event: Critical, Major, Minor, Caution, or Informational.
- **Timeframe (in days)** - 1, 7, 14, 30, 60, 90
- **Columns** - Allows you to select the following additional columns to display:
  - Hostname - The fully qualified name of the computer
  - Data - Details about the event
  - Created - Date and time that the event was captured
  - Machine Name - Name of the computer on which the threat event was detected
  - Path - Path to the file in which the threat was detected
Sha256 - The file’s 256-character Secure Hash Algorithm can be compared with an expected result to indicate whether the file has been tampered with.

Score - The threat file’s score, indicating the confidence level that the file is malware. The higher the number, the greater the confidence.

**Server Encryption Clients**

**Suspend an Encrypted Server**

When you suspend an encrypted server, you suspend the user associated with the encryption client rather than an individual user who logs on to the endpoint.

To suspend a Server Encryption client:

1. In the left pane, click **Populations > Users**.
2. In **Search**, enter **SERVER-USER** and click the **Q**.
3. Click the user name of the appropriate user.
4. On the User Detail page, click the **Endpoints** tab.
5. Click the Device ID of the appropriate endpoint.
6. On the Endpoint Detail page, click the **Details & Action** tab.
7. In Server Device Control, click **Suspend**.

Suspension takes effect the next time the endpoint is rebooted.

To reinstate an encrypted server, follow the instructions in [Reinstate a Suspended Server Encryption Client](#).

**Reinstate an Encrypted Server**

To reinstate an encrypted server, follow these steps:

1. In the left pane, click **Populations > Users**.
2. In **Search**, enter **SERVER-USER** and click **Q**.
3. Click the user name of the appropriate user.
4. On the User Detail page, click the **Endpoints** tab.
5. Click the Device ID of the appropriate endpoint.
6. On the Endpoint Detail page, click the **Details & Action** tab.
7. In Server Device Control, click **Reinstate**.

Reinstatement takes effect the next time the endpoint is rebooted.

**Commands for Self-Encrypting Drives**

**Priority of Commands for Self-Encrypting Drives**

Each command for self-encrypting drives has a priority ranking. A command with a higher priority rank cancels commands of lower priorities in the enforcement queue.
Navigate the Dell Server

Priority rankings (1 is highest):

1. Wipe
2. Lock
3. Remove Users
4. Unlock
5. Bypass

For example, a Wipe command cancels a Lock command that was previously queued to send to the endpoint.

Related topics:
Send Wipe Command to Self-Encrypting Drive
Lock a Self-Encrypting Drive
Remove Users from Endpoint with Self-Encrypting Drive
Unlock a Self-Encrypting Drive
Allow PBA Login Bypass

Allow PBA Login Bypass

You can allow users to bypass the Preboot Authentication (PBA) screen one time to allow a user into the computer without authenticating on an endpoint equipped with a self-encrypting drive.

To send the Bypass Login command, follow these steps:

1. In the left pane, click Populations > Endpoints.
2. Select the Workstation Endpoint Type.
3. If you know the full endpoint hostname, enter it in Search. Leave the field blank to display all Workstation endpoints.
4. Click . An endpoint or list of endpoints displays, based on your search filter.
5. Click the endpoint hostname on which to allow PBA login bypass.
6. Click Details & Actions tab.
7. Under SED Device Control, click Bypass Login.
8. Click Yes to confirm that you want to send the Bypass Login command to the endpoint.

Unlock a Self-Encrypting Drive

You can unlock the PBA screen after it has been locked on this endpoint, either by sending a Lock command or by exceeding the maximum number of authentications attempts allowed by policy.

To send the Unlock command, follow these steps:

1. In the left pane, click Populations > Endpoints.
2. Select the Workstation endpoint type.
3. If you know the full endpoint hostname, enter it in Search. Leave the field blank to display all Workstation endpoints.
4. Click . An endpoint or list of endpoints displays, based on your search filter.
5. Click the endpoint hostname with the self-encrypting drive to unlock.
6. Click the Details & Actions tab.
7. Under SED Device Control, click Unlock.
8. Click Yes to confirm that you want to send the Unlock command to the endpoint.

Remove Users from Endpoint with Self-Encrypting Drive

To remove users from the PBA, follow these steps:
1. In the left pane, click Populations > Endpoints.
2. Select the Workstation endpoint type.
3. If you know the full Hostname of the endpoint, enter it in the Search field. However, you may leave the field blank to display all Workstation endpoints.
4. Click the search icon.

An endpoint or list of endpoints displays, based on your search filter.
5. Click the Hostname of the endpoint from which to remove users.
6. Click the Details & Actions tab.
7. Under SED Device Control, click Remove Users.
8. Click Yes to confirm that you want to send the Remove Users command to the endpoint.

Lock a Self-Encrypting Drive

To lock the PBA screen and prevent any user from logging onto the computer, follow these steps:
1. In the left pane, click Populations > Endpoints.
2. Select the Workstation Endpoint Type.
3. If you know the full endpoint hostname, enter it in Search. Leave the field blank to display all Workstation endpoints.
4. Click . An endpoint or list of endpoints displays, based on your search filter.
5. Click the endpoint hostname with the self-encrypting drive to lock.
6. Click the Details & Actions tab.
7. Under SED Device Control, click Lock.
8. Click Yes to confirm that you want to send the Lock command to the endpoint.

Send Wipe Command to Self-Encrypting Drive

CAUTION: The Wipe command clears all data from the disk and cannot be undone.
The Wipe command functions as a “restore to factory state” for the self-encrypting drive. In an emergency situation, wipe the computer, making the data permanently unrecoverable. When the wipe command is consumed, all history and details about this endpoint are removed. Ensure that this is the desired behavior before invoking this command.

To send the Wipe command, follow these steps:

1. In the left pane, click **Populations > Endpoints**.
2. Select the Workstation Endpoint Type.
3. If you know the full endpoint hostname, enter it in **Search**. Leave the field blank to display all Workstation endpoints.
4. Click **Search**. An endpoint or list of endpoints displays, based on your search filter.
5. Click the endpoint hostname on which to wipe the self-encrypting drive.
6. Click the **Details & Actions** tab.
7. Under **SED Device Control**, click **Wipe**.
8. Click **Yes** to confirm that you want to send the Wipe command to the endpoint.

---

**Set the Dell Server Connection Retry Interval**

To set the interval that the Manager client attempts to contact the Dell Server when it is unavailable to communicate with the Manager client, set the following value on the client computer:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\DellMgmtAgent\Parameters
CommErrorSleepSecs (DWORD Value)=300
```

This value is the number of seconds the Manager client waits to attempt to contact the Dell Server if it is unavailable to communicate with the Manager client. The default is 300 seconds (5 minutes).

---

**Administrators**

**Assign or Modify Administrator Roles**

View or modify existing administrator privileges.

1. In the left pane, click **Populations > Administrators**.
2. Search or select the row that displays the user name of the appropriate administrator to display User Detail.
3. View or modify administrator roles in the pane at the right.
4. Click **Save**.

Dell recommends assigning administrator roles at the Group level rather than at the User level.

1. In the left pane, click **Populations > User Groups**.
2. Search or select a group name, then the **Admin** tab.
3. Select or deselect administrator roles assigned to the group.
4. Click **Save**.

If you remove a group that has administrative privileges and later re-add the group, it remains an administrator group.
To view, assign, or modify administrator roles at the User level, see User Admin.

Related topics:
Administrator Roles
User Admin
Delegate Administrator Roles

Administrator Roles

Administrator login is integrated with Active Directory to simplify the process of managing administrators and to allow you to leverage your existing user authentication infrastructure. Administrators are assigned roles that define what level of access each administrator is allowed. For example, some administrators may only be allowed to implement help desk assisted recovery while others have full access to edit security policies. You can assign administrator roles to Active Directory groups so you can easily change the level of administrator access users have with a simple change to AD group membership. Non-domain users can be granted reporting-only access via Compliance Reporter.

There are 11 types of administrators. Distributed administration is key to the secure administration of your environment. It allows you to divide roles appropriately among your administrators and ensures the proper level of privileges are assigned to each administrator. A single administrator can have privileges of more than one administrator type. However, it is recommended to have a maximum of one super administrator (an administrator who has privileges of all administrator types).

The following table shows the tasks each administrator can perform in the Management Console or Compliance Reporter.

<table>
<thead>
<tr>
<th>Task</th>
<th>Performed by Type of Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Help Desk</td>
</tr>
<tr>
<td>Log in</td>
<td>●</td>
</tr>
<tr>
<td>Log out</td>
<td>●</td>
</tr>
<tr>
<td>View current system state</td>
<td>●</td>
</tr>
<tr>
<td>Search for Users, Groups, and Endpoints</td>
<td>●</td>
</tr>
<tr>
<td>Add Users and Groups</td>
<td>●</td>
</tr>
<tr>
<td>Browse Domains</td>
<td>●</td>
</tr>
<tr>
<td>Add and edit Domains</td>
<td>●</td>
</tr>
<tr>
<td>Upload licenses</td>
<td>●</td>
</tr>
<tr>
<td>Recover an endpoint - Authentication Failure</td>
<td>●</td>
</tr>
<tr>
<td>Task</td>
<td>1</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Remove an endpoint</td>
<td></td>
</tr>
<tr>
<td>Change Dell Server Options</td>
<td></td>
</tr>
<tr>
<td>Suspend a User</td>
<td></td>
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<tr>
<td>Reinstate suspended user</td>
<td></td>
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<tr>
<td>Deactivate a User</td>
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<tr>
<td>View policies</td>
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<tr>
<td>Modify policies</td>
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<tr>
<td>Commit policies</td>
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<tr>
<td>Issue commands</td>
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<tr>
<td>Analyze logs</td>
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<tr>
<td>View Administrators</td>
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<tr>
<td>Create, change, and delete Administrator accounts</td>
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<tr>
<td>Delegate Administrator privileges</td>
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<td>Download Endpoint software</td>
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<tr>
<td>Download recovery key bundle</td>
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<tr>
<td>Provision or recover the Advanced Threat Prevention service</td>
<td></td>
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<tr>
<td>Enroll for Advanced Threat Prevention auto updates</td>
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<tr>
<td>Set email notifications of Client Access Licenses, Threat Protection, and Advanced Threat</td>
<td></td>
</tr>
<tr>
<td>Prevention alerts</td>
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<tr>
<td>------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Log in to Compliance Reporter</td>
<td>●</td>
</tr>
<tr>
<td>Manage report folders and modify/save Compliance Reporter report layouts</td>
<td></td>
</tr>
<tr>
<td>Access the Compliance Reporter reports window</td>
<td></td>
</tr>
<tr>
<td>Work with Compliance Reporter report views and generate reports</td>
<td></td>
</tr>
<tr>
<td>Access the Compliance Reporter report administrator window</td>
<td></td>
</tr>
<tr>
<td>Create, manage, schedule, and make Compliance Reporter report layouts available to report users</td>
<td></td>
</tr>
<tr>
<td>Specify the data source for Compliance Reporter and Manage Reports</td>
<td></td>
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<tr>
<td>Manage Compliance Reporter and Manage Reports user privileges</td>
<td></td>
</tr>
<tr>
<td>Edit or delete a report that is set to run at a specified interval in the Compliance Reporter Scheduler and Manage Reports</td>
<td></td>
</tr>
</tbody>
</table>
### Navigate the Dell Server

<table>
<thead>
<tr>
<th>Schedule and rename a report that is set to run at a specified interval in the Compliance Reporter Scheduler and Manage Reports</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter or modify settings in Compliance Reporter and Manage Reports Settings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set up Compliance Reporter plugins</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Open a Report, modify an online Report display, and rename a Report view in Compliance Reporter Manage Reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generate, export, store, print, and email a Report result in Compliance Reporter and Manage Reports</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Add, edit, and delete a Compliance Reporter Report folder</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Access the Manage Reports Tab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 The forensic administrator role provides the rights to use the forensic administrator tools via XAPI.

2 The policy administrator role is reserved for future use.

### Delegate Administrator Rights

Administrator rights for a user group can be delegated to a user. The delegated administrator and users must be members of the user group not only in Active Directory but in the Dell Server database. Administrator rights are available to the delegated administrator only if the delegated administrator is a
Security Management Server Virtual v10.2.11 AdminHelp

member of the user group in the Dell Server database. Delegated administrator rights are effective only with regard to Users who are members of the user group in the Dell Server database.

Only the superadmin and account administrator can delegate administrator rights.

To delegate Administrator rights, follow these steps:

1. In the left pane, click **Populations > User Groups**.
2. Search for the appropriate group.
3. Click the **Admin** tab.
4. Under **Delegated Roles**, click **Add**.
5. Search for and select the user to receive administrator rights, then click **Add**.

To remove delegated administrator rights, under **Delegated Roles** in User Group Detail, locate the user to remove as delegated administrator and click the red X next to the user name.

**Reporting**

**Manage Reports**

**Manage Reports**

In the left pane, click **Reports > Manage Reports**. For compliance and monitoring purposes, you can:

- Manage reports
- View or modify an existing report
- Create a new report

The Manage Reports page has:

- **New Report** - See Create a new report.
- **Report Type** - Select All (default) or specific report types to display in the Name column. Clear selected items to undo selections. See Report Type.

**Note**: Policy-based reports are not an option.

- **Grouping** - Group by Report Type, Author, Private, or None (default).
- **Columns** - Select which columns to display on the Manage Reports page, such as Name, Description, Report Type, Author. Also:
  - **Private** - True indicates only the owner of the report can access it.
  - Report Administrator - can view all public and private reports.
  - Other Administrators - can view private reports they created and all public reports.
  - **Created** - Date the report was created.
  - **Modified** - Date the report was modified.
- **Search** - Hover to view columns for performing a search, then enter specific text for those columns. Use * for a wildcard. For additional filtering to provide a detailed search on a specific report, see Use Search and More to filter.
View or Modify an Existing Report

On the Manage Reports page, select a report from the Name column to view an instance of that report. The owner can make the report private or public. See View Report.

Create a New Report

On the Manage Reports page, click Create New Report and select an option. An instance of that report opens to customize the information to display. See View Report.

View Report

On the Manage Reports page, select an option in Create New Report or click an existing report in the Name column:

- New report - An administrator can select Save As. Save, Rename, and Delete options are activated, and the report is saved to the Manage Reports page. The owner can make the report private or public. You can create:
  - Single reports
  - Report templates - Determine frequent report content that you will generate. Select Column and Grouping options that are common to all those reports and save it as a template. See View or modify an existing report.
- Existing report:
  - To filter a report, perform a query using Search and More.
  - Owner of a report - Can view their private reports and all public ones. Only the Owner or a Report administrator can modify or rename the report.
  - Report administrator - Can view all private and public reports. Can modify or rename public and private reports.
  - Public reports - Any administrator can select Save As to modify a copy of the report.

Grouping, Columns, and More differ for each report type. Some Column and Grouping options are selected by default.

- Columns allows customized options to display. After you select options, you can drag and resequence to avoid scrolling. The resequenced columns return to the default when you close the report.
- Grouping allows you to sort the column options you selected.
- Hover over Search to view suggested columns for performing a search, then enter specific text. Suggested column options differ for each report type. Use (*) as a wildcard.

For a description of each report's Column and Grouping options, click a link below.

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Description and link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Detail</td>
<td>Provides reports based on Windows or, Mac details. See Endpoint Details &amp; Actions.</td>
</tr>
<tr>
<td>Shield Detail</td>
<td>Customize a report of an endpoint's policies, recovery keys, or details. See Shield Detail.</td>
</tr>
<tr>
<td>Notifications</td>
<td>Customize a report of news, alerts, and events or email notifications. See Notifications.</td>
</tr>
<tr>
<td>Log Analyzer</td>
<td>Customize a report of policy modifications or logs based on message</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ATP Event</td>
<td>Provides reports of events for the entire enterprise based on information</td>
</tr>
<tr>
<td></td>
<td>available in the Dell Server.</td>
</tr>
<tr>
<td>EMS Event</td>
<td>Provides data about events that occur when removable media is used.</td>
</tr>
<tr>
<td>BitLocker Manager</td>
<td>Customize a report to see if BitLocker is enabled and to view details.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows Encryption Failures</td>
<td>Provides a report on files that were not encrypted on a Windows Encryption</td>
</tr>
<tr>
<td></td>
<td>client.</td>
</tr>
<tr>
<td>Windows Shield User Encryption</td>
<td>For Windows, provides a report more focused on the user and a device, for</td>
</tr>
<tr>
<td>Status</td>
<td>example if one device has multiple users.</td>
</tr>
</tbody>
</table>

**Query using Search and More... to filter**

**Search** performs a text-only quick search across multiple fields and may return numerous results.

- Hover to view columns that apply to this search, then enter specific text for those columns.
- Use * for a wildcard.

To filter and narrow the search with More...:

- Select More... and select a check box. Check boxes differ for each report type. Select one or multiple check boxes to narrow the search.
- An additional field displays for that check box option where you can either enter text to search on that column or select from a list of enumerators or a data type for that column.

**Query example for Log Analyzer report**

1. In Columns, select options. From menu options such as, **Priority** and **Category** select enumerators. **Created** allows you to filter by date.
2. Enter text in Search to perform a quick search on **Username** and **Message**.
3. For additional filtering, select More.... and then select **Username**, **Message**, or both. Additional text fields allow you to limit the text search specifically to that column.

**Query example for BitLocker Manager report**

1. In Columns, select options.
2. Enter text in Search to perform a quick search on **Registered User**.
3. For additional filtering, select More.... and then select one or more options. Additional text fields allow you to limit the text search to that column:
   - Registered User - Enter text to search specifically on that column.
   - BitLocker Enabled or TPM Enabled - Boolean search specifically on those columns.
   - Disk Status and Logical Disk Status - Enumerator searches specifically on those columns.

**Export File**

Export to Excel or a .csv file.

**Add Schedule**
To add an email schedule for a report:

1. In the left pane of the Management Console, click Reporting > Manage Reports.
2. In Columns, click a report name then click Schedule.
3. In Schedules, click Add Schedule.
4. In Add Schedule, set the following parameters:
   - Email - add a single or multiple addresses separated by commas
   - Schedule - select one of the following:
     - Every Day
     - Days of Week - select a specific weekday or multiple weekdays
     - Day of Month - select a day of the month
   - Time - select a time of day
   - Locale - select a language
5. Click Save.

Compliance Reporter

Compliance Reporter has its own help system. When Compliance Reporter launches, click the Help link on the top menu.

To launch Compliance Reporter:

1. In the left pane of the Management Console, click Compliance Reporter.
2. When Compliance Reporter launches, log in with superadmin credentials or reporting credentials.

Export Events to a SIEM/Syslog Server

Integrating with a SIEM/syslog server allows administrators to run customized analytics on threat and audit data within their environments. The Dell Server supports the export of Advanced Threat Prevention events.

To export audit events to a syslog server or to a local file:

1. In the left pane, click Management > Services Management.
2. Select the Events Management tab.
3. Select the appropriate option(s):
   - Export to Local File allows export of audit events to a file. Enter the location in which to store the file. This option also provides a backup of the audit events database.
   - Export to Syslog allows specification of the syslog server to which to export the file. If TCP protocol is not selected, select it.
4. Click Save Preferences.

Export Audit Events with TLS/SSL over TCP
To use TLS/SSL, the syslog server must be configured to listen for TLS/SSL messages. The root certificate used for the syslog server configuration must be added to the Dell Server Java keystore.

The following example shows necessary configurations for a Splunk server with default certificates. Configurations are specific to individual environments. Property values vary when using non-default certificates.

1. Configure the Splunk server to use the Splunk server certificate and root certificate to listen on TCP for TLS/SSL messages:

   `$SPLUNK_HOME/etc/system/local/inputs.conf`
   
   `[tcp-ssl:<port number>]`
   
   `disabled = 0`
   
   `[SSL]`
   
   `serverCert = $SPLUNK_HOME/etc/auth/server.pem`
   
   `sslPassword = <password>`
   
   `requireClientCert = false`

   `$SPLUNK_HOME/etc/system/local/server.conf`
   
   `[sslConfig]`
   
   `sslRootCAPath = $SPLUNK_HOME/etc/auth/cacert.pem`
   
   `sslPassword = <password>`

2. Restart the Splunk server.

   After the restart, `splunkd.log` will have entries similar to the following:

   07-10-2017 16:27:02.646 -0500 INFO  TcpInputConfig - IPv4 port 5540 is reserved for raw input (SSL)

   07-10-2017 16:27:02.646 -0500 INFO  TcpInputConfig - IPv4 port 5540 will negotiate new-s2s protocol

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputConfig - IPv4 port 5540 is reserved for raw input (SSL)

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputConfig - IPv4 port 5540 will negotiate new-s2s protocol

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputConfig - IPv4 port 9997 is reserved for splunk 2 splunk

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputConfig - IPv4 port 9997 will negotiate new-s2s protocol

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputProc - Creating raw Acceptor for IPv4 port 5540 with SSL

   07-10-2017 16:27:02.653 -0500 INFO  TcpInputProc - Creating raw Acceptor for IPv4 port 5541 with Non-SSL

   07-10-2017 16:27:02.654 -0500 INFO  TcpInputProc - Creating fwd data Acceptor for IPv4 port 9997 with Non-SSL

3. Configure the Dell Server to communicate with the Splunk server and export audit events.
Navigate the Dell Server

Use the keytool command to add the Splunk server's root certificate (cacert.pem) to the Dell Server operating system Java keystore. The certificate is added to the operating system Java keystore and not to the Dell Server application Java keystore.

```
keytool -keystore <keystore_location> -alias <alias-name> -importcert -file <certificate_file>
```

Add the Splunk server's root certificate (cacert.pem) to `/etc/ssl/certs/java/cacerts` and restart the Security Management Server Virtual.

4. Modify the Dell Server database to change the SSL value from `false` to `true`:

In the database, navigate to the information table, SIEM-specific support configuration.

Change the "SSL":"false" value to "SSL":"true" – for example:

```
{"eventsExport":{"exportToLocalFile":{"enabled":"false","fileLocation":"./logs/siem/audit-export.log"},"exportToSyslog":{"enabled":"true","protocol":"TCP","SSL":"true","host":"yourDellServer.yourdomain.com","port":"5540"}}}
```

**Advanced Threat Prevention Syslog Event Types**

Following are event types that are supported with the Syslog/SIEM Advanced Threats option.

**Application Control**

This option is visible when the Application Control feature is enabled. Application Control events represent actions occurring when the device is in Application Control mode. Selecting this option sends a message to the Syslog server whenever an attempt is made to modify or copy an executable file, or when an attempt is made to execute a file from an external device or network location.

Example Message for Deny PE File Change:

![Example Message for Deny PE File Change](image1)

Example Message for Deny Execution from External Drive:

![Example Message for Deny Execution from External Drive](image2)

**Devices**

Select this option to send device events to the Syslog server.

- When a new device is registered, two messages for this event are received: Registration and SystemSecurity.

Example Message for Device Registered Event:

![Example Message for Device Registered Event](image3)
• When a device is removed.

Example Message for Device Removed Event:

• When a device’s policy or logging level has changed.

Example Message for Device Updated Event:

Memory Protection

Selecting this option logs any Memory Exploit Attempts that might be considered an attack from any of the Tenant’s devices to the Syslog server.

There are four types of Memory Exploit actions:

• **None**: Allowed because no policy has been defined for this violation.

• **Allowed**: Allowed by policy.

• **Blocked**: Blocked from running by policy.

• **Terminated**: Process has been terminated.

Example Message of Memory Protection Event:

Script Control

Selecting this option logs any newly found scripts that have been blocked or have triggered an alert to the Syslog server.

Syslog Script Control events contain the following properties:

• **Alert**: The script is allowed to run. A script control event is sent to the Dell Server.

• **Block**: The script is not allowed to run. A script control event is sent to the Dell Server.

Example Message of Script Control
Navigate the Dell Server

**Threats**

Select this option to log any newly found threats or changes observed for any existing threat, to the Syslog server. Changes include a threat being Removed, Quarantined, Waived, or Executed.

There are five types of Threat Events:

- **threat_found**: A new threat has been found in an Unsafe status.
- **threat_removed**: An existing threat has been Removed.
- **threat_quarantined**: A new threat has been found in the Quarantine status.
- **threat_waived**: A new threat has been found in the Waived status.
- **threat_changed**: The behavior of an existing threat has changed (examples: Score, Quarantine Status, Running Status).

Example Message of Threat Event:

```
Event Type: Threat, Event Name: threat_found, Device Name: ..., IP Address: ..., File Name: virusshare_00fbcc4c0422774b5a9f71e074b70bda9, Path: c:\\host_automation\test\data\test_files, SHA256: 118f3bba617e0023ab380d5a693adsf10774b70bda9, Status: Unsafe, Cylance Score: 100, Found Date: 6/1/2015 10:57:42 PM, File Type: Executable, Is Running: False, Auto Run: False, Detected By: FileWatcher
```

**Threat Classifications**

Hundreds of threats are classified each day as either Malware or Potentially Unwanted Programs (PUPs). If this option is selected, you subscribe to be notified when these events occur.

Example Message of Threat Classification:

```
Event Type: ThreatClassification, Event Name: ResearchSaved, Threat Class: Malware, Threat Subclass: Worm, SHA256: 121843037321c1d1df897bc0c258ef17c00696c9368d8d006551eac8f9794f65
```

**Security Information and Event Management (SIEM)**

Specifies the type of Syslog server or SIEM that events are to be sent to.

**Protocol**

This must match what is configured on your Syslog server. The choices are UDP or TCP. UDP is generally not recommended as it does not guarantee message delivery. Dell recommends TCP (default).

**TLS/SSL**

Only available if the Protocol specified is TCP. TLS/SSL ensures the Syslog message is encrypted in transit from Advanced Threat Prevention to the Syslog server. Dell encourages customers to select this option. Ensure that the Syslog server is configured to listen for TLS/SSL messages. To use TLS/SSL, it is necessary to configure the Syslog server and import certificates. For more information, see Export Audit Events with TLS/SSL over TCP.
IP/Domain

Specifies the IP address or fully-qualified domain name of the Syslog server that the customer has setup. Consult with your internal network experts to ensure firewall and domain settings are properly configured.

Port

Specifies the port number on the devices that the Syslog server listens for messages. It must be a number between 1 and 65535. Typical values are: 512 for UDP, 1235 or 1468 for TCP, and 6514 for Secured TCP (example: TCP with TLS/SSL enabled).

Severity

Specifies the severity of the messages that should display in the Syslog server. This is subjective, and it may be set to whatever level preferred. The value of severity does not change the messages that are forwarded to Syslog.

Facility

Specifies what type of application is logging the message. The default is Internal (or Syslog). This is used to categorize the messages when they are received by the Syslog server.

Testing the Connection

Click Test Connection to test the IP/Domain, Port and Protocol settings. If valid values are entered, after a couple of moments, a success confirmation displays.

Advanced Threat Prevention Syslog IP Addresses

Syslog server IP addresses to allow, by region:

US (includes my.cylance.com and my-vs2.cylance.com):
52.2.154.63
52.20.244.157
52.71.59.248
52.72.144.44
54.88.241.49

AU (my-au.cylance.com):
52.63.15.218
52.65.4.232

EU (my-vs0-euc1.cylance.com and my-vs1-euc1.cylance.com):
52.28.219.170
52.29.102.181
52.29.213.11

Note: This IP Address should remain static.

For the latest IP addresses for Syslog messages, contact Dell ProSupport.
Commit Policies

Uncommitted policies display in a badge icon in the top left of the Management Console. Click the badge icon to navigate to Management > Commit.

To commit policies that have been modified and saved:

1. In the left pane, click Management > Commit.
2. In Comment, enter a description of the change.
   
   Best practice: add a comment about the changes that are committed.
3. Click Commit Policies.

A policy publication/commit occurs when an administrator clicks Commit Policies. The following information displays:

Pending Policy Changes - The number of policy changes ready to commit.
Date Committed - Date and time the policies were committed.
Changed by - User name of the administrator who performed the policy commit.
Comment - Any comments that were added when the polices were committed.
Version - The number of policy saves since the last policy commit plus the previous Version.
Policy Logs - Select View Logs to see logs associated with this row's policy commit.

View Pending Commit(s)

Uncommitted policies display in a badge icon in the top left of the Management Console. Click the badge icon to go to Management > Commit.

To see pending policy changes in Log Analyzer:

1. In the left pane, click Management > Commit.
2. Select View Pending Commit(s).

Log Analyzer

Log Analyzer gives you the power to search logs by message priority level, date and time periods, and occurrences of usernames and hosts.

To view or export logs:

1. In the left pane, click Management > Log Analyzer.
2. Select a Category.

   The Categories are Admin Actions, Shield for Server Events, Policy, Advanced Threat Events, System Logs, Whitelist, and Full Access List.
3. To narrow the results, select from these optional filters:
   
   • Priority - Choose DEBUG, INFO, WARN, ERROR, or FATAL. FATAL returns fewest entries; DEBUG returns the greatest number of entries.
   
   • And more severe - Select this option to include all areas of greater severity than the priority level you selected.
Date Range - Enter a Start Date and End Date to limit results to entries that occur between these dates. To insert dates into these fields, click the calendar icons to the right of the fields.

Time Range - If you entered a Date Range, further narrow the entries by entering a Start Time and End Time. To insert times into these fields, click the calendar icons to the right of the fields.

Username and Host - Enter a either a username or host or both.

4. Click **Search**.

5. To sort the results in ascending order by column, click the heading of the column to sort.

6. To export the results to an Excel or CSV file, pull down the **Export File** list and select **Excel** or **CSV**.

Exported files can hold up to 100,000 records.

Recovery

**Recover Data - Encryption External Media Authentication Failure**

Encryption External Media encrypts data on removable media, as defined by policy. There may be several conditions where access to encrypted data needs to be regained. In general, these scenarios fall into two categories:

- The Encryption External Media password is lost or forgotten
- The Encryption External Media software or encryption key material has been lost or corrupted on the device

If more than one Dell Server is part of a federation, to perform Encryption External Media Recovery across Dell Servers in the federation, see **Enable Federated Key Recovery**.

Manual Authentication when Encryption External Media Password is Lost or Forgotten

If a user has lost or forgotten a password, manual authentication is necessary.

1. The user is prompted for their password. Since the password is not available, the user clicks **I forgot**.

2. The user is given another opportunity to try again. If the user clicks **Yes - I forgot**, manual authentication begins (or the manual authentication begins upon the set number of retries allowed).

3. The user is instructed to contact their administrator and inform them that they need to manually recover Encryption External Media for Windows.

4. As a Dell administrator, log in to the Management Console.

5. In the left pane, click **Populations > Users**.

6. Enter a filter to search for the user. The wild card character is *. You can enter Common Name, Universal Principal Name, or sAMAccountName.

7. Click **Q**. A user or list of users displays, based on your search filter.

8. Locate the appropriate user and click the **Endpoints** tab.

9. Locate the appropriate **Shielded** Endpoint.

10. Under **Actions**, click the **Recover** link.

**Tip:** Numbers are red and letters are blue.
11. Ask the user for the **Shield ID** and verify that it is correct or enter it into **Shield ID**. Shield IDs do not contain the letters B, O, Q, and S.

12. Ask the user for the 8, 16, or 32-character **Endpoint Code** (not case sensitive) and enter it into the appropriate field. Endpoint Codes contain only the letters A-F.

13. Ask the user for the **Key ID** and enter it into the appropriate field (if your organization allows non-domain user activation, the Key ID is required).

14. Click **Generate Access Code**. The Restore User Access page displays the directory user alias associated with the Encryption client, along with an access code.

15. Confirm to your satisfaction that the request is coming from the directory user alias shown.

   This is especially important if recovering media that may have been given to another user. Dell recommends that you set a help desk policy for how to handle requests from users other than those who originally copied the data.

16. Do one of the following:
   
   - To allow the user to access the endpoint, click **Activate**.
   - To not allow the user to access the endpoint, click **Cancel**.

17. If the requester is the device authorized user, ask the user to enter the Access Code (not case sensitive) on the endpoint and click **OK**. The Access Code policies of the user affect this process (for example, how many attempts the user has to enter the code correctly).

18. When the user successfully enters the Access Code, the Encryption client changes the **Current Shield State** policy to **Activate**, and the successfully entered Access Code is no longer valid. Instruct the user to click **OK** to close the dialog.

19. In the left pane, click **Management > Commit**.

20. Click **Commit Policies**.

Once manual authentication is successful, the user is directed to reset their password. Depending on how policies are set, one of the following three options are displayed. The user enters a new password and confirms it, then clicks **OK** or **Cancel**.

Depending on policies set, the user may be prompted to type this password when using this removable media in other computers.

<table>
<thead>
<tr>
<th>If the policy is set to block all access to removable media until authenticated/encrypted and the user clicks Cancel, they cannot access any files on this removable storage. If a user re-uses a password that has been used too recently, a dialog displays asking them to use a different password. If a password does not</th>
<th>If the policy gives read-access to removable storage until authenticated/encrypted and the user clicks Cancel, they can read/delete existing files on this removable media, but cannot edit/add files to this removable storage. If a user re-uses a password that has been used too recently, a dialog displays asking them to use a different password.</th>
<th>If the policy gives full access to removable media until authenticated/encrypted and the user clicks Cancel, they have full access to unencrypted files on this removable media, but cannot access encrypted files. If a user re-uses a password that has been used too recently, a dialog displays asking them to use a different password.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
meet the criteria set by policy, a dialog displays, outlining the password criteria.

password.

If a password does not meet the criteria set by policy, a dialog displays, outlining the password criteria.

password.

If a password does not meet the criteria set by policy, a dialog displays, outlining the password criteria.

The user may now use the removable media as usual.

If manual authentication is not successful, the device is disabled according to policy, as follows:

- The policy could be set to wait (cooldown) between unsuccessful manual authentication attempts.

or

- The policy may be set to delete the encryption key material and prevent any access to encrypted files on this removable media. In this case, the user needs to contact an administrator again for instructions to re-enable access.

Restore Lost Encryption Key Material

If encryption keys have been deleted on the removable media (because of failed manual authentication, accidentally deleting a necessary file, a change in policy), the encrypted data is inaccessible until an authorized user reinitializes the encryption key material.

A dialog displays, notifying the user that key material is missing. Click Yes to use the self-healing feature of Encryption External Media or click No.

If the policy blocks all access to removable media until encrypted and the user clicks No, they cannot access this removable media.

If the policy gives read-access to removable media until encrypted and the user clicks No, they have read-access to unencrypted data on this media, but no access to encrypted data.

If the policy gives full access to removable media, whether or not encrypted and the user clicks No, they have full access to unencrypted data on this media. They cannot access encrypted data.

Occasionally, based on policies set, encryption keys cannot be reinitialized on the computer that the removable media is inserted in. If policy permits, the user can insert the media into any Dell-encrypted computer where the original user is logged in, to reinitialize the encryption keys. If policy does not permit this, it must be inserted into the originally encrypting computer, with the originally specified user name.

On rare occasions, when encryption key material is lost, the Encryption client cannot automatically locate the necessary information. Use the following process to recover encrypted data.

1. Attach the device to a Windows computer that is not running the Encryption client.
2. Copy all folders from the device onto the Windows computer.
3. Use WSScan to determine the DCID of the encrypted data.
4. Follow the process for recovering access to encrypted data on Windows computers. Use the DCID obtained from WSScan for the RecoveryID.

Enable Federated Key Recovery
If more than one Dell Server is part of a federation, to perform Encryption External Media Recovery across Dell Servers in the federation, enable federated key recovery:

1. Navigate to <Security Server install dir>\conf\ and open the federatedservers.properties file.
2. Update the server.code property with a new a code, password or passphrase to be shared across Dell Servers in the federation. Enclose the code, password, or passphrase within a new CLR() tag, to replace the ENC() tag.
   
   Example: server.code=CLR(mypassword)
3. List all Dell Servers to be federated in the server uris property, delimited by a comma.
   
4. Save and copy the federatedservers.properties file to all Dell Servers that are part of the federation.
5. Restart all Security Servers in the federation.
   
   The restart converts the CLR() tag to the encrypted tag, ENC(), in the federatedservers.properties file.

Recover Data - BitLocker Manager

See the Recovery Guide for the most up-to-date recovery instructions.

Recover Endpoint

To download encryption keys of a managed or removed endpoint:

NOTE: Select Include Removed Endpoints to display endpoints that were previously removed.

1. In the left pane, click Management > Recover Endpoint.
2. Enter the hostname and click Search.
3. Click Recover next to the endpoint.
4. Enter a password then click Downloadx86 or Downloadx64.
5. Copy the recovery file to the endpoint and run the file.

Windows Recovery

For Windows Recovery, follow the instructions in the Recovery Guide. The latest Recovery Guide is available at these locations:

   Encryption
   Endpoint Security Suite Enterprise

SED Recovery

For information about SED authentication failure or SED endpoint recovery, see SED Recovery.

Encryption External Media Recovery

For information about recovering after Encryption External Media authentication failure, see Encryption External Media Authentication Failure.

Mac Recovery
Security Management Server Virtual v10.2.11 AdminHelp

See the Encryption Enterprise for Mac Administrator Guide, available at dell.com/support for the most up-to-date recovery instructions.

License Management

License Management

To view usage of Client Access Licenses (CALs) that you own and upload new licenses, click Management > License Management.

Upload Client Access Licenses

You received CALs separately from the installation files, either at the initial purchase or later if you added additional CALs.

1. In the left pane, click Management > License Management.
2. Under Upload Volume Licenses, click Choose File to browse to and select the saved CAL.

View or Add License Notifications

Through Notification Management, you can set up notifications of license usage or expiration.

In the left pane, click Management > Notification Management.

Related topics:
CAL Information
Notification Management

Client Access License (CAL) Information

Upon log in to the Management Console, if there is a problem with your CAL, an error message displays (typically, the error states that the Dell Server has exceeded the maximum number of authorized client licenses). The next step is to review your CALs to ensure that your enterprise has the appropriate number of CALs to client ratio (1-to-1 ratio).

If authorized CALs exceed 5% of that specific CAL total, new client activations for that specific product is blocked until the license key is brought into compliance. No other client or Dell Server functions is impacted when a license key is in the over 105% state. Two separate warning messages are displayed, the first warning message is when the CAL reaches 99% of the authorized licenses, the second when the CAL count reaches or exceeds the 105% total.

For example:

- Authorized CAL for Dell Encryption (Windows): 5000 user licenses
- First warning message from Dell Server and an email message is sent to the administrator: CAL count reaches 5000
- Second warning message from Dell Server and an email message is sent to the administrator: CAL count reaches 5250

If a user has previously been activated and inventory records exist, then it is not blocked from any re-activation. However, if the CAL authorized count is exceeded during this process, new activations are blocked for the specific CAL that is in the over 105% state.
1. License structure:
   b. Encryption External Media (EME)
   c. Threat Protection (TP) - includes Malware Protection and/or Client Firewall and/or Web Protection features
   d. Advanced Threat Prevention (ATP) - includes optional Client Firewall and/or Web Protection features

2. Dell Digital Delivery of entitlements

Upload Client Access Licenses

You received CALs separately from the installation files, either at the initial purchase or later if you added additional CALs.

1. In the left pane, click Management > License Management.

2. Under Upload Licenses, click Choose File to browse to the location of the saved CAL.

Related topics:
CAL Information
License Management

On The Box Licenses
See On The Box Licenses for information about the type of licenses in use and the associated Service Tags.

1. In the left pane, click Management > License Management.
2. Select the On The Box Licenses pane.

Services Management

Services Management
From the left pane of the Management Console, select Management > Services Management. The following options are available:

Provision or Recover the Advanced Threat Prevention service - After the service is provisioned, clients are automatically provisioned with Advanced Threat Prevention. For more information, see Provision or Recover Advanced Threat Prevention Service.

Enroll to receive Advanced Threat Prevention agent auto updates - After enrollment, clients can automatically download and apply updates from the Advanced Threat Prevention server. For more information, see Enroll for Agent Auto Update.

Export audit events - Audit events can be exported to a syslog server or to a local file. For more information, see Export Events to SIEM Server.

Provision or Recover Advanced Threat Prevention Service
The Advanced Threat Prevention service is provisioned and recovered through the Services Management Advanced Threats tab. Only system administrator can provision and recover the service.

After provisioning is complete, the contact information of the administrator who provisioned the service is displayed.

The guided setup prompts the system administrator to back up the Advanced Threat Prevention certificate at this time.

Provision service
To provision the Advanced Threat Prevention service:

1. In the left pane of the Management Console, click Management > Services Management.
2. Select the Advanced Threats tab.
3. Click Setup Advanced Threat Prevention Service.
4. Follow the guided setup and complete the necessary fields.

Regional provisioning to support geographical data centers is available for NA (North America), EU (EMEA), and AU (APAC).

Download and back up the Advanced Threat Prevention certificate in a safe location, separate from the server running the Dell Server. The backed up certificate is required if a service recovery is necessary.
Clients are automatically provisioned with Advanced Threat Prevention.

After provisioning is complete, the Setup link no longer displays.

Recover service

You will need your backed up certificate to recover the Advanced Threat Prevention service.

1. In the left pane of the Management Console, click Management > Services Management.
2. Click Recover Advanced Threat Prevention Service.
3. Follow the guided service recovery dialogs and upload the Advanced Threat Prevention certificate when prompted.

Enroll for Advanced Threat Prevention Agent Auto Updates

You can enroll to receive Advanced Threat Prevention agent auto updates. Enrolling to receive agent auto updates allows clients to automatically download and apply updates from the Advanced Threat Prevention server. Updates are released monthly.

Receive agent auto updates

To enroll to receive agent auto updates:

1. In the left pane of the Management Console, click Management > Services Management.
2. On the Advanced Threats tab, under Agent Auto Update, click On then click Save Preferences.

Stop receiving agent auto updates

To stop receiving agent auto updates:

1. In the left pane of the Management Console, click Management > Services Management.
2. On the Advanced Threats tab, under Agent Auto Update, click Off then click the Save Preferences.

Events Management - Export Audit Events to a SIEM Server

To export audit events to a syslog server or to a local file:

1. In the left pane, click Management > Services Management.
2. Select the Events Management tab.
3. Select the appropriate option(s):
   - Export to Local File allows you to export audit events to a file. Enter the location in which to store the file. This option also provides a backup of the audit events database.
   - Export to Syslog lets you specify the syslog server to which to export the file. If TCP protocol is not selected, select it.
4. Click the Save Preferences button.

Product Notifications

You can enroll to receive notifications of product updates, recommended configuration changes, and relevant knowledge base articles.
Receive product notifications

To enroll to receive product notifications:
1. In the left pane, click Management > Services Management.
2. Select the Product Notifications tab.
3. Click On then click Save Preferences.
   
   Note: The product notification switch does not display when servers are configured in disconnected mode.

Stop receiving product notifications

To stop receiving product notifications:
1. In the left pane of the Management Console, click Management > Services Management.
2. Select the Product Notifications tab.
3. Click Off then click Save Preferences.

Notification Management

Notification Management

The Notification Management page lets you manage email notifications.

To add an email notification:
1. In the left pane, click Management > Notification Management.
2. Click Add and enter the following information:
   
   Email: Enter or select your email address.
   Notification Type: Select the type of alert to add.
   Priority Level: Select the priority levels of notifications.
   Email Frequency: Select how often alerts of this type. The default frequency is 24 hours.
3. Click Add when complete.

To edit an alert:
• Select the alert to change, click Edit, make the changes, and press Enter.

To delete an alert:
• Select the alert to delete, and click Delete.

Send Test Email

Send test emails from the Management Console to validate email workflows.

To test email workflows:
1. Navigate to Management > Notification Management.
2. Select Send Test Email.
3. Enter an email address and select Send Email.
If the test email passes through the Dell Server successfully, a notification with the following results displays:

- Sent From - email used for testing workflow.
- Server Name - SMTP server used.
- SMTP Port - SMTP port in use for email notifications.
- Authentication - true or false value for authentication protected notifications.

Related topics:
License Management

Enable SMTP Server for Email Notifications

Use this procedure to enable the SMTP server for email notifications.

When configuration changes are complete, restart the Security Server service. The Security Server service must be restarted for the settings to be updated.

Configure SMTP Settings

To receive email notifications, follow the steps in this section to configure SMTP settings. Dell Server email notifications inform recipients of status error states, password updates, availability of Dell Server updates, and client license issues.

It is a best practice to restart the services any time a settings change is made.

To configure SMTP settings, follow these steps:

1. From the Advanced Configuration menu, select Email Notifications.
2. In the Set up Email Notifications screen, to enable email alerts, press the space bar to enter an X in the Enable Email Alerts field.
3. Enter the SMTP server fully qualified domain name.
4. Enter the SMTP port.
5. In From User, enter the email account ID that will send email notifications.
6. In Enter User, enter an email account ID for access to change configured email notifications.
7. In Password, enter a password for access to change configured email notifications.
8. In Mail IDs for Dell Server Status, Password Updates, and Updates Availability, enter lists of recipients for each notification type.
9. Follow these conventions when listing recipients:
   - Email address format is recipient@dell.com.
   - Recipients are separated with commas or semicolons.
10. In Service alert reminder, to enable reminders, press the space bar to enter an X in the field then set the reminder interval in minutes.
11. A Service alert reminder is triggered when the reminder interval has passed after a notification is sent about a system health issue and the host or service remains in the same state.
12. In the Summary Report, to enable reports of notifications, select the desired interval (daily, weekly, or monthly) and then press the space bar to enter an X in the field.

13. Select OK.

Product Notifications

You can enroll to receive notifications of product updates, recommended configuration changes, and relevant knowledge base articles.

Receive product notifications

To enroll to receive product notifications:

1. In the left pane, click Management > Services Management.
2. Select the Product Notifications tab.
3. Click On then click Save Preferences.

Note: The product notification switch does not display when servers are configured in disconnected mode.

Stop receiving product notifications

To stop receiving product notifications:

1. In the left pane of the Management Console, click Management > Services Management.
2. Select the Product Notifications tab.
3. Click Off then click Save Preferences.

Change Superadmin Password

1. In the masthead at the top of the screen, click the gear icon and select Change superadmin password.
2. Enter the current password.
3. Enter the new password.
   - The new password must be at least 6 characters, contain at least one capital letter and one of these characters: ~@#$%^*()|?!{}[].
4. Confirm the new password.
5. Click Update.

After three failed login attempts, the superadmin account is locked for five minutes. To change these settings, see Set or Change Account Lockout Settings.

Change Account Lockout Settings

After three failed login attempts, the superadmin account is locked for five minutes. To change these settings:

1. Open <Security Server installation folder>\conf\application.properties.
2. Edit the following property to change the maximum allowed number of failed login attempts.
login.cooldown.max.failed.attempts=3

3. Edit the following property to change the length of lockout time after the maximum allowed number of failed login attempts is reached.
   login.cooldown.minutes=5

4. Save the file, and restart the Security Server.

Downloads

Endpoint Software

To download the latest version of Dell Encryption:

1. In the left pane, click Management > Downloads.
2. Select the Endpoint Software tab.
3. Click Navigate to Download.
   The Download tab is only available if the user has been assigned a security and a system administrator role.

To download the latest version of Endpoint Security Suite Enterprise (ESSE):

1. In the left pane, click Management > Downloads.
2. Select the Endpoint Software tab.
3. Click Dell Support to contact Dell for access to Dell Endpoint Security Suite Enterprise.
Manage Policies

Manage Security Policies

You can apply security policies at the Enterprise, Domain, User Group, User, Endpoint Group, and Endpoint levels. Default policy settings allow your enterprise to get started with Dell security, but you should customize the security and configuration settings. If you've migrated from an earlier version of Dell Server, your policy settings have been migrated for you.

Security policies are grouped by technology. Click a technology group to view its policies and policy descriptions.

### Windows Encryption
- Full Disk Encryption (FDE)
- Self-Encrypting Drive (SED)
- Policy-Based Encryption
- BitLocker Encryption
- Server Encryption

### Threat Prevention
- Advanced Threat Prevention
- Threat Protection
- Web Protection
- Client Firewall

### Mac Encryption
- Dell Volume Encryption
- Mac Global Settings

### Authentication
- Pre-Boot Authentication
- Windows Authentication

### Removable Media Encryption
- Windows Media Encryption
- Mac Media Encryption
- Media Encryption Settings

### Port Control
- Windows Port Control
- Windows Device Control

### Global Settings

The following override information displays at the top of the Security Policies page:

- **Override count** - the number of policy settings that are changed from their default settings.
- **Uncommitted overrides** - the number of changes from default settings that are not yet committed.

**NOTE:** The Security Policies page for a population displays overrides to localizable policies in the browser language only.

**Icons and their meanings:**

- The master switch for policies in the subgroup is On, which means the policy group is enabled. Policies in the group are sent to clients when policies are committed.
- Policies in the subgroup are not enabled.
- At least one default setting in the policy group has been overridden.
- Group of policy settings that has no master switch.
- The policy change is not yet committed.
- The policy value can be localized, so that policies on the endpoint computer display in a
selected language. For more information, see Localize Policies Displayed on the Endpoint Computer and Localizable_policies.

The default setting of a localizable policy is overridden.

A localizable policy change is not yet committed.

To remove a policy override, hover over the red flag next to the policy name. The red flag becomes a red X. Click the red X to revert to the default value.

Group precedence

You can Modify Group Precedence. Group precedence creates a weight associated with the specific group it is assigned to, and that weight is used in policy arbitration for all policy overrides.

Related topics:
- View or Modify Enterprise-Level Policies
- View or Modify Domain Policies and Information
- View or Modify User Group Policies and Information
- View or Modify User Policies and Information
- View or Modify Endpoint Group Policies and Information
- View or Modify Endpoint Policies and Information

Localize Policies Displayed on the Endpoint Computer

Localizable_policies are indicated by: 🌐

To localize policies that are displayed on the endpoint computer, follow these steps:

1. In the left pane, expand Populations and select a population.
2. Click the Security Policies tab.
3. Select the technology group, such as Windows Encryption, or policy group, such as Policy-Based Encryption, to modify.
4. Select a language for localizable policies from the list at the top right of the screen.

5. Enter text that is in the language you selected for localizable policies. Navigate the populations and technology groups as necessary to localize all desired policies for that language.

6. Click **Save**.

7. To update policies in a different language, select the language from the list, enter localized text for all desired policies, and click **Save**.

   Save policy changes before selecting another language in the list. A different language cannot be selected until policy changes are saved.

8. When finished, select the desired language. Any changes made to localizable policies are made in the language that displays.

   **NOTE:** The Security Policies page for a population displays overrides to localizable policies in the browser language only.

**Localizable Policies**

Localizable policies are indicated with by 🌐

Available languages:

- English
- Korean
- French
- Brazilian Portuguese
- German
- Portuguese
- Italian
- Spanish
- Japanese

For instructions about localizing policies, see [Localize policies](#).

The following policies can be displayed in a selected language on the endpoint computer:

**Enterprise Level**

<table>
<thead>
<tr>
<th>Technology Group</th>
<th>Policy</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Category</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Windows Encryption &gt; Full Disk Encryption</strong></td>
<td>Support Information Text</td>
</tr>
<tr>
<td></td>
<td>Full Disk Encryption Title Text</td>
</tr>
<tr>
<td></td>
<td>Legal Notice Text</td>
</tr>
<tr>
<td></td>
<td>Self Help Questions</td>
</tr>
<tr>
<td><strong>Windows Encryption &gt; Self-Encrypting Drive (SED)</strong></td>
<td>Support Information Text</td>
</tr>
<tr>
<td></td>
<td>PBA Title Text</td>
</tr>
<tr>
<td></td>
<td>Legal Notice Text</td>
</tr>
<tr>
<td></td>
<td>Self Help Questions (Pre-8.0 clients)</td>
</tr>
<tr>
<td><strong>Windows Encryption &gt; Policy-Based Encryption</strong></td>
<td>Common Encrypted Folders</td>
</tr>
<tr>
<td></td>
<td>User Encrypted Folders</td>
</tr>
<tr>
<td></td>
<td>OS Update Encryption Rules</td>
</tr>
<tr>
<td></td>
<td>Application Data Encryption List</td>
</tr>
<tr>
<td></td>
<td>Managed Services</td>
</tr>
<tr>
<td><strong>Windows Encryption &gt; BitLocker Encryption</strong></td>
<td>Default Folder Location to Save Recovery Password</td>
</tr>
<tr>
<td><strong>Authentication &gt; Windows Authentication</strong></td>
<td>Recovery Questions for Windows Authentication (check box selections)</td>
</tr>
<tr>
<td><strong>Removable Media Encryption &gt; Windows Media Encryption</strong></td>
<td>EMS Device Whitelist</td>
</tr>
<tr>
<td></td>
<td>EMS Access Code Required Message</td>
</tr>
<tr>
<td></td>
<td>EMS Access Code Failed Message</td>
</tr>
<tr>
<td><strong>Users Level</strong></td>
<td><strong>Technology Group</strong></td>
</tr>
<tr>
<td><strong>Windows Encryption &gt; Policy-Based Encryption</strong></td>
<td><strong>Policy</strong></td>
</tr>
<tr>
<td></td>
<td>User Encrypted Folders</td>
</tr>
</tbody>
</table>
A word about types of encryption: SDE is designed to encrypt the operating system and program files. To accomplish this purpose, SDE must be able to open its encryption key while the operating system is booting without intervention of a password by the user. Its intent is to prevent alteration or offline attacks on the operating system by an attacker. SDE is not intended for user data. Common and User key encryption are intended for sensitive user data because they require a user password to unlock encryption keys.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Disk Encryption (FDE)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Manage Policies

This technology manages drives using software-based Full Disk Encryption. Authentication by users through a Pre-Boot Authentication environment (before the operating system has booted) is required to unlock the drive.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Disk Encryption (FDE)</strong></td>
<td>Off</td>
<td><strong>On</strong>&lt;br&gt;Toggle to ON to enable all full disk encryption policies. If this policy is toggled to OFF, no full disk encryption takes place, regardless of other policy values.&lt;br&gt;<strong>Off</strong>&lt;br&gt;On means that all Full Disk Encryption policies are enabled. Changing the value of this policy triggers a new sweep to encrypt/decrypt files.</td>
</tr>
<tr>
<td>Encryption Algorithm</td>
<td>AES 256</td>
<td><strong>AES 256, AES 128, FIPS AES 256, FIPS AES 128</strong> Encryption algorithm used for Full Disk Encryption.</td>
</tr>
<tr>
<td>Encryption Mode</td>
<td>CBC</td>
<td><strong>CBC, XTS</strong> Encryption mode used for Full Disk Encryption.</td>
</tr>
<tr>
<td>Enable FDE Plugin</td>
<td>Selected</td>
<td>The plugin must remain selected. To deactivate the PBA and disable full disk encryption, toggle the Full Disk Encryption policy to OFF.</td>
</tr>
</tbody>
</table>

Self-Encrypting Drive (SED)<br>This technology manages self-encrypting drives (SEDs). Authentication by users through a Pre-Boot Authentication environment (before the operating system has booted) is required to unlock the drive.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Encrypting Drive (SED)</strong></td>
<td>On</td>
<td><strong>On</strong>&lt;br&gt;Enable this policy to provision the PBA. If disabled after the PBA is provisioned, the PBA is de-provisioned and the PBA database is deleted. Re-enabling this policy re-provisions the PBA and re-creates the PBA database.</td>
</tr>
</tbody>
</table>

See [advanced settings](#)
encryption. This allows greater protection over individual data than traditional full disk encryption, by limiting access on a computer to only what a user is authorized to view.

<table>
<thead>
<tr>
<th>Policy-Based Encryption</th>
<th>On</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toggle to ON to enable all policy-based encryption policies. If this policy is toggled to OFF, no policy-based encryption takes place, regardless of other policy values.</strong> On means that all Policy-Based Encryption policies are enabled. Changing the value of this policy triggers a new sweep to encrypt/decrypt files.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Data Encryption Key</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose a key to indicate who can access files encrypted by Application Data Encryption List, and where. More...</strong> Common for these files to be accessible to all managed users on the computer where they were created (the same level of access as Common Encrypted Folders), and encrypted with the Common encryption algorithm. User for these files to be accessible only to the user who created them, only on the computer where they were created (the same level of access as User Encrypted Folders), and encrypted with the user encryption algorithm. User Roaming for these files to be accessible only to the user who created them, on any encrypted Windows computer, and encrypted with the user encryption algorithm. Changes to this policy do not affect files already encrypted because of this policy.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SDE Encryption Enabled</th>
<th>Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If this policy is not selected, SDE</strong></td>
<td></td>
</tr>
</tbody>
</table>

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Manage Policies

Encryption is disabled, regardless of other policy values. Selected means that all data not encrypted by other Intelligent Encryption policies are encrypted per the SDE Encryption Rules policy. Changing the value of this policy requires a reboot.

**SDE Encryption Rules**

<table>
<thead>
<tr>
<th>String</th>
</tr>
</thead>
<tbody>
<tr>
<td>F:\</td>
</tr>
<tr>
<td>-@%ENV:SYSTEMDRIVE%\System Volume Information</td>
</tr>
<tr>
<td>-%ENV:SYSTEMROOT%\dll.exe.sys.ocx.man.cat.manifest.policy</td>
</tr>
<tr>
<td>-%ENV:SYSTEMROOT%\System32</td>
</tr>
<tr>
<td>-%ENV:SYSTEMROOT%\SysWow64</td>
</tr>
<tr>
<td>-%ENV:SYSTEMROOT%\WinSxS</td>
</tr>
<tr>
<td>-%ENV:SYSTEMROOT%\Fonts</td>
</tr>
<tr>
<td>-3@%ENV:SYSTEMROOT%\SYSTEM32\exe</td>
</tr>
<tr>
<td>-3@%ENV:SYSTEMROOT%\SYSTEM32\cmd.exe;exe</td>
</tr>
<tr>
<td>-3@%ENV:SYSTEMROOT%\SYSTEM32\autochk.exe;exe</td>
</tr>
<tr>
<td>-3@%ENV:SYSTEMROOT%\SYSTEM32\winresume.exe;exe</td>
</tr>
<tr>
<td>-F:\bootmgr</td>
</tr>
<tr>
<td>-F:\boot</td>
</tr>
<tr>
<td>-@%ENV:SYSTEMDRIVE%\vol</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\Program Files\PGP Corporation</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\PGPWDE00</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\PGPWDE01</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\PGPWDE02</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\PGPWDE03</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\Program Files\Symantec</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\Program Files (x86)\Symantec</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\Program Files\Common Files\Symantec Shared</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\Program Files (x86)\Common Files\Symantec Shared</td>
</tr>
<tr>
<td>-%ENV:SYSTEMDRIVE%\ProgramData\Symantec</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\SafeBoot.fs</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\SafeBoot.rsv</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\SafeBoot.csv</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\Program Files\McAfee</td>
</tr>
<tr>
<td>-3%ENV:SYSTEMDRIVE%\Program Files\Common Files\McAfee</td>
</tr>
<tr>
<td>Policy</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Bitlocker Encryption</td>
</tr>
<tr>
<td>Policy</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>BitLocker Encryption</td>
</tr>
<tr>
<td>TPM Manager Enabled</td>
</tr>
<tr>
<td>Disable Sleep Mode</td>
</tr>
<tr>
<td>Encrypt System Drive</td>
</tr>
<tr>
<td>Encrypt Fixed Drives</td>
</tr>
<tr>
<td>Feature</td>
</tr>
<tr>
<td>----------------------------------------------</td>
</tr>
<tr>
<td><strong>Encrypt Removable Drives</strong></td>
</tr>
<tr>
<td><strong>Require Additional Authentication at System Startup</strong></td>
</tr>
<tr>
<td><strong>Allow BitLocker Encryption without a Compatible TPM</strong></td>
</tr>
</tbody>
</table>
**Manage Policies**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BitLocker recovery for access.</td>
<td></td>
<td>To use this policy, <strong>Require Additional Authentication at System Startup</strong> must be set to <strong>Selected</strong>.</td>
</tr>
<tr>
<td>Configure TPM Startup PIN</td>
<td>Allow</td>
<td><strong>Do Not Allow</strong>&lt;br&gt;<strong>Require</strong>&lt;br&gt;<strong>Allow</strong>&lt;br&gt;On computers with a compatible TPM, three types of authentication are supported. Only one of the following can be required or allowed:&lt;br&gt;<strong>Configure TPM Startup PIN</strong>&lt;br&gt;<strong>Configure TPM Startup Key</strong>&lt;br&gt;<strong>Configure TPM Startup Key and PIN</strong>&lt;br&gt;To use this policy, <strong>Require Additional Authentication at System Startup</strong> must be set to <strong>Selected</strong>.</td>
</tr>
<tr>
<td>Configure TPM Startup Key</td>
<td>Allow</td>
<td><strong>Do Not Allow</strong>&lt;br&gt;<strong>Require</strong>&lt;br&gt;<strong>Allow</strong>&lt;br&gt;To use this policy, <strong>Require Additional Authentication at System Startup</strong> must be set to <strong>Selected</strong>. This type of authentication involves the entry of a 4-digit to 20-digit personal identification number (PIN).</td>
</tr>
<tr>
<td>Configure TPM Startup Key and PIN</td>
<td>Do Not Allow</td>
<td><strong>Do Not Allow</strong>&lt;br&gt;<strong>Require</strong>&lt;br&gt;<strong>Allow</strong>&lt;br&gt;To use this policy, <strong>Require Additional Authentication at System Startup</strong> must be set to <strong>Selected</strong>. This type of authentication involves insertion of a USB drive containing the startup key.</td>
</tr>
<tr>
<td>Feature</td>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Configure TPM Startup Key and PIN</td>
<td>Do Not Allow</td>
<td>Do Not Allow. To use this policy, Require Additional Authentication at System Startup must be set to Selected. This type of authentication involves a 4-digit to 20-digit personal identification number (PIN) and a USB drive containing the startup key.</td>
</tr>
</tbody>
</table>

**Encryption Method and Cipher Strength**
- **AES-128**: 128-bit encryption using AES algorithm.
- **AES-256**: 256-bit encryption using AES algorithm.
- **XTS-AES-128**: 128-bit encryption using XTS-AES algorithm.
- **XTS-AES-256**: 256-bit encryption using XTS-AES algorithm.

**Algorithm and Cipher Strength**
- **AES**: Advanced Encryption Standard.
- **XTS**: eXtended Triple DES.
Manage Policies

strength used by BitLocker Drive Encryption for Fixed Volumes.

See advanced settings

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server Encryption</td>
<td>Off</td>
<td>This technology manages Dell's data centric encryption using certificate-based authentication instead of the typical user-based authentication. This technology allows for protection of devices such as Windows Servers that do not commonly have users logged in.</td>
</tr>
<tr>
<td>Allow Software Server Encryption</td>
<td>Selected</td>
<td>If this policy is Selected, client servers are activated at the Enterprise level. This policy may be set to Not Selected to block activations during initial Dell Server setup and maintenance interruptions.</td>
</tr>
<tr>
<td>Server Maintenance Schedule</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other Server Maintenance policies. If this policy is Not Selected, no Server Maintenance policies are enforced, regardless of other policy values. Selected allows a maintenance schedule to control application of policy that requires a reboot.</td>
</tr>
<tr>
<td>Server Maintenance Schedule Repeats</td>
<td>Weekly</td>
<td>The schedule configuration defines when the task should run.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Daily</strong></td>
<td>Runs the task every day at the specified Server Maintenance Schedule Start Time.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly: Runs the task weekly on the days specified in Server Maintenance Day of the Week.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly: Runs the task monthly on the specified Server Maintenance Day of the Month.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quarterly: Runs the task quarterly on the specified Server Maintenance Day of the Month.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annually: Runs the task annually on the specified Server Maintenance Day of the Month.</td>
<td></td>
</tr>
<tr>
<td><strong>Port Control System</strong></td>
<td>Enable or Disable all Port Control System policies. If this policy is set to Disable, no Port Control System policies are applied, regardless of other Port Control System policies. <strong>All PCS policies require a reboot before the policy takes effect.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SDE Encryption Enabled</strong></td>
<td>If this policy is Not Selected, SDE encryption is disabled, regardless of other policy values. Selected means that all data not encrypted by other Intelligent Encryption policies are encrypted per the SDE Encryption Rules policy. Changing the value of this policy requires a reboot.</td>
<td></td>
</tr>
<tr>
<td><strong>SDE Encryption Rules</strong></td>
<td>Encryption rules to be used to encrypt/not encrypt certain drives, directories, and folders. See <a href="#">Encryption Rules</a> for information. SDE Encryption Rules may be changed as appropriate for your environment. However, these defaults have</td>
<td></td>
</tr>
</tbody>
</table>
Some Windows policies support the following variables. A pathname can consist entirely of one or more of these variables, or can include one or more of these variables at any point.

To get directory locations that these CSIDL values resolve to, go to [http://msdn.microsoft.com/en-us/library/bb762494.aspx](http://msdn.microsoft.com/en-us/library/bb762494.aspx). All names listed on the MSDN page are CSIDL_<name>.

- Includes any of the following Windows CSIDL constants:
  - DESKTOP
  - INTERNET
  - PROGRAMS
  - CONTROLS
  - PRINTERS
  - PERSONAL
  - FAVORITES
  - STARTUP
  - RECENT
  - SENDTO
  - STARTMENU

Variables

<table>
<thead>
<tr>
<th>Encryption Enabled</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>This policy must be selected to use all Common Encryption policies. Not Selected means that no Common Encryption takes place, regardless of other policy values. Changing the value of this policy triggers a new sweep to encrypt/decrypt files.</td>
<td></td>
</tr>
</tbody>
</table>

been tested extensively. Removing these exclusions may result in Windows issues, particularly after applying patch updates. Contact ProSupport for guidance if you are unsure about changing the values.
MYMUSIC
MYVIDEO
DESKTOPDIRECTORY
DRIVES
NETWORK
NETHOOD
FONTS
TEMPLATES
COMMON_STARTMENU
COMMON_PROGRAMS
COMMON_STARTUP
COMMON_DESKTOPDIRECTORY
APPDATA
PRINTHOOD
LOCAL_APPDATA
ALTSTARTUP
COMMON_ALTSTARTUP
COMMON_FAVORITES
INTERNET_CACHE
COOKIES
HISTORY
COMMON_APPDATA
WINDOWS
SYSTEM
PROGRAM_FILES
PROGRAMFILES
MYPICTURES
PROFILE
SYSTEMX86
PROGRAM_FILESX86
PROGRAMFILESX86
PROGRAM_FILES_COMMON
PROGRAM_FILES_COMMONX86
COMMON_TEMPLATES
COMMON_DOCUMENTS
COMMON_ADMINTOOLS
ADMINTOOLS
CONNECTIONS
COMMON_MUSIC
COMMON_PICTURES
COMMON_VIDEO
RESOURCES
PROFILES

- Includes a numeric or text value stored in the registry for the current user. If you specify a path but not an item, the client uses the default value.

- Includes a numeric or text value stored in the registry for the local computer. If you specify a path but not an item, the client uses the default value.

- Includes the value of a Windows local environment variable.

- Includes the % character.

**Windows Policies that Require Reboot**

- SDE Encryption Enabled
- Encrypt Windows Paging File
- Secure Windows Credentials
- All PCS policies

**Windows Policies that Require Logoff**

- SDE Encryption Enabled
- User state change to Suspended
- EMS Encrypt External Media
- EMS Scan External Media
- EMS Encryption Algorithm
- EMS Exclude CD/DVD Encryption
- EMS Data Encryption Key

**Advanced Windows Encryption**
A word about types of encryption: SDE is designed to encrypt the operating system and program files. To accomplish this purpose, SDE must be able to open its encryption key while the operating system is booting without intervention of a password by the user. Its intent is to prevent alteration or offline attacks on the operating system by an attacker. SDE is not intended for user data. Common and User key encryption are intended for sensitive user data because they require a user password to unlock encryption keys.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Encrypting Drive (SED)</strong>&lt;br&gt;This technology manages self-encrypting drives (SEDs). Authentication by users through a Pre-Boot Authentication environment (before the operating system has booted) is required to unlock the drive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enable SED Plugin</td>
<td>Selected</td>
<td>The plugin must remain selected. To deactivate the PBA and disable SED Manager, toggle the <strong>Self-encrypting Drive</strong> policy to OFF.</td>
</tr>
<tr>
<td><strong>Policy-Based Encryption</strong>&lt;br&gt;This technology uses Dell's proprietary data centric encryption to allow user data and computer encryption. This allows greater protection over individual data than traditional full disk encryption, by limiting access on a computer to only what a user is authorized to view.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encrypt with SDE when SED is detected</td>
<td>Not Selected</td>
<td>When Selected, this policy applies SDE encryption to self-encrypting drives. Use this policy when SDE encryption is preferred instead of native SED encryption.</td>
</tr>
<tr>
<td>User Encrypted Folders</td>
<td>String</td>
<td>String - maximum of 100 entries of 500 characters each (up to a maximum of 2048 characters) A list of folders on the computer hard drive to be encrypted with the user data encryption key or excluded from encryption. If the same folder is specified in this policy for multiple users of the same Windows computer, each file in that folder is encrypted for the <strong>first owner</strong> of the file after the policy takes effect, and can be decrypted only by that owner. The text in this policy is translatable. More... Specify as for Common Encrypted Folders. This policy applies to all drives classified by Windows as Hard Disk Drives (see My Computer). You cannot use this policy to encrypt drives or external media whose type displays as Removable Disk, use EMS Encrypt External Media instead.</td>
</tr>
<tr>
<td>Application Data Encryption List</td>
<td></td>
<td>String - maximum of 100 entries of 500 characters each Do not add explorer.exe or iexplorer.exe to the ADE list, as unexpected or unintended results may occur. Explorer.exe is the process used to create a new notepad file on the desktop using the right-click menu. Setting encryption by file extension, instead of the ADE list, provides more comprehensive coverage. Changes to this policy do not affect files already encrypted because of this policy. List process names of applications (without paths) whose new files you want encrypted, separated by carriage returns. Do not use wildcards.</td>
</tr>
</tbody>
</table>

Exe List: winword.exe excel.exe powerpnt.exe msaccess.exe winproj.exe outlook.exe acrobat.exe visio.exe mspub.exe winzip.exe winrar.exeonenote.exe
The text in this policy is translatable.

You can also specify these process names (separated by commas) via the registry value HKLM\Software\Dell\CMGShield\ApplicationDataEncryptionList. The Encryption client encrypts all new files (not already being encrypted by Common Encrypted Folders and User Encrypted Folders) on the current computer hard drives created by these application processes whenever they are owned by a currently-logged-on managed user. This may include files excluded from encryption by Common Encrypted Folders and/or User Encrypted Folders.

The following folders and their subfolders are always excluded from encryption by this policy:
- C:\Windows\system32
- C:\Windows\Software Distribution
- C:\Windows\Security
- C:\System Volume Information\Program Files\Dell\(.dll.exe.sys.ddp.wip.rty.mmd.inv)

Dell strongly recommends not listing applications or installers that write system-critical files. Doing so could result in encryption of important system files, which could make a Windows computer unbootable.

Common process names:
- outlook.exe
- winword.exe
- powerpnt.exe
- msaccess.exe
- wordpad.exe
- mspaint.exe
- excel.exe

The following hard-coded system and installer process names are ignored if specified in this policy (you can also add to this list via the registry value HKLM\Software\Dell\CMGShield\EUWPrivilegedList):
- hotfix.exe, a Windows update process
- update.exe, a Windows update process
- setup.exe, a third-party installer process
- msiexec.exe, a third-party installer process
- wuaclt.exe, a Windows update process
- wmiprvse.exe, a Windows system process
- migrate.exe, a Windows update process
- unregmp2.exe, a Windows update process
- ikernel.exe, a third-party installer process
- wssetup.exe, the Windows Encryption client installer
- svchost.exe, a Windows system process

| User Encryption Algorithm | AES256 | AES256, Rijndael 256, AES128, Rijndael 128, 3DES
| SDE Encryption Algorithm | AES256 | AES 256, AES 128, 3DES
| Common Encryption Algorithm | AES256 | AES256, Rijndael 256, AES128, Rijndael 128, 3DES

AES256, Rijndael 256, AES128, Rijndael 128, 3DES
Encryption algorithm used to encrypt data at the individual user level. You can specify different values for different users of the same computer.

Encryption algorithms in order of speed, fastest first, are Rijndael 128, AES 128, Rijndael 256, AES 256, 3DES.

AES 256, AES 128, 3DES
Encryption algorithm used to for System Data Encryption. Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES.

AES256, Rijndael 256, AES128, Rijndael 128, 3DES
Encryption algorithm used to encrypt data at the endpoint (all users) level.

System paging files are encrypted using AES 128.

Encryption algorithms in order of speed, fastest first, are Rijndael 128, AES 128, Rijndael 256, AES 256, 3DES.

Encrypt Not Selected
Encrypts Outlook Personal Folders (%csidl:local_appdata
<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Folders</td>
<td></td>
<td>When this policy is selected, the paths listed in the environment variables TEMP and TMP are encrypted. TEMP and TMP for the operating system are encrypted with the Common encryption key. To reduce encryption sweep time, the contents of the TEMP and TMP folders are cleared for initial encryption, as well as updates to this policy. However, if your organization uses a third-party application that requires the file structure within the 	emp directory to be preserved, you should prevent this deletion. To disable temporary file deletion, create DeleteTempFiles (REG_DWORD) and set its value to 0 in the registry at HKLM\SOFTWARE\Credant\CMSShield.</td>
</tr>
<tr>
<td>Encrypt Temporary Files</td>
<td>Selected</td>
<td>When this policy is selected, the path listed in the environment variable CSIDL_INTERNET_CACHE is encrypted with the User data encryption key. To reduce encryption sweep time, the contents of CSIDL_INTERNET_CACHE are cleared for initial encryption, as well as updates to this policy. This policy is applicable when using Microsoft Internet Explorer only. For other web browsers, an administrator must create an encryption policy that is specific to the storage location of the temporary internet files used by each browser.</td>
</tr>
<tr>
<td>Encrypt User Profile Documents</td>
<td>Not Selected</td>
<td>When this policy is selected, the following are encrypted: • The users profile (C:\Users\jsmith) with the User data encryption key • \Users\Public with the Common encryption key</td>
</tr>
<tr>
<td>Encrypt Windows Paging File</td>
<td>Selected</td>
<td>When this policy is selected, the Windows paging file is encrypted. A change to this policy requires a reboot.</td>
</tr>
<tr>
<td>Managed Services</td>
<td>String</td>
<td>String - maximum of 100 entries of 500 characters each (up to a maximum of 2048 characters) When a service is managed by this policy, the service is started only after the user is logged in and the Encryption client is unlocked. This policy also ensures that the service managed by this policy is stopped before the Encryption client is locked during logoff. This policy can also prevent a user logoff if a service is unresponsive. More... Syntax is one Service name per line. Spaces in the service name are supported. Wildcards are not supported. Entries are not case-sensitive. For example, GoogleDesktop Manager is the same as gooledesktopmanager. The service &quot;log on as&quot; setting has no bearing on whether or not the Encryption client can control it. It does not matter if a user logs on with user credentials verses the local system. The startup type (Automatic or Manual) does not affect the ability of the Encryption client to control it. Automatic or Manual startup is acceptable. Managed services are not started if an unmanaged user logs on.</td>
</tr>
<tr>
<td>Secure Post-Encryption Cleanup</td>
<td>No Overwrite</td>
<td>No Overwrite, Single-pass Overwrite, Three-pass Overwrite, Seven-pass Overwrite Once encryption is complete, this policy determines what happens to the unencrypted residue of the original files: • No Overwrite deletes it. This value yields the fastest encryption processing. • Single-pass Overwrite overwrites it with random data. • Three-pass Overwrite overwrites it with a standard pattern</td>
</tr>
<tr>
<td>Policy</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Manage Policies</td>
<td>• Seven-pass Overwrite overwrites it with a standard pattern of 1s and 0s, then with its complement, and then with random data.</td>
<td></td>
</tr>
<tr>
<td>Secure Windows Credentials</td>
<td>When this policy is selected, the Windows Credentials are secured by encrypting the entire registry with the exception of registry information required for computer boot. The information required for computer boot includes HKLM/SYSTEM and all sub-keys.</td>
<td></td>
</tr>
<tr>
<td>Block Unmanaged Access to Domain Credentials</td>
<td>This policy prevents unmanaged users and applications from accessing the Windows domain credentials when a user is logged in.</td>
<td></td>
</tr>
<tr>
<td>Secure Windows Hibernation File</td>
<td>When this policy is selected, the hibernation file is encrypted only when the computer enters hibernation. The Encryption client disengages protection when the computer comes out of hibernation, providing protection without impacting users or applications while the computer is in use.</td>
<td></td>
</tr>
<tr>
<td>Prevent Unsecured Hibernation</td>
<td>When this policy is selected, the Encryption client does not allow computer hibernation if the client is unable to encrypt the hibernation data.</td>
<td></td>
</tr>
<tr>
<td>Scan Workstation on Logon</td>
<td>When this policy is selected, all current and previously encrypted folders on the encrypted computer’s local hard drives are scanned each time a managed user logs on, ensuring that all Common Encrypted Folders and User Encrypted Folders policy values are properly implemented. Abides by the Workstation Scan Priority policy.</td>
<td></td>
</tr>
<tr>
<td>Workstation Scan Priority</td>
<td>Specifies the relative Windows priority of encrypted folder scanning. High and Highest prioritize scanning speed over computer responsiveness, Low and Lowest prioritize computer responsiveness over scanning speed and favor other resource-intensive activities, and Normal balances the two. The client checks for a changed Workstation Scan Priority before processing the next file.</td>
<td></td>
</tr>
<tr>
<td>User Data Encryption Key</td>
<td>Common, User, User Roaming &lt;br&gt; Choose a key to indicate who can access files encrypted by the following policies, and where: &lt;br&gt; • User Encrypted Folders &lt;br&gt; • Encrypt Outlook Personal folders &lt;br&gt; • Encrypt Temporary Files &lt;br&gt; ( \backslash \text{Users} \backslash \text{Username} \backslash \text{AppData} \backslash \text{Local} \backslash \text{Temp} ) only</td>
<td></td>
</tr>
</tbody>
</table>
• Encrypt Temporary Internet Files
• Encrypt User Profile Documents (except \All Users\Shared Documents)

Select:
• Common for User Encrypted Folders to be accessible by all managed users on the computer where they were created (the same level of access as Common Encrypted Folders), and encrypted with the Common encryption algorithm.

More...

The Common encryption algorithm controls the encryption algorithm for all User Encrypted Folders and overrides any encryption algorithm selected, including the default User encryption algorithm. For example, if the Common encryption algorithm is set to AES 256, all Common and User Encrypted Files/Folders is encrypted with the AES 256 algorithm. All other encryption parameters can be selected to override default settings. For example, if the Encrypt Temporary Files policy is set to Not Selected, you can override this setting for any managed user by setting this value to Selected.

Designated User Encrypted Folders use the Common Key, resulting in all managed users having the key to access any encrypted files stored in these folders as permitted by security settings on the operating system.
• User for these files to be accessible only to the user who created them, only on the computer where they were created (the same level of access as User Encrypted Folders), and encrypted with the User Encryption Algorithm.
• User Roaming for these files to be accessible only to the user who created them, on any encrypted Windows computer, and encrypted with the User encryption algorithm.

When incorporating an encryption policy to encrypt entire disk partitions, Dell recommends using the default SDE policy, rather than Common or User. This ensures that any operating system files that are encrypted are accessible during times when the managed user is not logged in.

<table>
<thead>
<tr>
<th>Policy Proxy Connections</th>
<th>String</th>
</tr>
</thead>
<tbody>
<tr>
<td>String - maximum of 1500 characters</td>
<td></td>
</tr>
<tr>
<td>List fully qualified Policy Proxy hostnames, or IP addresses, separated by carriage returns. Ports cannot be specified in this policy.</td>
<td></td>
</tr>
</tbody>
</table>

More...

Once a valid entry is found, the remainder of the Policy Proxies listed are ignored.

Entries are processed in the following order:
1. GKConnections Override (this registry entry overrides all other entries)
2. GKConnections (this registry entry is set automatically by the client, based on the this policy)
3. GK

To override this policy and specify ports via the registry key, set HKLM\Software\Microsoft\WindowsNT\CurrentVersion\Winlogon\CMGShield\GKConnectionsOverride. The client communicates with Policy Proxies using the GKPORT (the default is 8000).

If necessary, change that port via the registry key HKLM\SOFTWARE\Microsoft\WindowsNT\Current Version\Winlogon\CMGShield\GKPort.

Inherited values for this policy accumulate. For the client to connect to a Policy Proxy specified in this policy, it must be in the same group as the Policy Proxy specified during client installation.

Because the client supports up to 255 users per computer, this policy is available only at the Enterprise policy level.
<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polling Interval</strong></td>
<td></td>
<td>The interval that the Encryption client attempts to poll Policy Proxy for policy updates, and send inventory information to Policy Proxy. The Encryption client also attempts to poll Policy Proxy each time a user logs on.</td>
</tr>
<tr>
<td><strong>Allow Activations</strong></td>
<td>Selected</td>
<td>This policy is available at the Enterprise, Domain, User Group, and User levels. This policy is used only by the Encryption client. Other applications do not have an activation policy setting. When this policy is selected, Encryption client activations are allowed. When this policy is not selected, activations are blocked. Blocking activations is useful for staggering activations, preventing activations during the initial Dell Server setup, or preventing activations during a maintenance interruption.</td>
</tr>
<tr>
<td><strong>Current Shield State</strong></td>
<td>Activate</td>
<td>Activate is the normal state for an encrypted user. A user must be in this state to activate a computer. Select Suspend to require recovery before the user can access the computer. When a user is suspended, encrypted data cannot be accessed. The user can be recovered by changing this policy to Activate, and committing the policy.</td>
</tr>
<tr>
<td><strong>Enable Software Auto Updates</strong></td>
<td>Not Selected</td>
<td>Selected enables the client update agent to automatically check for updates to Encryption client software. If this policy is not selected, Encryption client auto updates do not take place, regardless of other policy values. If this policy is selected, the On Premise Update Staging Location policy must have a network location in its value.</td>
</tr>
<tr>
<td><strong>On Premise Update Staging Location</strong></td>
<td>String</td>
<td>This policy defines the network location (UNC) where the Dell Server stages Encryption client update packages. If a network location is not specified in this policy, the Enable Software Auto Updates policy should not be published.</td>
</tr>
<tr>
<td><strong>Update Check Period</strong></td>
<td>10080</td>
<td>1-43200 minutes (1 minute to 30 days) The period in minutes between checks for software auto updates.</td>
</tr>
<tr>
<td><strong>Number of Policy Update Delays Allowed</strong></td>
<td>3</td>
<td>0-5000 If Force Logoff/Reboot on Policy Updates is Selected, a non-zero value allows the user to delay the required logoff or reboot the specified number of times. Set to zero to disable delays.</td>
</tr>
<tr>
<td><strong>Force Logoff / Reboot on Policy Updates</strong></td>
<td>Selected</td>
<td>Selected requires either a logoff or a reboot in order for key policy updates to take effect. Otherwise, these policy updates take effect whenever the next logoff or reboot occurs.</td>
</tr>
<tr>
<td><strong>Policy Viewer Enabled</strong></td>
<td>Not Selected</td>
<td>When Selected, the user can view their encryption policies from the Encryption icon in the notification area.</td>
</tr>
<tr>
<td><strong>Display Local Encryption Processing Control</strong></td>
<td>Not Selected</td>
<td>When Selected, the user sees a menu option in the notification area icon that allows them to pause/resume encryption/decryption (depending on what the client is currently doing). <strong>Important:</strong> Allowing a user to pause encryption could allow the user to prevent the Encryption client from fully encrypting or decrypting data per policy.</td>
</tr>
<tr>
<td><strong>Suppress File Contention Notification</strong></td>
<td>Selected</td>
<td>This policy controls whether users see notification pop-ups if an application attempts to access a file while the client is processing it.</td>
</tr>
</tbody>
</table>

See [basic settings](#)
If the client is processing a large file that an application needs, and this policy is selected, it may appear that the application is unresponsive or slow to open (with no message indicating what the issue is). Care should be taken when using this policy.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Encryption Processing Delays Allowed</td>
<td>0</td>
<td>A non-zero value allows the user to delay any encryption processing required by the encryption policies you set, the specified number of times. Set to zero to disable delays.</td>
</tr>
<tr>
<td>Length of Each Encryption Processing Delay</td>
<td>5</td>
<td>5-40320 minutes. If Number of Encryption Processing Delays Allowed has a non-zero value, use this policy to specify how often the user is prompted to continue with encryption processing or delay again. More... This prompt displays for five minutes each time. If the user does not respond to the prompt, encryption processing begins. The final delay prompt includes a countdown and progress bar, and it displays until the user responds, or the final delay expires and encryption processing begins. Calculate the maximum possible delay as follows (a maximum delay would involve the user responding to each delay prompt immediately prior to the 5-minute mark): (Number of Encryption Processing Delays Allowed x Length of Each Encryption Processing Delay) + (5 minutes x [Number of Encryption Processing Delays Allowed - 1])</td>
</tr>
<tr>
<td>Length of Each Policy Update Delay</td>
<td>15</td>
<td>5-40320 minutes. If Number of Policy Update Delays Allowed has a non-zero value, use this policy to specify how often the user is prompted to logoff/reboot or delay again. More... This prompt displays for five minutes each time. If the user does not respond to the prompt, the next delay begins. The final delay prompt includes a countdown and progress bar, and it displays until the user responds, or the final delay expires and the required logoff/reboot occurs. You can change the behavior of the user prompt to begin or delay encryption, to prevent encryption processing following no user response to the prompt. To do this, set the registry key SnoozeBeforeSweep [(DWORD), stored in HKLM\Software\Microsoft\Windows NT\CurrentVersion\Winlogon\CMGShield, to a non-zero value. Any non-zero value will change the default behavior to snooze. With no user interaction, encryption processing is delayed up to the number of configurable allowed delays. When the final delay expires, encryption processing begins. Calculate the maximum possible delay as follows (a maximum delay would involve the user never responding to a delay prompt, each of which displays for 5 minutes): (Number of Policy Update Delays Allowed x Length of Each Policy Update Delay) + (5 minutes x [Number of Policy Update Delays Allowed - 1])</td>
</tr>
<tr>
<td>Force Reboot on Update</td>
<td>Selected</td>
<td>When selected, the computer immediately reboots to allow processing of encryption or updates related to device-based policy, such as System Data Encryption (SDE).</td>
</tr>
<tr>
<td>Length of Each Reboot Delay</td>
<td>15</td>
<td>5-40320 minutes. The number of minutes to delay when the user chooses to delay reboot for device-based policy.</td>
</tr>
<tr>
<td>Number of Reboot Delays Allowed</td>
<td>3</td>
<td>0-5000. The number of times the user is allowed to delay reboot for device-based policy.</td>
</tr>
<tr>
<td>Allow</td>
<td>False</td>
<td>True, False, User-Optional</td>
</tr>
</tbody>
</table>
### Manage Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption Processing Only When Screen is Locked</td>
<td></td>
<td>When True, there is no encryption or decryption of data while the user is actively working. The client will only process data when the workstation screen is locked. When False, encryption processing occurs any time, even while the user is working. User-Optional adds an option to the notification area icon allowing the user to turn this feature on or off. Enabling this option will significantly extend the amount of time it takes to complete encryption or decryption.</td>
</tr>
<tr>
<td>Hide Overlay Icons</td>
<td>Selected</td>
<td>When Selected, Encryption overlay icons is not present on encrypted files in File Explorer for all managed users on the computer.</td>
</tr>
<tr>
<td>Encrypt temporary files</td>
<td>Off</td>
<td>When Off SDE Common</td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td><strong>BitLocker Encryption</strong>&lt;br&gt;This technology manages Microsoft BitLocker policies for full disk and removable media encryption.</td>
</tr>
<tr>
<td>Disable BitLocker on Self-Encrypting Drives</td>
<td>Selected</td>
<td>Selected Not Selected&lt;br&gt;If Selected, Bitlocker Manager does not start encryption on a volume that is already protected by a provisioned SED. For example, if this policy is Selected and both C: and D: are on one physical self-encrypting drive, and the PBA has been provisioned, then C: and D: does not encrypt for Bitlocker even if System and Fixed drive encryption are turned on in the BitLocker Manager policies.</td>
</tr>
<tr>
<td>Configure the Use of Smart Cards on Fixed Data Drives</td>
<td>Allow</td>
<td>Allow Disallow Require&lt;br&gt;This policy specifies whether smart cards can be used to authenticate access to BitLocker fixed data drives. These settings are enforced when turning on BitLocker, not when unlocking a drive. BitLocker will allow unlocking a drive with any of the protectors available on the drive.</td>
</tr>
<tr>
<td>Deny Write Access to Fixed Data Drives Not Protected by BitLocker</td>
<td>Disabled</td>
<td>Enabled Disabled Enabled for Organizations&lt;br&gt;If the drive is protected by BitLocker, it is mounted with read and write access. If you disable or do not configure this policy setting, all fixed data drives on the computer is mounted with read and write access. When Disabled, this policy element will force the option to be blocked from being used, and will not proceed unless it is met. When Enabled, this policy element will force the option to be used, and will not proceed unless it is met.</td>
</tr>
<tr>
<td>Allow Access</td>
<td>Selected</td>
<td>Selected</td>
</tr>
<tr>
<td>Security Management Server Virtual v10.2.11 AdminHelp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to BitLocker Protected Fixed Data Drives from Earlier Versions of Windows</td>
<td>Not Selected</td>
<td></td>
</tr>
<tr>
<td>When Selected, fixed data drives with the FAT file system can be unlocked and viewed on computers running Windows Server 2008. This policy does not apply to drives that are formatted with the NTFS file system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set this policy to Selected and the Do Not Install BitLocker to Go Reader on FAT Formatted Fixed Drives policy to Not Selected to allow BitLocker to Go Reader to be installed on the fixed drive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Not Install BitLocker to Go Reader on FAT Formatted Fixed Drives</td>
<td>Not Selected</td>
<td></td>
</tr>
<tr>
<td>-selected</td>
<td>If this policy is Not Selected, BitLocker to Go Reader is installed on the fixed drive to enable users to unlock the drive on computers running Windows Server 2008. Set this policy to Not Selected and the Allow Access to BitLocker Protected Fixed Data Drives from Earlier Versions of Windows policy to Not Selected to allow BitLocker to Go Reader to be installed on the fixed drive.</td>
<td></td>
</tr>
<tr>
<td>Configure Use of Passwords for Fixed Data Drives</td>
<td>Allow</td>
<td></td>
</tr>
<tr>
<td>Allow</td>
<td>When set to Require, a connection to a domain controller is necessary to validate the complexity of the password. When set to Allow, a connection to a domain controller is attempted to validate complexity, but if no domain controller is found, the password will still be accepted. when set to Do Not Allow, no password complexity validation is done.</td>
<td></td>
</tr>
<tr>
<td>To use this policy, Configure Use of Passwords for Fixed Data Drives must be set to Allow or Require.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Configure Password Complexity for Fixed Data Drives</td>
<td>Allow</td>
<td></td>
</tr>
<tr>
<td>Allow</td>
<td>When set to Require, a connection to a domain controller is necessary to validate the complexity of the password. When set to Allow, a connection to a domain controller is attempted to validate complexity, but if no domain controller is found, the password will still be accepted. when set to Do Not Allow, no password complexity validation is done.</td>
<td></td>
</tr>
<tr>
<td>To use this policy, Configure Use of Passwords for Fixed Data Drives must be set to Allow or Require.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Password Length for Fixed Data Drives</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>8 min 20 max</td>
<td>Passwords must be at least 8 characters. To configure a greater minimum length for the password enter the desired number of characters.</td>
<td></td>
</tr>
<tr>
<td>To use this policy, Configure Use of Passwords for Fixed Data Drives must be set to Allow or Require.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encryption Type for Fixed Data Drives</td>
<td>Full Encryption</td>
<td></td>
</tr>
<tr>
<td>Full Encryption</td>
<td>Used Space Only Encryption</td>
<td>Select the type of encryption to use for Fixed Data Drives.</td>
</tr>
<tr>
<td>Choose How BitLocker-protected Fixed Drives Can be Recovered</td>
<td>Not Selected</td>
<td></td>
</tr>
<tr>
<td>Selected</td>
<td>BitLocker drives can always be recovered with BitLocker Manager, even if this value is Not Selected. This policy allows for the control of how BitLocker protected fixed data drives are recovered in the absence of the required credentials.</td>
<td></td>
</tr>
<tr>
<td>More...</td>
<td>This policy is the parent policy to:</td>
<td></td>
</tr>
<tr>
<td>Policy Description</td>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Allow Data Recovery Agent for Protected Fixed Data Drives</td>
<td>Selected</td>
<td>When Selected, a data recovery agent is allowed for use with BitLocker protected fixed data drives. Before the agent can be used, it must be added from the Public Key Policies in either the Group Policy Management Console or the Local Group Policy Editor. When setting this policy to Selected, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 48-digit Recovery Password</td>
<td>Allow</td>
<td>This policy determines if a user is allowed, required, or not allowed to generate a 48-digit password. When setting this policy to Allow or Require, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 256-bit Recovery Key</td>
<td>Allow</td>
<td>This policy determines if a user is allowed, required, or not allowed to generate a 256-bit recovery key. When setting this policy to Allow or Require, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected.</td>
</tr>
<tr>
<td>Omit Recovery Options from the BitLocker Setup Wizard</td>
<td>Not Selected</td>
<td>When Selected, users are prevented from specifying recovery options when BitLocker is enabled. Recovery options for the drive are determined by policy settings. When setting this policy to Not Selected, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected.</td>
</tr>
<tr>
<td>Save BitLocker Recovery Information to AD DS for Fixed Data Drives</td>
<td>Selected</td>
<td>Selected allows BitLocker recovery information to be stored in AD DS for fixed data drives. BitLocker recovery information is always saved to the Dell Serve. Enabling this policy additionally saves the information to AD. More... The appropriate schema extensions and access control settings on the domain must be first configured before AD DS backup can succeed. When setting this policy to Selected, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected. Set this policy to Selected to use the policy BitLocker Recovery Information to Store in AD DS.</td>
</tr>
<tr>
<td>BitLocker Recovery Information to Store in AD DS</td>
<td>Recovery Passwords and Key Packages</td>
<td>This policy provides the option of storing recovery passwords and key packages, or storing the recovery password only in AD DS. The appropriate schema extensions and access control settings on the domain must be first configured before AD DS backup can succeed. When setting this policy to Recovery Passwords and Key Packages, the Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must also be set to Selected. Set this policy to Recovery Passwords Only to use the policy BitLocker Recovery Information to Store in AD DS.</td>
</tr>
</tbody>
</table>
Do Not Enable BitLocker Until Recovery Information is Stored in AD DS for Fixed Data Drives

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do Not Enable BitLocker</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Until Recovery Information is</td>
<td></td>
</tr>
<tr>
<td>Stored in AD DS for Fixed Data</td>
<td></td>
</tr>
<tr>
<td>Drives</td>
<td></td>
</tr>
</tbody>
</table>

Although BitLocker recovery information is automatically stored in the Dell Server, this policy additionally requires BitLocker drive encryption recovery information to be stored in AD DS. The appropriate schema extensions and access control settings on the domain must be configured before using this policy.

More...

This policy is used to prevent users from enabling BitLocker unless the computer is connected to the domain and the backup of the BitLocker recovery information to AD DS has succeeded. The Choose How BitLocker-protected Fixed Drives Can Be Recovered policy must be set to Selected to use this policy.

Configure Use of Hardware-Based Encryption for Fixed Data Drives

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure Use of Hardware-Based</td>
<td>Selected</td>
</tr>
<tr>
<td>Encryption for Fixed Data Drives</td>
<td></td>
</tr>
</tbody>
</table>

Selected enables the configuration of hardware-based encryption on fixed data drives.

More...

Use Hardware-Based Encryption for Fixed Data Drives

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Hardware-Based Encryption for</td>
<td>Selected</td>
</tr>
<tr>
<td>Fixed Data Drives</td>
<td></td>
</tr>
</tbody>
</table>

Selected enables hardware-based encryption for fixed data drives. To use this policy, Configure Use of Hardware-Based Encryption for Fixed Data Drives must be set to Selected.

More...

Use BitLocker Software-Based Encryption on Fixed Data Drives When Hardware Encryption is Not Available

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use BitLocker Software-Based</td>
<td>Selected</td>
</tr>
<tr>
<td>Encryption on Fixed Data Drives</td>
<td></td>
</tr>
<tr>
<td>When Hardware Encryption is Not</td>
<td></td>
</tr>
<tr>
<td>Available</td>
<td></td>
</tr>
</tbody>
</table>

Selected enables BitLocker software-based encryption on fixed data drives if hardware-based encryption is not available. To use this policy, Configure Use of Hardware-Based Encryption for Fixed Data Drives must be set to Selected.

More...

Restrict Crypto Algorithms and Cipher Suites Allowed for Hardware-Based Encryption on Fixed Data Drives

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict Crypto Algorithms and</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Cipher Suites Allowed for</td>
<td></td>
</tr>
<tr>
<td>Hardware-Based Encryption on</td>
<td></td>
</tr>
<tr>
<td>Fixed Data Drives</td>
<td></td>
</tr>
</tbody>
</table>

Selected allows only specific crypto algorithms and cipher suites for BitLocker hardware encryption on fixed data drives. To use this policy, Configure Use of Hardware-Based Encryption for Fixed Data Drives must be set to Selected.

More...

Configure Specific Crypto Algorithms and Cipher Suites Settings on Fixed Data Drives

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure Specific Crypto</td>
<td>String</td>
</tr>
<tr>
<td>Algorithms and Cipher Suites</td>
<td></td>
</tr>
<tr>
<td>Settings on Fixed Data Drives</td>
<td></td>
</tr>
</tbody>
</table>

String -
2.16.840.1.101.3.4.1.2;
2.16.840.1.101.3.4.1.42
Set specific Crypto Algorithms and Cipher Suites on fixed data drives. To use this policy, Configure Use of Hardware-Based Encryption for Fixed Data Drives must be set to Selected.

More...

See basic settings

BitLocker Encryption - Global Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Folder Location to</td>
<td>Qualified path</td>
</tr>
</tbody>
</table>

Important: This policy is not used by BitLocker Manager,
```markdown
<table>
<thead>
<tr>
<th>Policy</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save Recovery Password</td>
<td></td>
<td>Because it does not prompt the user when saving recovery passwords. Microsoft defines this policy as: This setting provides the default path that is displayed when the BitLocker drive encryption setup wizard prompts the user to enter the location of a folder to save the recovery password. The text in this policy is translatable.</td>
</tr>
<tr>
<td>Encryption Method and Cipher Strength</td>
<td>AES 128 with Diffuser</td>
<td>This policy specifies the encryption method and cipher strength used for BitLocker drive encryption. Changing this policy has no effect if the drive is already encrypted or encryption is in progress.</td>
</tr>
<tr>
<td>Enable Organizational Unique Identifiers</td>
<td>Not Selected</td>
<td>This policy allows for the association of unique organizational identifiers to a new drive that is enabled with BitLocker. These identifiers are stored as the identification field and allowed identification field. The allowed identification field is used in combination with the Deny Write Access to Removable Drives Not Protected by BitLocker policy to help control the use of removable drives in the organization. This policy must be set to Selected to use the policies Set Organizational Unique Identifiers and Set Allowed Organizational Unique Identifiers.</td>
</tr>
<tr>
<td>Set Organizational Unique Identifiers</td>
<td>Up to 260 characters</td>
<td>The identification field allows you to associate a unique organizational identifier to BitLocker-protected drives. This identifier is automatically added to new BitLocker-protected drives and can be updated on existing BitLocker-protected drives using the Manage-BDE command-line tool. An identification field is required for management of certificate-based data recovery agents on BitLocker-protected drives and for potential updates to the BitLocker To Go Reader. BitLocker will only manage and update data recovery agents when the identification field on the drive matches the value configured in the identification field. In a similar manner, BitLocker will only update BitLocker To Go Reader when the identification field on the drive matches the value configured for the identification field. To use this policy, Enable Organizational Unique Identifiers must be set to Selected.</td>
</tr>
<tr>
<td>Set Allowed Organizational Unique Identifiers</td>
<td>Up to 260 characters</td>
<td>The allowed identification field is used in combination with the Deny Write Access to Removable Drives Not Protected by BitLocker policy to help control the use of removable drives in the organization. It is a comma separated list of identification fields from your organization or other external organizations. To use this policy, Enable Organizational Unique Identifiers must be set to Selected.</td>
</tr>
<tr>
<td>Prevent Memory Overwrite on Restart</td>
<td>Not Selected</td>
<td>Selected prevents memory from being overwritten on restart. Preventing memory overwrite may improve restart performance, but will increase the risk of exposing BitLocker secrets. When Not Selected, BitLocker secrets are removed from memory when the computer restarts.</td>
</tr>
<tr>
<td>Enable Smart</td>
<td>Not Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>
```
### Card Certificate Identifier

| Not Selected | This policy allows or denies an object identifier to be specified for enhanced key usage with a certificate. This policy must be set to Selected to use the policy Smart Card Certificate Identifier. |

### Smart Card Certificate Identifier

| 1.3.6.1.4.1.311.67.1.1 | 1.3.6.1.4.1.311.67.1.1 |

| This policy provides for an object identifier to be specified for enhanced key usage with a certificate. BitLocker can identify which certificates may be used to authenticate a user certificate to a BitLocker drive by matching the object identifier in the certificate with the object identifier that is defined by this policy. Use caution if changing the default value. To use this policy, Enable Smart Card Certificate Identifier must be set to Selected. |

---

### See basic settings

### Bitlocker Encryption - Operating System Volume Settings

| Allow Enhanced PINs for Startup | Not Selected | Selected |

| Not Selected | Selected allows enhanced startup PINs to be used with Bitlocker. Enhanced startup PINs permit the use of characters including uppercase and lowercase letters, symbols, numbers, and spaces. This policy setting is applied when you turn on BitLocker. |

| Number of Characters Required in PIN | 4 | 4-20 digits |

| This policy configures the minimum length for a TPM startup PIN. The startup PIN must have a minimum length of 4 digits and can have a maximum of 20 digits. |

| Allow Network Unlock at Startup on Operating System Drives | Not Selected | Selected |

| Not Selected | Selected |

| This policy specifies if a user is allowed to use the Network Unlock at Startup feature on operating system drives. |

| Allow SecureBoot on Operating System Drives | Selected | Selected |

| Not Selected | Selected |

| This policy specifies if a user is allowed to use SecureBoot on operating system drives. |

| Disallow Standard Users from Changing the PIN on Operating System Drives | Not Selected | Selected |

| Not Selected | Selected |

| This policy specifies if a standard user is allowed to change their PIN on operating system drives. |

| Enable Use of Preboot Keyboard Input on Slates | Not Selected | Selected |

| Not Selected | Selected |

| This policy specifies if a preboot keyboard input is enabled on Slates. |

| Reset Platform Validation Data After Recovery | Not Selected | Selected |

| Not Selected | Selected |

| This policy specifies if a preboot keyboard input is enabled on Slates. |

| Choose How BitLocker-protected Operating System Drives Can be Recovered | Not Selected | Selected |

| Not Selected | Selected |

| BitLocker drives can always be recovered with BitLocker Manager, even if this value is Not Selected. For the GPO, a Selected value allows you to specify how BitLocker drives are recovered. |

<p>| More... | This policy is the parent policy to: Allow Data Recovery Agent for Protected Operating System Drives |</p>
<table>
<thead>
<tr>
<th>Policy Description</th>
<th>Default Setting</th>
<th>Configuration Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Data Recovery Agent for Protected Operating System Drives</td>
<td>Selected</td>
<td><strong>Selected</strong>&lt;br&gt;The &quot;Allow Certificate Based Data Recovery Agent&quot; is used to specify whether a data recovery agent can be used with BitLocker operating system drives. Before a data recovery agent can be used, it must be added from the Public Key policies in either the Group Policy Management Console or the Local Group Policy Editor.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 48-digit Recovery Password</td>
<td>Allow</td>
<td><strong>Do Not Allow</strong>&lt;br&gt;This policy configures if a user is allowed, required, or not allowed to generate a 48-digit password.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 256-bit Recovery Key</td>
<td>Allow</td>
<td><strong>Do Not Allow</strong>&lt;br&gt;This policy configures if a user is allowed, required or not allowed to generate a 256-bit recovery key.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
<tr>
<td>Omit Recovery Options from the BitLocker Setup Wizard</td>
<td>Not Selected</td>
<td><strong>Selected</strong>&lt;br&gt;When Selected, users are prevented from specifying recovery options when BitLocker is enabled. Recovery options for the drive are determined by policy settings.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
<tr>
<td>Save BitLocker Recovery Information to AD DS for Operating System Drives</td>
<td>Selected</td>
<td><strong>Selected</strong>&lt;br&gt;Selected allows BitLocker recovery information to be stored in AD DS for operating system drives. The appropriate schema extensions and access control settings on the domain must be first configured before AD DS backup can succeed.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
<tr>
<td>BitLocker Recovery Information to Store in AD DS (Windows Server 2008 Only)</td>
<td>Recovery Passwords and Key Packages</td>
<td><strong>Recovery Passwords and Key Packages</strong>&lt;br&gt;This policy provides the option of storing recovery passwords and key packages, or storing the recovery password only in AD DS. The appropriate schema extensions and access control settings on the domain must be first configured before applying this policy.&lt;br&gt;This policy is applicable only to computers running Windows Server 2008.&lt;br&gt;To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.</td>
</tr>
</tbody>
</table>
| Do Not Enable BitLocker Until Recovery                                             | Not Selected   | **Selected**<br>Although BitLocker recovery information is automatically
Information is Stored in AD DS for Operating System Drives

- stored in the Dell Server, this policy additionally requires BitLocker drive encryption recovery information to be stored in AD DS. The appropriate schema extensions and access control settings on the domain must be configured before using this policy.
- This policy is used to prevent users from enabling BitLocker unless the computer is connected to the domain and the backup of the BitLocker recovery information to AD DS has succeeded.
- To use this policy, Choose How BitLocker-protected Operating System Drives Can be Recovered must be set to Selected.

Configure Use of Hardware-Based Encryption for Operating System Drives

- Selected
- Not Selected

- PARENT to the next 4 policies.
- Selected enables the configuration of hardware-based encryption on operating system drives.

Use Hardware-Based Encryption for Operating System Drives

- Selected

- Selected enables hardware-based encryption on operating system drives.
- To use this policy, Configure Use of Hardware-Based Encryption for Operating System Drives must be set to Selected.

Use BitLocker Software-Based Encryption on Operating System Drives When Hardware Encryption is Not Available

- Selected

- Selected enables BitLocker software-based encryption on operating system drives if hardware-based encryption is not available.
- To use this policy, Configure Use of Hardware-Based Encryption for Operating System Drives must be set to Selected.

Restrict Crypto Algorithms and Cipher Suites Allowed for Hardware-Based Encryption on Operating System Drives

- Not Selected

- Selected allows only specific crypto algorithm and cipher suites for BitLocker hardware encryption on operating system drives.
- To use this policy, Configure Use of Hardware-Based Encryption for Operating System Drives must be set to Selected.

Configure Specific Crypto Algorithms and Cipher Suites Settings on Operating System Drives

- 2.16.840.1.101.3.4.1.2;2.16.840.1.101.3.4.1.42

- String - 2.16.840.1.101.3.4.1.2;2.16.840.1.101.3.4.1.42

- Specific Crypto Algorithms and Cipher Suites allowed on operating system drives.
- To use this policy, Configure Use of Hardware-Based Encryption for Operating System Drives must be set to Selected.

Encryption Type for Operating System Drives

- Full Encryption

- Full Encryption
- Used Space Only Encryption

- Select the type of encryption to use for operating system drives.

Configure Use of Passwords for Operating System Drives

- Not Configured

- Enabled
- Disabled

- Configure password requirements for Operating System Drives.
- When Disabled, this policy element will force the option to be blocked from being used, and will not proceed until it is met.
- When Enabled, this policy element will force the option to be used, and will not proceed unless it is met.
- When Not Configured, this policy element will consume the default action to do nothing.
<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Configure Password Complexity for Operating System Drives</strong></td>
<td>Allow, Require</td>
<td>When set to Require, a connection to a domain controller is necessary to validate the complexity of the password. When set to Allow, a connection to a domain controller is attempted to validate complexity, but if no domain controller is found, the password will still be accepted. When set to Do Not Allow, no password complexity validation is done. To use this policy, Configure Use of Passwords for Operating System Drives must be set to Enabled.</td>
</tr>
<tr>
<td><strong>Minimum Password Length for Operating System Drives</strong></td>
<td>8</td>
<td>8-256 The default value is a password length of 8 characters. 8-256 characters are allowed. To use this policy, Configure Use of Passwords for Operating System Drives must be set to Enabled.</td>
</tr>
<tr>
<td><strong>Require ASCII-Only Passwords for Operating System Drives</strong></td>
<td>Not Selected</td>
<td>Require ASCII-only passwords for operating system drives to create stronger passwords. To use this policy, Configure Use of Passwords for Operating System Drives must be set to Enabled.</td>
</tr>
<tr>
<td><strong>Use Enhanced Boot Configuration Data Profile</strong></td>
<td>Disabled</td>
<td>Set this policy to Enable to allow the verification and exclusion of BCD settings. When Disabled, this policy element will force the option to be blocked from being used, and will not proceed until it is met. When Enabled, this policy element will force the option to be used, and will not proceed unless it is met. When Not Configured, this policy element will consume the default action to do nothing.</td>
</tr>
<tr>
<td><strong>Verify Additional BCD Settings</strong></td>
<td>String</td>
<td>Specify the additional Boot Configuration settings. To use this policy, Use Enhanced Boot Configuration Data Profile must be set to Enabled.</td>
</tr>
<tr>
<td><strong>Exclude Additional BCD Settings</strong></td>
<td>String</td>
<td>Exclude specific Boot Configuration settings. To use this policy, Use Enhanced Boot Configuration Data Profile must be set to Enabled.</td>
</tr>
<tr>
<td><strong>Configure TPM Platform Validation Profile</strong></td>
<td>Not Selected</td>
<td>Set to Selected to enable boot up TPM drive unlocking for Windows 7 and Windows Server 2008 R2. Selected allows the configuration of how the TPM security hardware secures the BitLocker encryption key. This policy does not apply if the computer does not have a compatible TPM or if BitLocker has already been turned on with TPM protection. This policy must be set to Selected to use the policy Configure Specific TPM Platform Settings. See <a href="http://technet.microsoft.com/en-us/library/jj679890.aspx#BKMK_depopt3">http://technet.microsoft.com/en-us/library/jj679890.aspx#BKMK_depopt3</a> for more information.</td>
</tr>
<tr>
<td><strong>Configure Specific TPM Platform Settings</strong></td>
<td>PCR0, on, PCR1, off, PCR2, on, PCR3, off, PCR4, on, PCR5, on, PCR6, off, PCR7, off</td>
<td>This policy allows you to configure how the computer’s TPM security hardware secures the BitLocker encryption key. This policy setting does not apply if the computer does not have a compatible TPM or if BitLocker has already been turned on with TPM protection. This setting determines what values the TPM measures when it validates early boot components before unlocking a drive on a computer running Windows 7 or Windows Server 2008 R2.</td>
</tr>
</tbody>
</table>
If you enable this policy before turning on BitLocker, you can configure the boot components that the TPM will validate before unlocking access to the BitLocker-encrypted operating system drive. If any of these components change while BitLocker protection is in effect, the TPM does not release the encryption key to unlock the drive and the computer will instead display the BitLocker recovery console and require that either the recovery password or recovery key be provided to unlock the drive.

If you disable or do not configure this policy, the TPM uses the default platform validation profile or the platform validation profile specified by the setup script. A platform validation profile consists of a set of Platform Configuration Register (PCR) indices ranging from 0 to 23. The default platform validation profile secures the encryption key against changes to the Core Root of Trust of Measurement (CRTM), BIOS, and Platform Extensions (PCR 0), the Option ROM Code (PCR 2), the Master Boot Record (MBR) Code (PCR 4), the NTFS Boot Sector (PCR 8), the NTFS Boot Block (PCR 9), the Boot Manager (PCR 10), and the BitLocker Access Control (PCR 11). The descriptions of PCR settings for computers that use an Extensible Firmware Interface (EFI) are different than the PCR settings described for computers that use a standard BIOS. The BitLocker Drive Encryption Deployment Guide on Microsoft TechNet contains a complete list of PCR settings for both EFI and standard BIOS.

**Caution:** Changing from the default platform validation profile affects the security and manageability of your computer. BitLocker's sensitivity to platform modifications (malicious or authorized) is increased or decreased depending upon inclusion or exclusion (respectively) of the PCRs.

To use this policy, Configure TPM Platform Validation Profile must be set to True.
### Configure UEFI TPM Platform Validation Profile

<table>
<thead>
<tr>
<th>Profile</th>
<th>PCR0,on</th>
<th>PCR1,off</th>
<th>PCR2,off</th>
<th>PCR3,off</th>
<th>PCR4,off</th>
<th>PCR5,off</th>
<th>PCR6,off</th>
<th>PCR7,off</th>
<th>PCR8,off</th>
<th>PCR9,off</th>
<th>PCR10,off</th>
<th>PCR11,off</th>
<th>PCR12,off</th>
<th>PCR13,off</th>
<th>PCR14,off</th>
<th>PCR15,off</th>
<th>PCR16,off</th>
<th>PCR17,off</th>
<th>PCR18,off</th>
<th>PCR19,off</th>
<th>PCR20,off</th>
<th>PCR21,off</th>
<th>PCR22,off</th>
<th>PCR23,off</th>
</tr>
</thead>
</table>
| Not Selected | *Selected* | **Not Selected** | Set to Selected to enable boot up UEFI TPM drive unlocking. Selected allows the configuration of how the UEFI TPM security hardware secures the BitLocker encryption key. This policy does not apply if the computer does not have a compatible TPM or if BitLocker has already been turned on with TPM protection. This policy must be set to Selected to use the policy Configure Specific UEFI TPM Platform Settings. See [http://technet.microsoft.com/en-us/library/jj679890.aspx#BKMK_tpmvaluefi](http://technet.microsoft.com/en-us/library/jj679890.aspx#BKMK_tpmvaluefi) for more information.

### Configure Specific UEFI TPM Platform Settings

<table>
<thead>
<tr>
<th>Profile</th>
<th>PCR0,off</th>
<th>PCR1,off</th>
<th>PCR2,off</th>
<th>PCR3,off</th>
<th>PCR4,off</th>
<th>PCR5,off</th>
<th>PCR6,off</th>
<th>PCR7,off</th>
<th>PCR8,off</th>
<th>PCR9,off</th>
<th>PCR10,off</th>
<th>PCR11,off</th>
<th>PCR12,off</th>
<th>PCR13,off</th>
<th>PCR14,off</th>
<th>PCR15,off</th>
<th>PCR16,off</th>
<th>PCR17,off</th>
<th>PCR18,off</th>
<th>PCR19,off</th>
<th>PCR20,off</th>
<th>PCR21,off</th>
<th>PCR22,off</th>
<th>PCR23,off</th>
</tr>
</thead>
</table>
| Not Selected | *Selected* | **Not Selected** | This policy setting allows you to configure how the computer's TPM security hardware secures the BitLocker encryption key. This setting determines what values the TPM measures when it validates early boot components before unlocking an operating system drive on a computer with native UEFI firmware configurations. If you enable this policy before turning on BitLocker, you can configure the boot components that the TPM will validate before unlocking access to the BitLocker-encrypted operating system drive. If any of these components change while BitLocker protection is in effect, the TPM does not release the encryption key to unlock the drive, and the computer will instead display the BitLocker recovery console and require that either the recovery password or recovery key be provided to unlock the drive. To use this policy, Configure UEFI TPM Platform Validation Profile must be set to Selected.

### BitLocker Encryption - Removable Storage Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Allow User to Apply BitLocker Protection on Removable Drives</th>
<th>Allow User to Suspend and Decrypt BitLocker Protection on Removable Data Drives</th>
<th>Configure Use of Smart Cards on Removable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile</td>
<td><em>Selected</em></td>
<td><em>Selected</em></td>
<td><em>Allow</em></td>
</tr>
<tr>
<td>Not Selected</td>
<td>When Selected, users are permitted to run the BitLocker setup wizard on a removable data drive.</td>
<td>When Selected, users are authorized to suspend and decrypt BitLocker protection on removable data drives.</td>
<td></td>
</tr>
<tr>
<td>Require</td>
<td></td>
<td></td>
<td>Allow Disallow</td>
</tr>
</tbody>
</table>

See [basic settings](http://technet.microsoft.com/en-us/library/jj679890.aspx#BKMK_tpmvaluefi) for more information.
Data Drives

This policy specifies whether smart cards can be used to authenticate access to BitLocker removable data drives. These settings are enforced when turning on BitLocker, not when unlocking a drive. BitLocker will allow unlocking a drive with any of the protectors available on the drive.

Deny Write Access to Removable Drives Not Protected by BitLocker

Disabled

Enabled

Disabled

Enabled for Organization

If this policy is enabled, all removable drives that are not BitLocker protected are mounted as read only. If this policy is disabled, all removable drives on the computer are mounted with read and write access.

Allow Access to BitLocker Protected Removable Data Drives from Earlier Versions of Windows

Selected

Selected

Not Selected

When Selected, removable data drives with the FAT file system can be unlocked on computers running Windows Server 2008. This policy does not apply to drives that are formatted with the NTFS file system.

Do Not Install BitLocker to Go Reader on FAT formatted Removable Drives

Not Selected

Selected

Not Selected

If this policy is Not Selected, removable data drives formatted with the FAT file system that are BitLocker protected cannot be unlocked on computers running Windows Server 2008. Bitlockertogo.exe is not installed.

Configure Use of Passwords for Removable Data Drives

Allow

Allow

Require

Do Not Allow

This policy specifies whether a password is required to unlock BitLocker removable data drives. These settings allow the use of a password, require the use of a password, or disallow the use of a password.

To use this policy, Configure Use of Passwords for Removable Data Drives and Minimum Password Length for Removable Data Drives policies must be set to Allow or Require.

Configure Password Complexity for Removable Data Drives

Allow

Allow

Require

Do Not Allow

When set to Require, a connection to a domain controller is necessary to validate the complexity of the password. When set to Allow, a connection to a domain controller is attempted to validate complexity, but if no domain controller is found, the password will still be accepted. When set to Do Not Allow, no password complexity validation is done.

To use this policy, Configure Use of Passwords for Removable Data Drives must be set to Allow or Require.

Minimum Password Length for Removable Data Drives

8

8-20 characters

Passwords must be at least 8 characters in length, with a maximum of 20 characters.

To use this policy, Configure Use of Passwords for Removable Data Drives must be set to Allow or Require.

Encryption Type for Removable Data Drives

Full Encryption

Allow User to Choose

Full Encryption

Used Space Only Encryption

Select the type of encryption to use for Removable Data Drives.

Choose How BitLocker-protected Removable Drives Can Be

Not Selected

Selected

Not Selected

BitLocker drives can always be recovered with BitLocker Manager, even if this value is Not Selected. This policy allows for the control of how BitLocker protected removable drives are managed.
### Recovered

Data drives are recovered in the absence of the required credentials.

**More...**

This policy is the parent policy to:
- Allow Data Recovery Agent for Protected Removable Data Drives
- Configure User Storage of BitLocker 48-digit Recovery Password
- Configure User Storage of BitLocker 256-bit Recovery Key
- Omit Recovery Options from the BitLocker Setup Wizard for Removable Media
- Save BitLocker Recovery Information to AD DS for Removable Data Drives
- BitLocker Recovery Info to Store in AD DS for Removable Data Drives
- Do Not Enable BitLocker Until Recovery Info is Stored in AD DS for Rem Data Drives

<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Data Recovery Agent for Protected Removable Data Drives</td>
<td>Selected</td>
<td>When selected, a data recovery agent is allowed for use with BitLocker protected removable data drives. Before the agent can be used, it must be added from the Public Key Policies in either the Group Policy Management Console or the Local Group Policy Editor. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 48-digit Recovery Password</td>
<td>Allow</td>
<td>This policy configures if a user is allowed, required, or not allowed to generate a 48-digit password. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected.</td>
</tr>
<tr>
<td>Configure User Storage of BitLocker 256-bit Recovery Key</td>
<td>Allow</td>
<td>This policy configures if a user is allowed, required, or not allowed to generate a 256-bit recovery key. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected.</td>
</tr>
<tr>
<td>Omit Recovery Options from the BitLocker Setup Wizard for Removable Media</td>
<td>Not Selected</td>
<td>When selected, users are prevented from specifying recovery options when BitLocker is enabled. Recovery options for the drive are determined by policy settings. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected.</td>
</tr>
<tr>
<td>Save BitLocker Recovery Information to AD DS for Removable Data Drives</td>
<td>Selected</td>
<td>Selected allows BitLocker recovery information to be stored in AD DS for removable data drives. The appropriate schema extensions and access control settings on the domain must be first configured before AD DS backup can succeed. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected. Set this policy to Selected to use the policy BitLocker Recovery Information to Store in AD DS for Removable Data Drives.</td>
</tr>
<tr>
<td>BitLocker Recovery Information to Store in AD DS for Removable Data Drives</td>
<td>Recovery Passwords and Key Packages</td>
<td>This policy provides the option of storing recovery passwords and key packages, or storing the recovery password only in AD DS. The appropriate schema extensions and access control settings on the domain must be first configured before...</td>
</tr>
<tr>
<td>Policy</td>
<td>Default Setting</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Do Not Enable Bitlocker Until Recovery Information is Stored in AD DS for Removable Data Drives</td>
<td>Not Selected</td>
<td>Applying this policy. To use this policy, Choose How BitLocker-protected Removable Drives Can be Recovered must be to Selected. To use this policy, Save BitLocker Recovery Information to AD DS for Removable Data Drives must be set to Selected.</td>
</tr>
<tr>
<td>Configure Use of Hardware-Based Encryption for Removable Data Drives</td>
<td>Selected</td>
<td>Not Selected  Parent to the next 4 policies. Selected enables the configuration of hardware-based encryption on removable data drives.</td>
</tr>
<tr>
<td>Use Hardware-Based Encryption for Removable Data Drives</td>
<td>Selected</td>
<td>Not Selected  Selected enables hardware-based encryption on removable data drives. To use this policy, Configure Use of Hardware-Based Encryption for Removable Data Drives must be set to Selected.</td>
</tr>
<tr>
<td>Use BitLocker Software-Based Encryption on Removable Data Drives When Hardware Encryption is Not Available</td>
<td>Selected</td>
<td>Not Selected  Selected enables BitLocker software-based encryption on removable data drives if hardware-based encryption is not available. To use this policy, Configure Use of Hardware-Based Encryption for Removable Data Drives must be set to Selected.</td>
</tr>
<tr>
<td>Restrict Crypto Algorithms and Cipher Suites Allowed for Hardware-Based Encryption on Removable Data Drives</td>
<td>Not Selected</td>
<td>Selected  Not Selected  Selected allows only specific crypto algorithm and cipher suites for BitLocker hardware encryption. To use this policy, Configure Use of Hardware-Based Encryption for Removable Data Drives must be set to Selected.</td>
</tr>
<tr>
<td>Configure Specific Crypto Algorithms and Cipher Suites Settings on Removable Data Drives</td>
<td>2.16.840.1.101.3.4.1.2;2.16.840.1.101.3.4.1.42</td>
<td>String - 2.16.840.1.101.3.4.1.2; 2.16.840.1.101.3.4.1.42  Specific Crypto Algorithms and Cipher Suites allowed. To use this policy, Configure Use of Hardware-Based Encryption for Removable Data Drives must be set to Selected.</td>
</tr>
</tbody>
</table>

See basic settings
This technology manages Dell's data centric encryption using certificate-based authentication instead of the typical user-based authentication instead of the typical user-based authentication. This technology allows for protection of devices such as Windows Servers that do not commonly have users logged in.

<table>
<thead>
<tr>
<th>Server Encryption</th>
<th>Off</th>
<th>On/Off</th>
<th>This policy enables or disables System Data Encryption (SDE) and Common encryption on the client server. Changing the value of this policy triggers a new sweep to encrypt/decrypt files.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Software Server Encryption</td>
<td>Selected</td>
<td>Not Selected</td>
<td>If this policy is Selected, client servers are activated at the Enterprise level. This policy may be set to Not Selected to block activations during initial Dell Server setup and maintenance interruptions.</td>
</tr>
<tr>
<td>Max Network Failed Attempts</td>
<td>3</td>
<td>1-10</td>
<td>Number of successive failed attempts for a client server to connect to the Dell Server before encryption keys are locked.</td>
</tr>
<tr>
<td>Retry Interval to connect to Dell Server</td>
<td>5</td>
<td>1-60 minutes</td>
<td>Time interval for the client server to attempt to connect to the Dell Server.</td>
</tr>
<tr>
<td>Retry if Authentication Fails Upon Network Failure</td>
<td>Selected</td>
<td>Not Selected</td>
<td>If Selected, the client server continues to attempt to contact the Dell Server if the first attempt fails due to a network failure.</td>
</tr>
<tr>
<td>Retry Interval Upon Network Failure</td>
<td>10</td>
<td>10-60 minutes</td>
<td>The length of time between attempts to contact the Dell Server if the first attempt fails due to a network failure. The Retry if Authentication Fails Upon Network Failure policy must be set to Selected for this policy to be enforced.</td>
</tr>
<tr>
<td>Server Maintenance Schedule</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other Server Maintenance policies. If this policy is Not Selected, no Server Maintenance policies are enforced, regardless of other policy values. Selected allows a maintenance schedule to control application of policy that requires a reboot.</td>
<td></td>
</tr>
<tr>
<td>Server Maintenance Schedule Repeats</td>
<td>Weekly</td>
<td>Daily, Weekly, Monthly, Quarterly, Annually</td>
<td>The schedule configuration defines when the task should run. Daily: Runs the task every day at the specified Server Maintenance Schedule Start Time. Weekly: Runs the task weekly on the days specified in Server Maintenance Day of the Week. Monthly: Runs the task monthly on the specified Server Maintenance Day of the Month. Quarterly: Runs the task quarterly on the specified Server Maintenance Day of the Month. Annually: Runs the task annually on the specified Server Maintenance Day of the Month.</td>
</tr>
<tr>
<td>Server Maintenance Schedule Start Time</td>
<td>21:00</td>
<td>Format is HH:mm. Example: 23:59</td>
<td>The time the task should run.</td>
</tr>
<tr>
<td>Server Maintenance Day of the Week</td>
<td>Saturday</td>
<td>Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday</td>
<td>The day of the week the task should run.</td>
</tr>
</tbody>
</table>
| Server Maintenance Day of the | 1 | 1-31 | The day of the month the task should run. Example: 17.
<table>
<thead>
<tr>
<th>Month</th>
<th>Infinite Suppress</th>
<th>Not Selected</th>
<th>When selected, an automatic reboot is suppressed indefinitely.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Control System</td>
<td>Disabled</td>
<td></td>
<td>Enable or Disable all Port Control System policies. If this policy is set to Disable, no Port Control System policies are applied, regardless of other Port Control System policies. <strong>All PCS policies require a reboot before the policy takes effect.</strong></td>
</tr>
<tr>
<td>Port: Express Card Slot</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass ports exposed through the Express Card Slot.</td>
</tr>
<tr>
<td>Port: USB</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass port access to external USB ports. <strong>Note:</strong> USB port-level blocking and HID class-level blocking is only honored if we can identify the computer chassis as a laptop/notebook form-factor. We rely on the computer’s BIOS for the identification of the chassis.</td>
</tr>
<tr>
<td>Port: eSATA</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass port access to external SATA ports.</td>
</tr>
<tr>
<td>Port: PCMCIA</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass port access to PCMCIA ports.</td>
</tr>
<tr>
<td>Port: Firewire (1394)</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass port access to external Firewire (1394) ports.</td>
</tr>
<tr>
<td>Port: SD</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass port access to SD card ports.</td>
</tr>
<tr>
<td>Port: Memory Transfer Device (MTD)</td>
<td>Enabled</td>
<td></td>
<td>Enable, Disable, or Bypass access to Memory Transfer Device (MTD) ports.</td>
</tr>
<tr>
<td>Class: Storage</td>
<td>Enabled</td>
<td></td>
<td>PARENT to the next 3 policies. Set this policy to Enabled to use the next 3 Subclass Storage policies. Setting this policy to Disabled disables all 3 Subclass Storage policies - no matter what their value.</td>
</tr>
<tr>
<td>Subclass Storage: External Drive Control</td>
<td>Full Access</td>
<td></td>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. This policy interacts with the EMS Access to unShielded Media policy. If you intend to have Full Access to media, also set this policy to Full Access to ensure that the media is not set to read only and the port is not blocked. Full Access: External drive port does not have read/write data restrictions applied. Read Only: Allows read capability /write data is disabled Blocked: Port is blocked from read/write capability This policy is endpoint-based and cannot be overridden by user policy.</td>
</tr>
<tr>
<td>Subclass Storage: Optical Drive Control</td>
<td>UDF Only</td>
<td></td>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. Full Access: Optical Drive port does not have read/write data restrictions applied UDF Only: Blocks all data writes that are not in the UDF format (CD/DVD burning, ISO burning). Read data is enabled. Read Only: Allows read capability. Write data is disabled Blocked: Port is blocked from read/write capability This policy is endpoint-based and cannot be overridden by user policy. Universal Disk Format (UDF) is an implementation of the specification known as ISO/IEC 13346 and ECMA-167 and is an open vendor-neutral file system for computer data storage for a broad range of media. To encrypt data written to CD/DVD media: Set EMS Encrypt External Media = Selected, EMS Exclude CD/DVD Encryption = Not Selected, and Storage Class: Optical Drive Control = UDF Only.</td>
</tr>
<tr>
<td>Subclass Storage: Floppy Drive Control</td>
<td>Read Only</td>
<td></td>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. Full Access: Floppy Drive port does not have read/write data restrictions applied</td>
</tr>
</tbody>
</table>
### Manage Policies

<table>
<thead>
<tr>
<th>Class: Windows Portable Device (WPD)</th>
<th>Enabled</th>
<th>Read Only: Allows read capability. Write data is disabled. Blocked: Port is blocked from read/write capability. This policy is endpoint-based and cannot be overridden by user policy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subclass Windows Portable Device (WPD): Storage</td>
<td>Full Access</td>
<td>PARENT to the next policy. Set this policy to Enabled to use the Subclass Windows Portable Device (WPD): Storage policy. Setting this policy to Disabled disables the Subclass Windows Portable Device (WPD): Storage policy - no matter what its value. Control access to all Windows Portable Devices. CHILD of Class: Windows Portable Device (WPD). Class: Windows Portable Device (WPD) must be set to Enabled to use this policy. Full Access: Port does not have read/write data restrictions applied. Read Only: Allows read capability. Write data is disabled. Blocked: Port is blocked from read/write capability.</td>
</tr>
<tr>
<td>Class: Human Interface Device (HID)</td>
<td>Enabled</td>
<td>Control access to all Human Interface Devices (keyboards, mice). Note: USB port-level blocking and HID class-level blocking is only honored if we can identify the computer chassis as a laptop/notebook form-factor. We rely on the computer's BIOS for the identification of the chassis.</td>
</tr>
<tr>
<td>Class: Other</td>
<td>Enabled</td>
<td>Control access to all devices not covered by other Classes.</td>
</tr>
<tr>
<td>EMS Encrypt External Media</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other removable media policies. Not Selected means that no encryption of removable media takes place, regardless of other removable media policy values.</td>
</tr>
<tr>
<td>EMS Exclude CD/DVD Encryption</td>
<td>Not Selected</td>
<td>Not Selected encrypts CD/DVD devices.</td>
</tr>
</tbody>
</table>
| EMS Access to Unshielded Media | Read Only | **Block, Read Only, Full Access**
Note that this policy interacts with the Storage > Subclass Storage: External Drive Control policy. If you intend to set this policy to Full Access, ensure that Subclass Storage: External Drive Control is not set to Read Only or Blocked. **More...**
When this policy is set to Block Access, you have no access to removable media unless it is encrypted. Choosing either Read-Only or Full Access allows you to decide what removable media to encrypt. If you choose not to encrypt removable media and this policy is set to Full Access, you have full read/write access to removable media. If you choose not to encrypt removable media and this policy is set to Read-Only, you can read or delete existing files on the unencrypted media, but files cannot be edited on, or added to, the media. |
| EMS Encryption Algorithm | AES256 | AES 256, AES 128, 3DES Encryption algorithm used to encrypt removable media. Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES. |
| EMS Automatic Authentication | Disabled | **Disabled, Local, Roaming**
Local automatic authentication allows the encrypted media to be automatically authenticated when inserted in the originally encrypting computer when the owner of that media is logged in. When local automatic authentication is disabled, users must always manually authenticate to access encrypted media. Not selecting roaming automatic authentication helps to prevent users from forgetting their password when they take the media home or share it with a colleague. Not selecting roaming automatic authentication also promotes a sense of... |
<table>
<thead>
<tr>
<th>Security Management Server Virtual v10.2.11 AdminHelp</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMS Scan External Media</strong></td>
</tr>
</tbody>
</table>
| **Selected** allows removable media to be scanned every time it is inserted.  
  When this policy is **Not Selected** and the EMS Encrypt External Media policy is **Selected**, only new and changed files are encrypted.  
  See [EMS Encryption Rules](#) if changing this policy to **Selected**.  
  Do not enable this policy without applying EMS Encryption Rules also.  
  More...  
  A scan occurs at every insertion so that any files added to the removable media without authenticating can be caught.  
  Files can be added to the media if authentication is declined, but encrypted data cannot be accessed. The files added are not encrypted in this case, so the next time the media is authenticated (to work with encrypted data), any files that may have been added are scanned and encrypted. |
| **EMS Access Encrypted Data on unShielded Device** | **Selected** |
| **Selected** allows the user to access encrypted data on removable media whether the endpoint is encrypted or not.  
  More...  
  When this policy is **Not Selected**, the user can work with encrypted data when logged on to any encrypted device, regardless of the Dell Server the user activated against. The user cannot work with encrypted data using any unencrypted device. |
| **EMS Device Whitelist** | String - Maximum of 150 devices with a maximum of 500 characters per PNPDeviceID. Maximum of 2048 total characters allowed. "Space" and "Enter" characters count in the total characters used.  
  This policy allows the specification of removable media devices to exclude from encryption [using the device's Plug and Play device identifier (PNPDeviceID)], thereby allowing users full access to the specified removable media devices.  
  More...  
  This policy is available on an Enterprise, Domain, Group, and User level. Note that local settings override inherited settings. If a user is in more than one group, all EMS Device Whitelist entries, across all Groups, apply. This policy is particularly useful when using removable media devices which provide hardware encryption. However, this policy should be used with caution. This policy does not check whether external media devices on this list provide hardware encryption. Whitelisting removable storage devices that do not have hardware encryption do not have enforced security and are not protected.  
  For example, the Kingston® DataTraveler® Vault Privacy model enforces that encryption is enabled to use the device. However, the Kingston DataTraveler Vault model has an unsecured partition and a secured partition. Because it is the same physical removable media device with only one PNPDeviceID, the two partitions cannot be distinguished, meaning that whitelisting this particular device would allow unencrypted data to leave the endpoint.  
  Additionally, if a removable media device is encrypted and is subsequently added to the EMS Device Whitelist policy, it remains encrypted and requires a reformat of the device to remove encryption.  
  The following is an example of a PNPDeviceID, which contains... |
To whitelist a removable media device, provide a string value that matches portions of the device's PNPDeviceID. Multiple device PNPDeviceIDs are allowed.

For example, to whitelist all Kingston DataTraveler Vault Privacy models, input the string:

```
PROD DTVAULT_PRIVACY
```

To whitelist both models of Kingston DataTraveler, the Vault and Vault Privacy models, input the string:

```
PROD DTVAULT_PRIVACY;
PROD DT VAULT
```

Space characters are considered part of the substring to match to a PNPDeviceID. Using the previous PNPDeviceID as an example, a space before and after the semicolon would cause neither of the substrings to be matched, because the space character is not part of the PNPDeviceID.

**Instructions...**

**To find the PNPDeviceID for removable media:**

1. Insert the removable media device into an encrypted computer.
2. Open the EMSService.log in C:\Programdata\Dell\Dell Data Protection\Encryption\EMS.
3. Find PNPDeviceID=

   ```
   USBSTOR\DISK&VEN_SEAGATE&PROD_USB&REV_0409\2HC015KJ&0
   VEN=Vendor; Green highlighted text is for the vendor to be excluded
   PROD=Product/Model Name; Adding text highlighted blue also excludes all of Seagate's USB drives
   REV=Firmware Revision; Adding text highlighted gray also excludes the specific model being used
   Serial number (in this example); Adding text highlighted yellow excludes just this device
   ```

**OR**

**To find the PNPDeviceID for removable media on Windows 7 or later:**

1. Insert the removable media device.
2. Open the Control Panel and go to Administrative Tools > Computer Management.
3. Select the Hardware tab, select the drive, and click Properties.

   The PNPDeviceID is displayed in Value .

**Available Delimiters:**

- Tabs
- Commas
- Semi colons
- Hex character 0x1E (Record separator character)

EMS Alpha Characters Required in Password

**Selected**

Selected requires one or more letters in the password.
### EMS Mixed Case Required in Password
- **Selected**: Requires at least one uppercase and one lowercase letter in the password.

### EMS Number of Characters Required in Password
- **8**: 1-40 characters
- **Selected**: Minimum number of characters required in the password.

### EMS Numeric Characters Required in Password
- **Selected**: Requires one or more numeric characters in the password.

### EMS Password Attempts Allowed
- **3**: 1-10

### EMS Special Characters Required in Password
- **Not Selected**: Requires one or more special characters in the password.

### EMS Access and Device Code Length
- **16**: 8, 16, 32
- **Number of characters access and device codes have. 32 characters is the most secure, while 8 is the easiest to enter.**

### EMS Access Code Attempts Allowed
- **3**: 1-10

### EMS Access Code Failure Action
- **Apply Cooldown**: Action to take following unsuccessful EMS Access Code Attempts Allowed:
  - Apply Cooldown to allow another round of attempts following the specified cooldown period (EMS Cooldown Time Delay and EMS Cooldown Time Increment policies)
  - Wipe Encryption Keys to delete the encryption keys on the media, making the encrypted data inaccessible until the owner takes the media to an encrypted computer for which he has a login.

### EMS Access Code Required Message
- **Authentication Failed. Please contact your system administrator.**
  - **String**: 5-512 characters - Authentication Failed. Please contact your system administrator.
  - **Message policies must have non-blank values.**
  - **More...**
  - Optionally customize the second sentence of the message to include specific instructions about how to contact a help desk or security administrator for authentication failures.

### EMS Cooldown Time Delay
- **30**: 0-5000 seconds
- **Number of seconds the user must wait before attempting to enter the access code after failing the specified number of times.**

### EMS Cooldown Time Increment
- **20**: 0-5000 seconds
- **Incremental time to add to the cooldown time each time the user fails to enter the correct access code in the specified number of attempts.**

### EMS Access Code Failed Message
- **You are not authorized to use this media. Please contact your system administrator.**
  - **String**: 5-512 characters - You are not authorized to use this media. Please contact your system administrator.
  - **Message policies must have non-blank values.**
  - **More...**

"Space" and "Enter" characters used to add lines between rows count as characters used. Messages over the 512 character limit are truncated on the client.
count as characters used. Messages over the 512 character limit are truncated on the client. Optionally customize the message to include specific instructions about how to contact the help desk or security administrator.

Encryption rules to be used to encrypt/not encrypt certain drives, directories, and folders. A total of 2048 characters are allowed. "Space" and "Enter" characters used to add lines between rows count as characters used. Any rules exceeding the 2048 limit are ignored. See Encryption Rules for information.

Storage devices which incorporate multi-interface connections, such as Firewire, USB, eSATA, etc. may require the use of both Encryption External Media and encryption rules to encrypt the endpoint. This is necessary due to differences in how the Windows operating system handles storage devices based on interface type.

To ensure encrypting an iPod via Encryption External Media does not make the device unusable, use the following rules:

- ^R#:\Calendars
- ^R#:\Contacts
- ^R#:\iPod_Control
- ^R#:\Notes
- ^R#:\Photos

You can also force encryption of specific file types in the directories above: Adding the following rules will ensure that ppt, pptx, doc, docx, xls, and xlsx files are encrypted in the directories excluded from encryption via the previous rules:

- ^R#:\Calendars
  .ppt.doc
  .xls.pptx
  .docx.xlsx
- ^R#:\Contacts
  .ppt
  .doc.xls
  .pptx.docx
  .xlsx
- ^R#:\iPod_Control
  .ppt.doc
  .xls.pptx
  .docx.xlsx
- ^R#:\Notes
  .ppt.doc
  .xls.pptx
  .docx.xlsx
- ^R#:\Photos
  .ppt.doc
  .xls.pptx
  .docx.xlsx

Replacing these five rules with the following rule will force encryption of ppt, pptx, doc, docx, xls, and xlsx files in any directory on the iPod, including Calendars, Contacts, iPod_Control, Notes, and Photos:

- ^R#:\;ppt.doc.xls
  .pptx.docx.xlsx

These rules disable or enable encryption for these folders and file types for all removable devices - not just an iPod. Use care when defining rules to exclude an iPod from encryption. These rules have been tested against the following iPods:
iPod Video 30gb fifth generation
iPod Nano 2gb second generation
iPod Mini 4gb second generation
Dell does not recommend the use of the iPod Shuffle, as unexpected results may occur.
As iPods change, this information could also change, so caution is advised when allowing the use of iPods on Encryption External Media-enabled computers.
Because folder names on iPods are dependent on the model of the iPod, Dell recommends creating an exclusion encryption policy which covers all folder names, across all iPod models.

### EMS Block Access to UnShieldable Media

<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS Block Access to UnShieldable Media</td>
<td>Selected</td>
</tr>
</tbody>
</table>

Block access to any removable media that is less than 55 MB and thus has insufficient storage capacity to host Encryption External Media (such as a 1.44MB floppy disk).

More...

All access is blocked if EMS Encrypt External Media and this policy are both Selected. If EMS Encrypt External Media is Selected, but this policy is Not Selected, data can be read from the unencryptable media, but write access to the media is blocked.

If EMS Encrypt External Media is Off, then this policy has no effect and access to unencryptable media is not impacted.

### SDE Encryption Enabled

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
</tr>
</tbody>
</table>

If this policy is Not Selected, SDE encryption is disabled, regardless of other policy values. Selected means that all data not encrypted by other Intelligent Encryption policies are encrypted per the SDE Encryption Rules policy. Changing the value of this policy requires a reboot.

### SDE Encryption Algorithm

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES256</td>
</tr>
</tbody>
</table>

AES 256, AES 128, 3DES

Encryption algorithm used to for System Data Encryption. Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES.

### SDE Encryption Rules

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>String</td>
</tr>
</tbody>
</table>

Encryption rules to be used to encrypt/not encrypt certain drives, directories, and folders. See Encryption Rules for information.

SDE Encryption Rules may be changed as appropriate for your environment. However, these defaults have been tested extensively. Removing these exclusions may result in Windows issues, particularly after applying patch updates. Contact ProSupport for guidance if you are unsure about changing the values.

### Encryption Enabled

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
</tr>
</tbody>
</table>

This policy must be selected to use all Common encryption policies. Not Selected means that no Common encryption takes place, regardless of other policy values. Changing the value of this policy triggers a new sweep to encrypt/decrypt files.

### Common Encrypted Folders

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>String</td>
</tr>
</tbody>
</table>

A list of folders on computer drives to be encrypted or excluded from encryption, which can then be accessed by all managed users who have access to the computer. See Encryption Rules for information.

Important: Overriding directory protection can result in an unbootable computer and/or require reformatting drives.

More...

The available drive letters are:
- #: Refers to all drives
- f#: Refers to all fixed (non-removable) drives
- r#: Refers to all removable drives
<table>
<thead>
<tr>
<th>Common Encryption Algorithm</th>
<th>AES256</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES 256 or AES 128</td>
<td></td>
</tr>
<tr>
<td>Encryption algorithm used to encrypt data at the endpoint (all users) level.</td>
<td></td>
</tr>
<tr>
<td>System paging files are encrypted using AES 128.</td>
<td></td>
</tr>
<tr>
<td>Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Data Encryption List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exe List</strong></td>
</tr>
<tr>
<td>winword.exe</td>
</tr>
<tr>
<td>excel.exe</td>
</tr>
<tr>
<td>powerpnt.exe</td>
</tr>
<tr>
<td>msaccess.exe</td>
</tr>
<tr>
<td>winproj.exe</td>
</tr>
<tr>
<td>outlook.exe</td>
</tr>
<tr>
<td>acrobat.exe</td>
</tr>
<tr>
<td>visio.exe</td>
</tr>
<tr>
<td>mspub.exe</td>
</tr>
<tr>
<td>winzip.exe</td>
</tr>
<tr>
<td>winrar.exe</td>
</tr>
<tr>
<td>onenote.exe</td>
</tr>
<tr>
<td>onenotem.exe</td>
</tr>
<tr>
<td><strong>String</strong> - \text{maximum of 100 entries of 500 characters each}</td>
</tr>
<tr>
<td>Dell does not add explorer.exe or iexplorer.exe to the ADE list, as unexpected or unintended results may occur.</td>
</tr>
<tr>
<td>Explorer.exe is the process used to create a new notepad file on the desktop using the right-click menu.</td>
</tr>
<tr>
<td>Setting encryption by file extension, instead of the ADE list, provides more comprehensive coverage.</td>
</tr>
<tr>
<td>Changes to this policy do not affect files already encrypted because of this policy.</td>
</tr>
<tr>
<td>List process names of applications (without paths) whose new files you want encrypted, separated by carriage returns. Do not use wildcards.</td>
</tr>
</tbody>
</table>

**More...**

You can also specify these process names (separated by commas) via the registry value \text{HKLM\SOFTWARE\Credant\CMGShield\ApplicationDataEncryptionList}. The Encryption client encrypts all new files (not already being encrypted by Common Encrypted Folders and User Encrypted Folders) on the current computer hard drives created by these application processes whenever they are owned by a currently-logged-on managed user. This may include files excluded from encryption by Common Encrypted Folders and/or User Encrypted Folders.

The following folders and their subfolders are always excluded from encryption by this policy:
- C:\Windows\system32
- C:\Windows\Software Distribution
- C:\Windows\Security
- C:\System Volume Information\Program Files\Credant\(.dll.exe.sys.mac.ddp.wip.rty.nmd.inv)

Dell strongly recommends not listing applications or installers that write system-critical files. Doing so could result in encryption of important system files, which could make a Windows computer unbootable.

Common process names:
- outlook.exe
- winword.exe
- powerpnt.exe
- msaccess.exe
- wordpad.exe
- mspaint.exe
- excel.exe

The following hard-coded system and installer process names are ignored if specified in this policy (you can also add to this list in the registry value \text{HKLM\SOFTWARE\Credant\CMGShield\EUWPrivilegedList}):
- hotfix.exe, a Windows update process
- update.exe, a Windows update process
- setup.exe, a third-party installer process
- msiexec.exe, a third-party installer process
- wuaclt.exe, a Windows update process
- wmiprvse.exe, a Windows system process
- migrate.exe, a Windows update process
- unregmp2.exe, a Windows update process
- ikernel.exe, a third-party installer process
- wssetup.exe, the Windows Encryption client installer
- svchost.exe, a Windows system process
<table>
<thead>
<tr>
<th>Policy</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encrypt Temporary Files</td>
<td>Not Selected</td>
<td>When this policy is selected, the paths listed in the environment variables TEMP and TMP are encrypted. TEMP and TMP for the operating system are encrypted with the Common encryption key. To reduce encryption sweep time, the contents of the TEMP and TMP folders are cleared for initial encryption, as well as updates to this policy. However, if your organization uses a third-party application that requires the file structure within the \temp directory to be preserved, you should prevent this deletion. To disable temporary file deletion, create DeleteTempFiles (REG_DWORD) and set its value to 0 in the registry at HKLM\SOFTWARE\Credant\CMGShield.</td>
</tr>
<tr>
<td>Encrypt User Profile Documents</td>
<td>Not Selected</td>
<td>When this policy is selected, the following are encrypted: • The users profile (C:\Users\jsmith) with the User data encryption key • \Users\Public with the Common encryption key</td>
</tr>
<tr>
<td>Encrypt Windows Paging File</td>
<td>Selected</td>
<td>When this policy is selected, the Windows paging file is encrypted. A change to this policy requires a reboot.</td>
</tr>
<tr>
<td>Managed Services</td>
<td>null</td>
<td>String - maximum of 100 entries of 500 characters each (up to a maximum of 2048 characters) When a service is managed by this policy, the service is started only after the user is logged in and the Encryption client is unlocked. This policy also ensures that the Service managed by this policy is stopped before the Encryption client is locked during logoff. This policy can also prevent a user logoff if a service is unresponsive. More... Syntax is one service name per line. Spaces in the Service name are supported. Wildcards are not supported. Entries are not case-sensitive. For example, GoogleDesktop Manager is the same as googledesktopmanager. The service &quot;log on as&quot; setting has no bearing on whether or not the Encryption client can control it. It does not matter if a user logs on with user credentials verses the local system. The startup type (Automatic or Manual) does not affect the ability of the Encryption client to control it. Automatic or Manual startup is acceptable. Managed services are not started if an unmanaged user logs on.</td>
</tr>
<tr>
<td>Secure Post-Encryption Cleanup</td>
<td>Single Pass Overwrite</td>
<td>No Overwrite, Single-pass Overwrite, Three-pass Overwrite, Seven-pass Overwrite Once encryption is complete, this policy determines what happens to the unencrypted residue of the original files: • No Overwrite deletes it. This value yields the fastest encryption processing. • Single-pass Overwrite overwrites it with random data. • Three-pass Overwrite overwrites it with a standard pattern of 1s and 0s, then with its complement, and then with random data. • Seven-pass Overwrite overwrites it with a standard pattern of 1s and 0s, then with its complement, and then with random data five times. This value makes it most difficult to recover the original files from memory, and yields the most secure encryption processing.</td>
</tr>
<tr>
<td>Secure Windows Credentials</td>
<td>Selected</td>
<td>When this policy is selected, the Windows Credentials is secured by encrypting the entire registry with the exception of registry information required for computer boot. The information required for computer boot includes HKLM\SYSTEM and all sub-keys. This policy value is automatically set to Selected if SDE is enabled.</td>
</tr>
</tbody>
</table>
### Manage Policies

#### Block Unmanaged Access to Domain Credentials
- **State:** Selected
- **Description:** This policy prevents unmanaged applications from accessing the Windows domain credentials when a user is logged in.

#### Secure Windows Hibernation File
- **State:** Not Selected
- **Description:** When enabled, the hibernation file is encrypted only when the computer enters hibernation. The Encryption client disengages protection when the computer comes out of hibernation, providing protection without impacting users or applications while the computer is in use.

#### Prevent Unsecured Hibernation
- **State:** Not Selected
- **Description:** When enabled, the Encryption client does not allow computer hibernation if the client is unable to encrypt the hibernation data.

#### Workstation Scan Priority
- **State:** Lowest
- **Description:** Specifies the relative Windows priority of encrypted folder scanning. High and Highest prioritize scanning speed over computer responsiveness, Low and Lowest prioritize computer responsiveness over scanning speed and favor other resource-intensive activities, and Normal balances the two. The client checks for a changed Workstation Scan Priority before processing the next file.

The scan priority levels are used in two different ways:

1. These values correspond with the values used by the Microsoft SDK to set thread execution priority.
2. The client uses these values to introduce a delay in the encryption sweep after every single file is processed. The values translate to the following millisecond delay ranges, where the encryption thread will sit idle and then return full control to the operating system:
   - Highest = 0 ms
   - Lowest = 100 ms

#### Policy Proxy Connections
- **State:** String
- **Description:** List fully qualified Policy Proxy hostnames, or IP addresses, separated by carriage returns. Ports cannot be specified in this policy.

**More...**
- Once a valid entry is found, the remainder of the Policy Proxies listed are ignored.
- Entries are processed in the following order:
  1. GKConnections Override (this registry entry overrides all other entries)
  2. GKConnections (this registry entry is set automatically by the client, based on the this policy)
  3. GK

To override this policy and specify ports via the registry key, set HKLM\Software\Microsoft\WindowsNT\CurrentVersion\Winlogon\CMGShield\GKConnectionsOverride.

The client communicates with Policy Proxies using the GKPORT (the default is 8000).

If necessary, change that port via the registry key HKLM\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Winlogon\CMGShield\GKPort.

Inherited values for this policy accumulate. For the client to connect to a Policy Proxy specified in this policy, it must be in the same group as the Policy Proxy specified during client installation.

Because the client supports up to 255 users per computer, this...
The interval that the client attempts to poll Policy Proxy for policy updates, and send inventory information to Policy Proxy. The client also attempts to poll Policy Proxy each time a user logs on.

### Variables

Some Windows policies support the following variables. A pathname can consist entirely of one or more of these variables, or can include one or more of these variables at any point.

To get directory locations that these CSIDL values resolve to, go to [http://msdn.microsoft.com/en-us/library/bb762494.aspx](http://msdn.microsoft.com/en-us/library/bb762494.aspx). All names listed on the MSDN page are CSIDL_<name>.

- Includes any of the following Windows CSIDL constants:

  - DESKTOP
  - INTERNET
  - PROGRAMS
  - CONTROLS
  - PRINTERS
  - PERSONAL
  - FAVORITES
  - STARTUP
  - RECENT
  - SENDTO
  - STARTMENU
  - STARTMENU
  - MYDOCUMENTS
  - MYMUSIC
  - MYVIDEO
  - DESKTOPDIRECTORY
  - DRIVES
  - NETWORK
  - NETHOOD
  - FONTS
  - TEMPLATES
  - COMMON_STARTMENU
COMMONPROGRAMS
COMMONSTARTUP
COMMONDESKTOPDIRECTORY
APPDATA
PRINTHOOD
LOCALAPPDATA
ALTSTARTUP
COMMONALTSTARTUP
COMMONFAVORITES
INTERNETCACHE
COOKIES
HISTORY
COMMONAPPDATA
WINDOWS
SYSTEM
PROGRAMFILES
PROGRAMFILES
MYPICTURES
PROFILE
SYSTEMX86
PROGRAMFILESEX86
PROGRAMFILESX86
PROGRAMFILESCOMMON
PROGRAMFILESCOMMONX86
COMMONTEMPLATES
COMMONDOCUMENTS
COMMONADMINTOOLS
ADMINTOOLS
CONNECTIONS
COMMONMUSIC
COMMONPICTURES
COMMONVIDEO
RESOURCES
PROFILES
• Includes a numeric or text value stored in the registry for the current user. If you specify a path but not an item, the client uses the default value

• Includes a numeric or text value stored in the registry for the local computer. If you specify a path but not an item, the client uses the default value

• Includes the value of a Windows local environment variable

• Includes the % character

Windows Policies that Require Reboot

• SDE Encryption Enabled
• Encrypt Windows Paging File
• Secure Windows Credentials
• All PCS policies

Windows Policies that Require Logoff

• SDE Encryption Enabled
• User state change to Suspended
• EMS Encrypt External Media
• EMS Scan External Media
• EMS Encryption Algorithm
• EMS Exclude CD/DVD Encryption
• EMS Data Encryption Key

Encryption Rules

Important: Before you begin, you must understand directory protection, as well as when and how to override directories and file types. If you do not completely understand the information included in this section, as well as the encryption settings that currently exist on your environment, do not attempt to override protected directories.

Do not encrypt files with the extension tmp. Encrypting .tmp files may result in an unbootable computer and/or require reformatting drives.

Protected Directories

The Encryption client has several directories that are, by default, protected from encryption. The level of protection varies from folder to folder. If a folder is protected, then the only way to encrypt data within that directory is to use the override modifier described in Modifiers – What they are and what they do.

There are four levels (categories) of protection that directories and files can have: 0, 1, 2, and 3. Category 3 is the most protected level.
Modifiers - What they are and what they do

The ^ character is the “Override” command. It causes the listed policy to override protected directories. It may be followed by a “2” or a “3”, indicating the level of the override.

The @ character is the “At” command. It will cause the listed policy to be applied at the specified folder location only (subdirectories of that folder are not subject to that policy).

The - is the “Not” command. It will cause the listed policy to be an exclusion policy instead of an inclusion policy.

Using the Override Modifier

The Override Modifier can be used to allow for inclusion or exclusion in cases where there is a higher level of protection. The following are the different override levels supported:

^ Category 1 Override
^2 Category 2 Override
^3 Category 3 Override

Encrypting/Not Encrypting Extensions

To include or exclude file name extensions using encryption rules, use the following within your rules:

- After specifying your directory location, use a semi-colon (;) before listing your extensions.
- After specifying your directory location, you do not need to list a trailing backslash (\).
- The period is used as a delineator. It is not meant to be used as “dot-extension.” However, you can precede the first extension with a period.
- The Override command (^) can be used with extensions.
- The At command (@) can be used with extensions.
- The Not command (-) can be used with extensions.
- You can make any combination of the modifiers with an extension inclusion or exclusion.

Examples of Extension Inclusions/Exclusion

C:\;doc.xls.ppt.docx.xlsx.pptx
What this does: On the C: drive, this encrypts all doc, docx, xls, xlsx, ppt, and pptx files that do not exist within any protected directory.

^C:\;txt
What this does: On the C: drive, this encrypts all txt files that are not in a directory that has protection of Category 1 or better.

-C:\bat.exe.dll
What this does: On the C: drive, this causes all files with the extension bat, exe, and dll to not be encrypted.

Encrypting/Not Encrypting Directories

To include or exclude directories using encryption rules, use the following within your rules:

- After specifying your directory location, you do not need to list a trailing backslash (\).
- If you list a directory for inclusion, every file contained within that directory is encrypted.
The Override command (^) can be used with folders only when specifying an exclusion policy.

The At command (@) can be used with folders.

The Not command (-) can be used with folders.

You can make any combination of the supported modifiers for folders. If the Override command (^) is used, the statement can only be an exclusion statement.

Examples of folder inclusion/exclusion

C:\CustomApplication\DataStore
What this does: On the C: drive, this causes every file within the directory of \CustomApplication\DataStore to be encrypted.

-C:\Documents and Settings\All Users
What this does: On the C: drive, this applies a Category 0 level of protection to the directory of \Documents and Settings\All Users.

-^2C:\CustomApplication\dll
What this does: On the C: drive, this applies a Category 2 level of protection to the directory of \CustomApplication\dll.

Sub-directories and Precedence of Directives

Encryption rules may be listed in any order. If more than one rule applies to a given folder or file, then the following general rules determine which one prevails:

1. The rule with the more specific path prevails.
2. If the rules have equal paths, specified extensions prevail.
3. If the rules both specify extensions, exclusion overrides inclusion.

Example of sub-directories

C:\
-C:\MyApplicationFolder
What this does: (1st statement is an inclusion, 2nd statement is an exclusion) On the C: drive, encrypt all files in folders at the root level and below, except for files residing in the protected directories and any files residing in "MyApplicationFolder".

Example 1 of competing directives:

C:\
-C:\MyApplicationFolder
^C:\\doc.xls.ppt.docx.xlsx.pptx
What this does: (1st statement is an inclusion, 2nd statement is an exclusion, 3rd statement is an inclusion) On the C: drive, encrypt all files in folders at the root level and below, except for files residing in the protected directories and files residing in "MyApplicationFolder". However, override and encrypt files with the extension doc, docx, xls, xlsx, ppt, and pptx in the protected directories and in the folder "MyApplicationFolder".

Example 2 of competing directives:

C:\
-C:\MyApplicationFolder
What this does: (1st statement is an inclusion, 2nd statement is an exclusion, 3rd statement is an inclusion, 4th statement is an exclusion) On the drive of C:, encrypt all files in folders at the root level and below, except for files residing in the protected directories and files residing in “MyApplicationFolder”. However, override and encrypt files with the extension doc, docx, xls, xlsx, ppt, and pptx in the protected directories, but not in the folder “MyApplicationFolder”.

Example 3 of competing directives:

C:\
-C:\MyApplicationFolder
-A:\doc.xls.ppt.docx.xlsx.pptx
-A:\MyApplicationFolder;doc.xls.ppt.docx.xlsx.pptx
-A:\MyApplicationFolder\Templates

What this does: (1st statement is an inclusion, 2nd statement is an exclusion, 3rd statement is an inclusion, 4th statement is an exclusion, 5th statement is an exclusion) On the C: drive, encrypt all files in folders at the root level and below, except for files residing in the protected directories and files residing in “MyApplicationFolder”. However, override and encrypt files with the extension doc, docx, xls, xlsx, ppt, and pptx in the protected directories, but not in the folder “MyApplicationFolder”. Additionally, the folder “MyApplicationFolder\Templates” gains a category 2 protection causing no data to be encrypted there, since the inclusion statements are less than or equal to category 2.

Environment Variables, KNOWNFOLDERID constants, and CSIDL

Using encryption rules, you can make use of environment variables, KNOWNFOLDERID constants (Windows 7 and later), and CSIDL values (pre-Windows 7 computers) in addition to specifying your policy folder locations as absolute paths. To use variables in your encryption rules, follow these formatting rules:

- Before and after the use of the variable, use a percent sign (%).
- For environment variables, you must use “ENV:” preceding the variable name, all contained within the percent signs.
- For KNOWNFOLDERID constants, you must use “FOLDERID_” preceding the variable name. Percent signs are not used.
- For CSIDL variables, you must use “CSIDL:” preceding the variable name, all contained within the percent signs.
- Ensure that your variable contains a trailing backslash if you plan on appending another directory after the use of the variable.
- Variables can be used in both folder and extension inclusion or exclusion rules.

The following environment variables are supported:
All locally defined environment variables

The following KNOWNFOLDERID values are supported:
RoamingAppData
Cookies
Desktop
The following CSIDL variables are supported:

- APPDATA
- COOKIES
- DESKTOPDIRECTORY
- FAVORITES
- INTERNET_CACHE
- LOCAL_APPDATA
- MYMUSIC
- MYPICTURES
- PERSONAL
- PROGRAMS
- RECENT
- SENDTO
- STARTMENU
- STARTUP
- TEMPLATES

Some examples of variables used in folder and extension policy:

- `%SYSTEMDRIVE%\CustomApplication`
  
  **What this does:** This lists the folder `\CustomApplication` for encryption on the default drive where Windows is installed.

- `%USERPROFILE%\Desktop`
  
  **What this does:** This lists the user who is logged in to have their desktop obtain a category 0 protection.
Application Data Encryption (ADE)

ADE encrypts any file written by a protected application, using a category 2 override. This means that any directory that has a category 2 protection or better, or any location that has specific extensions protected with category 2 or better, will cause ADE to not encrypt those files.

For example, ADE does not encrypt any files written into /Windows/System32 folder, because this directory has a default protection of category 2.

Example Policies for Common/User Key Encryption

The following set of encryption rules encrypts most of the drive, including standard Microsoft Office-type documents in the Documents and Settings folders. This policy set should only be used for Common encryption (not User encryption, removable media, or SDE). This is considered a strong policy set, and will typically require some adjustments for local conditions and requirements.

%ENV:SYSTEMDRIVE%\
%^%ENV:USERPROFILE%\;<insert standard office extensions here >
FOLDERID_Documents or %CSIDL:PERSONAL% (pre-Windows 7)
%ENV:USERPROFILE%\Desktop\%
%^%ENV:USERPROFILE%\mp3.mp4.mpeg.avi.wmv.wav
^-%ENV:USERPROFILE%\Desktop\;<system file extensions to exclude>
-%ENV:SYSTEMDRIVE%\; <system file extensions to exclude>
-%ENV:SYSTEMDRIVE%\config.msi

What this does:

Encrypts all of C:\, except for protected directories
Encrypts standard Microsoft Office documents across the drive, except for protected directories, although it will encrypt them in the USERPROFILE directory.
Encrypts all of My Documents
Encrypts all of the Desktop, except for any selected excluded extensions
Excludes common system files from encryption
Excludes all encryption from C:\config.msi directory, due to MSI upgrade migration issues
All paths are dynamic based on environment variables

%ENV:USERPROFILE% (inclusion or exclusion) variable should never be used with SDE Encryption.

System Data Encryption (SDE)

SDE is an intelligent file-based encryption method where the encryption key is auto-authenticated during the volume mount process. A unique SDE key is generated for each volume that is targeted for encryption by SDE. This allows the SDE key to be used to encrypt data that would not otherwise be possible with the Common or User keys due to time-based availability of the keys.

Due to the difference in how the SDE key can be used, there are several caveats to be aware of when considering use of this feature.

- The built-in exclusions covered in protected directories do not apply to SDE. By design, SDE excludes portions of the operating system that are necessary for booting and updating.
If a file is targeted for encryption by any key other than SDE in addition to SDE, then SDE does not encrypt the file.

All encryption rules apply when writing SDE policies.

Encryption Rules for SDE Encryption

The following is the default SDE policy. **Any changes to this policy should be considered carefully.**

The protection of the SystemRoot directory is specified so that only the root itself is protected, meaning that the sub-directories of the SystemRoot do not inherit this protection. This would be the equivalent of using the following policy:

```text
@C:\
```

Encryption Rules for Encryption External Media

Removable Media Encryption policies operate off their own set of encryption rules, independent of Common encryption, User encryption, or SDE uses. User/Common encryption policies are only applied to fixed disks. If an endpoint is determined to be removable media, then Removable Media Encryption policies are applied.

What Happens When Policies Tie

- When an exclusion and inclusion statement both apply to a given directory or file, the exclusion policy prevails.
- If you apply a Common encryption policy and User encryption policy specifically to the same file or location, the file or location is Common key encrypted.
- If you apply a Common encryption policy and an SDE encryption policy specifically to the same file or location, the file or location is Common key encrypted.
- If you apply a User encryption policy and an SDE encryption policy specifically to the same file or location, the file or location is User key encrypted.

See [Sub-directories and Precedence of Directives](#) for more information.

Encryption Rules for Generic Drive Statements

Instead of having to specify each drive in an inclusion or exclusion rule by its drive letter assignment, you may use a generic rule to target either All Fixed Drives or all Removable Drives.

**Fixed Drive Usage:** Replace the drive letter with F#.

*Example:* F#:\ instead of C:\ or D:\

The Fixed Drive rule can only be used within a Common Encrypted Folder policy, User Encrypted Folder policy, and/or SDE policy.

**Removable Drive Usage:** Replace the drive letter with R#.

*Example:* R#:\ instead of F:\ or H:\

The Removable Drive rule can only be used within an Encryption External Media Encryption Rules policy.

Remove System Data Encryption (SDE)

To completely decrypt SDE encrypted files, apply the following policies:
Manage Policies

SDE Encryption Enabled = Not Selected
Encrypt Windows Paging File = Not Selected
Secure Windows Credentials = Not Selected

Authentication

Authentication policies allow you to configure user experience and Windows authentication. Policy descriptions also display in tooltips in the Management Console.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Boot Authentication</td>
<td></td>
<td>This technology provides a secure, tamper-proof environment by preventing data from being read from the hard disk or operating system until the user enters the correct PBA login credentials. Pre-Boot Authentication serves as an extension of the BIOS or boot firmware to provide a trusted authentication layer, separate from the operating system.</td>
</tr>
</tbody>
</table>

**Authentication Method**
- **Password**
- **Smart Card**

Select the type of authentication to use when logging in to the PBA.

**Support Information Text**

String 0-512 characters

Text to display on the PBA support information screen. Customize the message to include specific instructions about how to contact the help desk or security administrator. Not entering text in this field results in no support contact information being available for the user. Text wrapping occurs at the word level, not the character level. If a single word is more than approximately 50 characters in length, it does not wrap and no scroll bar is present, therefore the text is truncated. The text in this policy is translatable.

**PBA Title Text**

0-17 characters

The text to display on the top of the PBA screen. Not entering text in this field results in no title being displayed. Text does not wrap, so entering more than 17 characters results in the text being truncated. The text in this policy is translatable.

**Sync Users at PBA Activation**

Not Selected

Select this option to sync all users of this computer with the PBA database during PBA activation.

See [advanced settings](#)

**Windows Authentication**

This technology sets definitions around user login, specifically what is required to login (password, smart card, fingerprint), password recovery options, and password requirements (number of attempts allowed, password length).

**Logon Authentication Policy for Administrators**

Windows Password and None

The possible VALUES are:
- Windows Password
- None
- Fingerprints
- Contactless Card
Logon Authentication Policy for Users | Windows Password and None | The possible VALUES are: Windows Password, None, Fingerprints, Contactless Card, One-Time Password

Microsoft Passport | This technology allows the use of Microsoft Passport, specifically authentication attempts and PIN usage.

Microsoft Passport | Off | On
Off
Toggle to On to enable Microsoft Passport. If this policy is toggled to Off, no Microsoft Passport policies are enabled. Microsoft Passport is supported only on computers running Windows 10.

Maximum Windows Passport Authentication Attempts | 3 | 1-10 attempts
Number of chances the user has to authenticate with correct credentials.

Logon Authentication Method | PIN | Currently, logon authentication method is supported only with PIN.

PIN Length | 8 | 4-127 numeric characters
Minimum number of characters required in the PIN.

Advanced Authentication

Authentication policies allow you to configure user experience and Windows authentication.

Policy descriptions also display in tooltips in the Management Console.

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</tr>
<tr>
<td>Authentication Method</td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td><strong>Support Information Text</strong></td>
<td>Please contact your system administrator.</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>PBA Title Text</strong></td>
<td>0-17 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The text to display on the top of the PBA screen. Not entering text in this field results in no title being displayed. Text does not wrap, so entering more than 17 characters results in the text being truncated. The text in this policy is translatable.</td>
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</tr>
<tr>
<td><strong>Sync Users at PBA Activation</strong></td>
<td>Not Selected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select this option to sync all users of this computer with the PBA database during PBA activation.</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Notice Text</strong></td>
<td>String 0-512 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Text to display before being allowed to log on to the computer. For example: By clicking OK, you agree to abide by the acceptable computer use policy. Not entering text in this field results in no text, OK, or Cancel buttons being displayed. Text wrapping occurs at the word level, not the character level. If a single word is more than approximately 50 characters in length, it does not wrap and no scroll bar is present, therefore the text is truncated. The text in this policy is translatable.</td>
<td></td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Self Help Questions (Pre-8.0 clients)</strong></td>
<td>Specify the questions to present to Windows users during recovery questions setup. Separate each question by a carriage return. These questions are used if the Windows password is forgotten. At least 3 questions must be specified.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What is the name of your first pet?&lt;br&gt;Who was your first employer?&lt;br&gt;What was the first concert you attended?&lt;br&gt;What was the make of the first car you owned?&lt;br&gt;What was the last name of your third grade teacher?&lt;br&gt;In what city or town did your mother and father meet?&lt;br&gt;In what city or town was your first job?</td>
<td></td>
</tr>
<tr>
<td><strong>Initial Access Code</strong></td>
<td>String 1-100 characters&lt;br&gt;This policy is used to log on to a computer when network access to Dell Server and Active Directory (AD) are both unavailable. The Initial Access Code policy should only be used if absolutely necessary, it is not the recommended method to log in. Using the Initial Access Code policy does not provide the same level of security as the usual authentication method of logging in using user name, domain, and password. The Initial Access Code can only be used one time, immediately after activation. The first domain login that occurs after the Initial Access Code is entered is cached and the Initial Access Code entry field does not displayed again.</td>
<td></td>
</tr>
<tr>
<td><strong>Encryption Administrator Password</strong></td>
<td>String 9-32 characters with at least 1 number and 1 letter&lt;br&gt;Computer-generated password used by the Dell Server and client for recovery and other internal processes. No user or administrator interaction is required. All values are automatically maintained in the Dell Server and can never be deleted. Entering a value for this policy does not affect the Override Count.</td>
<td></td>
</tr>
<tr>
<td><strong>Non-Cached User Login Attempts Allowed</strong></td>
<td>Any number&lt;br&gt;This policy does not come into play when connected to the network (there is a connection to AD), because authentication with AD is attempted. This policy only comes into play when the computer is not connected to the network and an unknown user attempts to log in (meaning, a user that has not logged in to the computer before -- no credentials have been cached).</td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cached User Login Attempts Allowed</td>
<td>10</td>
<td>1-20 times Number of times that a cached user can attempt to log in.</td>
</tr>
<tr>
<td>Self Help Question/Answer Attempts Allowed</td>
<td>3</td>
<td>1-10 times Number of times the user can attempt to enter the correct answer.</td>
</tr>
<tr>
<td>Enable One Step Logon</td>
<td>Selected</td>
<td>This policy simplifies the logon process when multi-factor authentication is enabled at both preboot and Windows logon. If selected (or not configured), authentication is required at preboot only, and users are automatically logged on to Windows. If not selected, authentication may be required multiple times.</td>
</tr>
<tr>
<td>Number of Shutdown/Restart Delays Allowed</td>
<td>5</td>
<td>1-25 times Number of times that a user is allowed to snooze/delay a shutdown/restart before being forced to shutdown/restart. TPM requires a reboot. SED requires a shutdown.</td>
</tr>
<tr>
<td>Length of Each Shutdown/Restart Delay</td>
<td>300 seconds</td>
<td>300-30000 seconds Number of seconds between each time the user is asked to shutdown/reboot. TPM requires a reboot. SED requires a shutdown.</td>
</tr>
<tr>
<td>Length of Forced Shutdown/Restart Notice</td>
<td>60 seconds</td>
<td>60-1800 seconds When user has reached the maximum number of authorized shutdown/restart snoozes/delays, this policy sets the number of seconds allowed before forcing a shutdown/restart. TPM requires a reboot. SED requires a shutdown.</td>
</tr>
<tr>
<td>Allow PBA to Remember User Name</td>
<td>Selected</td>
<td>Selected Not Selected Enables or disables the ability for users to select Remember Me on the PBA login screen.</td>
</tr>
<tr>
<td>Crypto Erase Password</td>
<td>String 0-100 characters</td>
<td>String 0-512 characters A word or code of up to 100 characters used as a fail-safe security mechanism. Entering this word or code in the user name or password field during PBA authentication initiates a crypto erase, which removes the keys from secure storage. Once this process is invoked, the drive is unrecoverable. Leave this field blank if you do not want a crypto erase password available in case of emergency.</td>
</tr>
<tr>
<td>Enable Client Check for PBA Commands</td>
<td>Not Selected</td>
<td>Allows the client to automatically check for PBA Device Control commands that are pushed from the Dell Server. When enabled, the PBA environment checks for new commands from the Dell Server every five minutes.</td>
</tr>
</tbody>
</table>
Windows Authentication
This technology sets definitions around user login, specifically what is required to login (password, smart card, fingerprint), password recovery options, and password requirements (number of attempts allowed, password length).

| Policy for Administrators | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card |
|---------------------------|---------------------------|--------------------------------------------------|
| Logon Authentication      | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card |
| Policy for Users          | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card |
| In-session Authentication | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card
One-Time Password |
| Policy for Administrators | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card
One-Time Password |
| In-session Authentication | Windows Password and None | The possible VALUES are:
Windows Password
None
Fingerprints
Contactless Card
One-Time Password |
### Manage Policies

<table>
<thead>
<tr>
<th>Recovery Questions for Windows Authentication</th>
<th>At least 3 selectable questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the questions to present to Windows users during recovery questions setup. Separate each question by a carriage return. These questions are used if the Windows password is forgotten. At least 3 questions must be specified.</td>
<td></td>
</tr>
<tr>
<td>1. What is your mother's maiden name?</td>
<td></td>
</tr>
<tr>
<td>2. What was the name of the first school you attended?</td>
<td></td>
</tr>
<tr>
<td>3. What is the name of your first pet?</td>
<td></td>
</tr>
<tr>
<td>4. What is your father's middle name?</td>
<td></td>
</tr>
<tr>
<td>5. What is your mother's middle name?</td>
<td></td>
</tr>
<tr>
<td>6. Who was your first employer?</td>
<td></td>
</tr>
<tr>
<td>7. Who was your first teacher?</td>
<td></td>
</tr>
<tr>
<td>8. What city were you born in?</td>
<td></td>
</tr>
<tr>
<td>9. What city was your mother born in?</td>
<td></td>
</tr>
<tr>
<td>10. What city was your father born in?</td>
<td></td>
</tr>
<tr>
<td>11. What was the first concert you attended?</td>
<td></td>
</tr>
<tr>
<td>12. Who is your favorite TV show character?</td>
<td></td>
</tr>
<tr>
<td>13. What was the name of your first stuffed animal?</td>
<td></td>
</tr>
<tr>
<td>14. What was the make of the first car you owned?</td>
<td></td>
</tr>
<tr>
<td>15. Where did you spend your honeymoon?</td>
<td></td>
</tr>
<tr>
<td>16. Where did you meet your spouse?</td>
<td></td>
</tr>
<tr>
<td>17. What is your oldest cousin's name?</td>
<td></td>
</tr>
<tr>
<td>18. What is your oldest niece's name?</td>
<td></td>
</tr>
<tr>
<td>19. What is your oldest nephew's name?</td>
<td></td>
</tr>
<tr>
<td>20. What is your oldest child's nickname?</td>
<td></td>
</tr>
<tr>
<td>21. What is your oldest child's nickname?</td>
<td></td>
</tr>
<tr>
<td>22. What was the last name of your third grade teacher?</td>
<td></td>
</tr>
<tr>
<td>23. In what city or town did your mother and father meet?</td>
<td></td>
</tr>
<tr>
<td>24. In what city or town was your first job?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allow Recovery Questions</th>
<th>Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set to Selected to allow users to use recovery questions/answers to log on to Windows.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Events Level</th>
<th>Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of detail in Windows Event logs. Determines whether events such as fingerprint registration and authentication attempts are logged in the Windows Event log. Each higher level includes all previous levels. Events are logged on the computer where they occur. Normally, the auditing level provides sufficient detail, covering all logon, authentication, fingerprint management, and user management events. The details levels can fill the log file very quickly. Status</td>
<td></td>
</tr>
</tbody>
</table>
Security Management Server Virtual v10.2.11 AdminHelp

<table>
<thead>
<tr>
<th>False Accept Rate of Fingerprint</th>
<th>Medium High - 1 in 100,000</th>
</tr>
</thead>
</table>

The False Accept Rate is the probability of receiving a false acceptance decision when comparing fingerprints scanned from different fingers. You can select one of the following FAR values:
* Medium (1 in 10,000)
* Medium High (1 in 100,000)
* High (1 in 1,000,000)

For example: if you select Medium High, on average, one false acceptance will occur when a fingerprint is compared against one hundred thousand fingerprints scanned from different fingers. The higher the setting, the lower the chance of receiving a false acceptance. However, at the High setting, the system may reject legitimate fingerprints.

**NOTE:** The FAR is set on a per verification basis. When matching a fingerprint against fingerprints of multiple users (identification), the internally used FAR is automatically adjusted to maintain the same effective FAR as was selected for a single match.

<table>
<thead>
<tr>
<th>Minimum Number of Fingerprints to Enroll</th>
<th>2</th>
</tr>
</thead>
</table>

The minimum number of fingerprints required to be enrolled.

<table>
<thead>
<tr>
<th>Maximum Number of Fingerprints to Enroll</th>
<th>10</th>
</tr>
</thead>
</table>

The maximum number of fingerprints required to be enrolled.

<table>
<thead>
<tr>
<th>Allow Users to Enroll Credentials</th>
<th>Selected</th>
</tr>
</thead>
</table>

Set to Selected to allow users to enroll their own credentials without administrator involvement.

<table>
<thead>
<tr>
<th>Allow Users to Modify Credentials</th>
<th>Selected</th>
</tr>
</thead>
</table>

Set to Selected to allow users to modify their own credentials that have been previously set up or enrolled.
### Manage Policies

| Reminder to Enroll Credentials (Admin) | In one day | Values for reminders: Disable Reminder At Next Logon In One Day In One Week Every Two Hours |
| Reminder to Enroll Credentials Expiration Date (Admin) | Now | The date (time is always 12 am) when authentication policy is going into full effect. Meaning, the client stops asking the local administrator to enroll credentials and forces them to enroll before they can logon. The default is “now”. |
| Reminder to Enroll Credentials (User) | In one day | Values for reminders: Disable Reminder At Next Logon In One Day In One Week Every Two Hours |
| Reminder to Enroll Credentials Expiration Date (User) | Now | The date (time is always 12 am) when authentication policy is going into full effect. Meaning, the client stops asking the user to enroll credentials and forces them to enroll before they can logon. The default is “now”. |
| Action Upon Smart Card Removal | Lock Workstation | No Action Lock Workstation Force Logoff Disconnect if on a Remote Desktop session The action that occurs when a smart card is removed from the computer. |

### Threat Prevention

Threat Prevention policies are available at the Enterprise, Endpoint Group, and Endpoint levels.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Threat Prevention</td>
<td>Off</td>
<td>This technology is powered by Cylance and protects your operating system by detecting and preventing malware pre-execution. Advanced Threat Prevention uses artificial intelligence and predictive mathematical models to quickly and accurately identify what is safe and what is a threat. On Toggle ON to enable Advanced Threat Prevention. If</td>
</tr>
</tbody>
</table>
Security Management Server Virtual v10.2.11 AdminHelp

File Actions

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Executable Auto Quarantine with Executable Control Enabled</td>
<td>Selected</td>
<td>If selected, Unsafe executable files are automatically quarantined or blocked to prevent their execution. Note: If you Auto Quarantine, it is highly recommended that before deployment, you test Auto Quarantine only on devices using a test policy to observe the behavior and ensure that no business-critical applications are blocked at execution.</td>
</tr>
<tr>
<td>Abnormal Executable Auto Quarantine with Executable Control Enabled</td>
<td>Selected</td>
<td>If selected, Abnormal executable files are automatically quarantined or blocked to prevent their execution. Note: If you Auto Quarantine, it is highly recommended that before deployment, you test Auto Quarantine only on devices using a test policy to observe the behavior and ensure that no business-critical applications are blocked at execution.</td>
</tr>
</tbody>
</table>

Memory Actions

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Protection Enabled</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other Memory policies. If this policy is Not Selected, no Memory Action policies are enforced, regardless of other policy values. NOTE: Before enabling Memory Protection, enable Compatibility Mode, to ensure applications function properly on the client computer. For instructions on how to enable Compatibility Mode, see Enable_Compatibility_Mode_for_Memory_Protection.htm. Compatibility Mode does not apply to Mac clients.</td>
</tr>
</tbody>
</table>

See advanced settings

Policy | Default Setting | Description |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat Protection</td>
<td>Off</td>
<td>This technology protects computers by identifying and taking action against threats of malware and malicious activity involving files, folders, the registry, and processes. On Toggle to ON to enable Threat Protection. If toggled to OFF, no Threat Protection policies are applied. Threat Protection includes Malware Protection, Web Protection, and Client Firewall.</td>
</tr>
<tr>
<td>Exploit Protection</td>
<td>Selected</td>
<td>This policy is the &quot;master policy&quot; for all other Exploit Protection policies. If this policy is Not Selected, no Exploit Protection policies are enforced, regardless of other policy values. A Selected value means that Exploit Protection is enabled. Exploit Protection monitors for application vulnerabilities and keeps buffer overflow exploits...</td>
</tr>
</tbody>
</table>
Manage Policies

Action on Malicious Activity for Files and Folders

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block and Report</td>
<td>Block and Report</td>
<td>Prevents users from modifying or deleting Threat Protection system files and folders and sets the action to take upon attempt. Block Only: Blocks activity but does not report to the server. Report Only: Reports activity to the server but does not block activity. Block and Report (default): Blocks and reports activity to the server.</td>
</tr>
</tbody>
</table>

Action on Malicious Activity for Registry

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block and Report</td>
<td>Block and Report</td>
<td>Prevents users from modifying or deleting Threat Protection registry keys and values and sets the action to take upon attempt. Block Only: Blocks activity but does not report to the server. Report Only: Reports activity to the server but does not block activity. Block and Report (default): Blocks and reports activity to the server.</td>
</tr>
</tbody>
</table>

On-Access Protection

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
<td>Selected</td>
<td>This policy is the &quot;master policy&quot; for all other On-Access Protection policies. If this policy is Not Selected, no On-Access Protection policies are enforced, regardless of other policy values. A Selected value means that On-Access Protection is enabled. This policy must be set to Selected to enable On-Access Protection. If this policy is Not Selected, no On-Access Protection policies are applied.</td>
</tr>
</tbody>
</table>

See advanced settings

Policy Default Setting Description

Web Protection
This technology protects computers by leveraging a web-based content ranking system to determine if a site that a user is browsing is considered safe or not. This technology also grants the administrator the ability to define what happens when an unsafe site is navigated to (allow, block, warn).

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
</table>
| Web Protection | Off | On
Off Toggle to ON to enable Web Protection. If toggled to OFF, no Web Protection policies are applied. |

Enforcement - Action to Apply to Sites Not Verified

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
</table>
| Enforcement - Action to Apply to Sites Not Verified | Allow | Block
Allow
Warm Specifies the default action to apply to sites that have not been verified. Block: Prevents users from accessing the site and displays a message that the site is blocked. Allow: Permits users to access the site. |
### Enforcement - Enable File Scanning for File Downloads

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warn</td>
<td></td>
<td>Displays a warning to notify users of potential dangers associated with the site. Users must dismiss the warning before continuing.</td>
</tr>
<tr>
<td>Selected</td>
<td></td>
<td>A Selected value scans all files (including .zip files) before downloading. This option prevents users from accessing a downloaded file until Threat Protection marks the file as clean. Downloaded files are sent to Threat Protection for scanning. Threat Protection performs a Reputation Service lookup on the file. If a downloaded file is detected as a threat, Threat Protection takes action on the file and alerts the user.</td>
</tr>
</tbody>
</table>

### Enable Secure Search

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Selected</td>
<td></td>
<td>A Selected value enables Secure Search, automatically blocking malicious sites in search results based on safety rating.</td>
</tr>
</tbody>
</table>

### Block Links to Risky Sites in Search Results

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Selected</td>
<td></td>
<td>A Selected value prevents users from clicking links to risky sites in search results.</td>
</tr>
</tbody>
</table>

See [advanced settings](#).

### Client Firewall

This technology protects computers by allowing administrators to determine which network traffic is permitted to pass between end user computers and the network.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td></td>
<td>Client firewall is a stateful firewall.</td>
</tr>
</tbody>
</table>

See [advanced settings](#).

### Protection Settings

This technology allows control over Threat Prevention settings such as display of threat event notifications on the client computer and Web Protection and Client Firewall logging.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppress Popup Notifications</td>
<td>Not Selected</td>
<td>If Selected, popup notifications of Advanced Threat Prevention events are disabled on the computer.</td>
</tr>
</tbody>
</table>
| Minimum Popup Notification Level | High | Severity level of events that result in popup notifications that display on the computer. High allows only notifications of critical events to display. Low displays all on-screen notifications for all events. Listed below are examples of events:
### Manage Policies

#### High
1. Protection status has changed. (Protected means that the Advanced Threat Prevention service is running and protecting the computer and needs no user or administrator interaction.)
2. A threat is detected and policy is not set to automatically address the threat.

#### Medium
1. Execution Control blocked a process from starting because it was detected as a threat.
2. A threat is detected that has an associated mitigation (for example, the threat was manually quarantined), so the process has been terminated.
3. A process was blocked or terminated due to a memory violation.
4. A memory violation was detected and no automatic mitigation policy is in effect for that violation type.

#### Low
1. A file that was identified as a threat has been added to the Global Safe List or deleted from the file system.
2. A threat has been detected and automatically quarantined.
3. A file has been identified as a threat, but waived on the computer.
4. The status of a current threat has changed (for example, Threat > Quarantined, Quarantined > Waived, or Waived > Quarantined).

<table>
<thead>
<tr>
<th>Log Files Location</th>
<th>&lt;SYSTEM_DRIVE&gt;:\ProgramData\DDP\Suite\Logs</th>
<th>String - File path specifies the location for the log files. The default location is &lt;SYSTEM_DRIVE&gt;:\ProgramData\DDP\Suite\Logs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Activity Logging</td>
<td>Selected</td>
<td>Not Selected</td>
</tr>
<tr>
<td>Debug Logging for Web Protection</td>
<td>Not Selected</td>
<td>Selected</td>
</tr>
<tr>
<td>Debug Logging for Client Firewall</td>
<td>Not Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>

**Advanced Threat Prevention**

Threat Prevention policies are available at the Enterprise, Endpoint Group, and Endpoint levels.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.
Advanced Threat Prevention
This technology is powered by Cylance and protects your operating system by detecting and preventing malware pre-execution. Advanced Threat Prevention uses artificial intelligence and predictive mathematical models to quickly and accurately identify what is safe and what is a threat.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Threat Prevention</td>
<td>Off</td>
<td>Toggle ON to enable Advanced Threat Prevention. If this policy is toggled to OFF, Advanced Threat Prevention is disabled, and policies are set to defaults for activated devices. This results in Execution Control blocking threats, but Auto Quarantine, Memory Protection, and Script Control will be disabled.</td>
</tr>
<tr>
<td>File Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsafe Executable Auto Quarantine With Executable Control Enabled</td>
<td>Selected</td>
<td>If selected, Unsafe executable files are automatically quarantined or blocked to prevent their execution. Note: If you Auto Quarantine, it is highly recommended that before deployment, you test Auto Quarantine only on devices using a test policy to observe the behavior and ensure that no business-critical applications are blocked at execution.</td>
</tr>
<tr>
<td>Unsafe Executable Auto Upload Enabled</td>
<td>Selected</td>
<td>If selected, any detected Unsafe file is automatically uploaded for a deeper analysis and additional details about the file.</td>
</tr>
<tr>
<td>Abnormal Executable Auto Quarantine With Executable Control Enabled</td>
<td>Selected</td>
<td>If selected, Abnormal executable files are automatically quarantined or blocked to prevent their execution. Note: If you Auto Quarantine, it is highly recommended that before deployment, you test Auto Quarantine only on devices using a test policy to observe the behavior and ensure that no business-critical applications are blocked at execution.</td>
</tr>
<tr>
<td>Abnormal Executable Auto Upload Enabled</td>
<td>Selected</td>
<td>If selected, any detected Abnormal file is automatically uploaded for a deeper analysis and additional details about the file.</td>
</tr>
<tr>
<td>Allow Execution of Files in Exclude Folders</td>
<td>Not Selected</td>
<td>If selected, executable files are allowed to run, even if they are in folders excluded in the Exclude Specific Folders policy.</td>
</tr>
<tr>
<td>Auto Delete</td>
<td>Not Selected</td>
<td>If selected, after the time period specified in the Days until Deleted policy, files that are quarantined on an endpoint are automatically deleted.</td>
</tr>
<tr>
<td>Days until Deleted</td>
<td>14</td>
<td>Number of days until files that are quarantined on an endpoint are automatically deleted.</td>
</tr>
<tr>
<td>Policy</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Memory Protection Enabled</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other Memory policies. If this policy is Not Selected, no Memory Action policies are enforced, regardless of other policy values.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE:</strong> Before enabling Memory Protection, enable Compatibility Mode, to ensure applications function properly on the client computer. For instructions on how to enable Compatibility Mode, see <a href="#">Enable Compatibility Mode for Memory Protection</a>. Compatibility Mode does not apply to Mac clients.</td>
</tr>
<tr>
<td>Enable Exclude executable files</td>
<td>Selected</td>
<td>Allow specific process files to be excluded from Memory Protection. This policy must be selected to use the Exclude executable files policy.</td>
</tr>
<tr>
<td>Excludes</td>
<td>String</td>
<td>Exclude specific process files from Memory Protection. This allows the specified files to run or be installed on any device on which this policy is enforced. All exclusions added must be specified using the relative path of that executable file (exclude the drive letter from the path).</td>
</tr>
</tbody>
</table>

Correct (Windows): \Application\SubFolder\application.exe
Correct (Mac): /Users/application.app/executable
Incorrect: \Application\SubFolder\application.exe
Incorrect: C:\Application\SubFolder\application.exe
Exploitation: Stack Pivot

Specify the action to take when a stack pivot threat is detected.

- **Ignore** - No action is taken against identified memory violations.
- **Alert** - Record the violation and report the incident to the Dell Server.
- **Block** - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.
- **Terminate** - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.

Stack Pivot - The stack for a thread has been replaced with a different stack. Generally the system will only allocate a single stack for a thread. An attacker would use a different stack to control execution in a way that is not blocked by Data Execution Prevention (DEP). The Stack Pivot exploitation affects Windows and macOS operating systems.
<table>
<thead>
<tr>
<th>Exploitation: Stack Protect</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation: Overwrite Code</td>
<td>Alert</td>
</tr>
<tr>
<td>Exploitation: Scanner Memory Search</td>
<td>Alert</td>
</tr>
</tbody>
</table>

**Ignore**

- No action is taken against identified memory violations.

**Alert**

- Record the violation and report the incident to the Dell Server.

**Block**

- Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.

**Terminate**

- Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.

**Stack Protect**

- The memory protection of a thread’s stack has been modified to enable execution permission. Stack memory should not be executable, so usually this means that an attacker is preparing to run malicious code stored in stack memory as part of an exploit, an attempt which would otherwise be blocked by Data Execution Prevention (DEP).

The Stack Protect exploitation affects Windows and macOS operating systems.

**Overwrite Code**

- Code residing in a process’s memory has been modified using a technique that may indicate an attempt to bypass Data Execution Prevention (DEP).

The Overwrite Code exploitation affects Windows operating systems. This policy does not apply to Mac clients.

**Scanner Memory Search, or RAM Scraping**

- A process is...
trying to read valid magnetic stripe track data from another process. Typically related to point-of-sale systems (POS).
The Scanner Memory Search exploitation affects Windows operating systems. This policy does not apply to Mac clients.

<table>
<thead>
<tr>
<th>Exploitation: Malicious Payload</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ignore</strong></td>
<td>Specify the action to take when a malicious payload is detected. Ignore - No action is taken against identified memory violations. Alert - Record the violation and report the incident to the Dell Server. Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run. Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call. Malicious Payload - A generic shellcode and payload detection associated with exploitation has been detected. The Malicious Payload exploitation affects Windows operating systems. This policy does not apply to Mac clients.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Injection: Remote Allocation of Memory</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ignore</strong></td>
<td>Specify the action to take when a remote memory allocation threat is detected. Ignore - No action is taken against identified memory violations. Alert - Record the violation and report the incident to the Dell Server. Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run. Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call. Remote Allocation of Memory - A process has allocated memory in another process. Most allocations will only occur within the same process. This generally indicates an attempt to inject code or data into another process, which may be a first step in reinforcing a malicious presence on a system. The Remote Allocation of Memory process injection affects Windows and macOS operating systems.</td>
</tr>
</tbody>
</table>

195
| Process Injection: Remote Mapping of Memory | Alert | Ignore  
| Block  
| Terminate  
| Specify the action to take when a remote attempt to map memory threat is detected. 
| Ignore - No action is taken against identified memory violations. 
| Alert - Record the violation and report the incident to the Dell Server. 
| Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run. 
| Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call. 
| Remote Mapping of Memory - A process has introduced code and/or data into another process. This may indicate an attempt to begin executing code in another process and thereby reinforce a malicious presence. 
| The Remote Mapping of Memory process injection affects Windows and macOS operating systems. |

| Process Injection: Remote Write to Memory | Alert | Ignore  
| Block  
| Terminate  
| Specify the action to take when a remote attempt to write to memory threat is detected. 
| Ignore - No action is taken against identified memory violations. 
| Alert - Record the violation and report the incident to the Dell Server. 
| Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run. 
| Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call. 
| Remote Write to Memory - A process has modified memory in another process. This is usually an attempt to store code or data in previously allocated memory but it is possible that an attacker is trying to overwrite existing memory to divert execution for a malicious purpose. 
| The Remote Write to Memory process injection affects Windows and macOS operating systems. |

| Process Injection: Remote Write PE to Memory | Alert | Ignore  
| Block  
| Terminate  
| Specify the action to take when a remote attempt to write a portable executable to memory threat is detected. 
| Ignore - No action is taken against identified memory violations. 
| Alert - Record the violation and report the incident to the Dell Server. 
| Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run. 
| Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call. 
<p>| Remote Write PE to Memory - A process has modified memory in another process to contain an executable image. |</p>
<table>
<thead>
<tr>
<th>Process Injection: Remote Overwrite Code</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Specify the action to take when a remote overwrite code threat is detected.</td>
<td></td>
</tr>
<tr>
<td>Ignore - No action is taken against identified memory violations.</td>
<td></td>
</tr>
<tr>
<td>Alert - Record the violation and report the incident to the Dell Server.</td>
<td></td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td></td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td></td>
</tr>
<tr>
<td>Remote Overwrite Code - A process has modified executable memory in another process. Under normal conditions executable memory is not modified, especially by another process. This usually indicates an attempt to divert execution in another process.</td>
<td></td>
</tr>
<tr>
<td>The Remote Overwrite Code process injection affects Windows operating systems. This policy does not apply to Mac clients.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Injection: Remote Unmap of Memory</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Specify the action to take when a remote memory unmapping threat is detected.</td>
<td></td>
</tr>
<tr>
<td>Ignore - No action is taken against identified memory violations.</td>
<td></td>
</tr>
<tr>
<td>Alert - Record the violation and report the incident to the Dell Server.</td>
<td></td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td></td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td></td>
</tr>
<tr>
<td>Remote Unmap of Memory - A process has removed a Windows executable from the memory of another process. This may indicate an intent to replace the executable image with a modified copy for the purpose of diverting execution.</td>
<td></td>
</tr>
<tr>
<td>The Remote Unmap of Memory process injection affects Windows operating systems. This policy does not apply to Mac clients.</td>
<td></td>
</tr>
</tbody>
</table>
Manage Policies

<table>
<thead>
<tr>
<th>Process Injection: Remote Thread Creation</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Block</td>
<td>Terminate</td>
</tr>
<tr>
<td>Specify the action to take when a remote thread creation threat is detected.</td>
<td></td>
</tr>
<tr>
<td>Ignore - No action is taken against identified memory violations.</td>
<td></td>
</tr>
<tr>
<td>Alert - Record the violation and report the incident to the Dell Server.</td>
<td></td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td></td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td></td>
</tr>
<tr>
<td>Remote Thread Creation - A process has created a new thread in another process. A process’s threads are usually only created by that same process. This is generally used by an attacker to activate a malicious presence that has been injected into another process.</td>
<td></td>
</tr>
<tr>
<td>The Remote Thread Creation process injection affects Windows and macOS operating systems.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Injection: Remote APC Scheduled</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Block</td>
<td>Terminate</td>
</tr>
<tr>
<td>Specify the action to take when a remote APC scheduled threat is detected.</td>
<td></td>
</tr>
<tr>
<td>Ignore - No action is taken against identified memory violations.</td>
<td></td>
</tr>
<tr>
<td>Alert - Record the violation and report the incident to the Dell Server.</td>
<td></td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td></td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td></td>
</tr>
<tr>
<td>Remote APC Scheduled - A process has diverted the execution of another process’s thread. This is generally used by an attacker to activate a malicious presence that has been injected into another process.</td>
<td></td>
</tr>
<tr>
<td>The Remote APC Scheduled process injection affects Windows operating systems. This policy does not apply to Mac clients.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Injection: Remote DYLD Injection (Mac OS X only)</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Block</td>
<td>Terminate</td>
</tr>
<tr>
<td>Specify the action to take when a remote DYLD injection threat is detected.</td>
<td></td>
</tr>
<tr>
<td>Ignore - No action is taken against identified memory violations.</td>
<td></td>
</tr>
<tr>
<td>Alert - Record the violation and report the incident to the Dell Server.</td>
<td></td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td></td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td></td>
</tr>
<tr>
<td>DYLD Injection - An environment variable has been set to</td>
<td></td>
</tr>
</tbody>
</table>

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cause a shared library to be injected into a launched process. Attacks can modify the plist of applications like Safari or replace applications with bash scripts, that cause their modules to be loaded automatically when an application starts. The DYLD Injection process injection affects macOS operating systems. This policy does not apply to Windows clients.

<table>
<thead>
<tr>
<th>Escalation: LSASS Read</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Block</td>
<td>Terminate</td>
</tr>
<tr>
<td>Specify the action to take when an LSASS read threat is detected.</td>
<td>Ignore - No action is taken against identified memory violations.</td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td>Block - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td>ALERT - Memory belonging to the Windows Local Security Authority process has been accessed in a manner that indicates an attempt to obtain users' passwords. The LSASS Read escalation affects Windows operating systems. This policy does not apply to Mac clients.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Escalation: Zero Allocate</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignore</td>
<td>Alert</td>
</tr>
<tr>
<td>Block</td>
<td>Terminate</td>
</tr>
<tr>
<td>Specify the action to take when a zero byte allocation threat is detected.</td>
<td>Ignore - No action is taken against identified memory violations.</td>
</tr>
<tr>
<td>Block - Block the process call if an application attempts to call a memory violation process. The application that made the call is allowed to continue to run.</td>
<td>Block - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
</tr>
<tr>
<td>Terminate - Block the process call if an application attempts to call a memory violation process and terminate the application that made the call.</td>
<td>Zero Allocate - A null page has been allocated. The memory region is typically reserved, but in certain circumstances it can be allocated. Attacks can use this to setup privilege escalation by taking advantage of some known null de-reference exploit, typically in the kernel. The Zero Allocate escalation affects Windows and macOS operating systems.</td>
</tr>
</tbody>
</table>

Execution Control
## Manage Policies

### Prevent Service Shutdown from Device

- **Not Selected**
  - If selected, the Advanced Threat Prevention service is protected from being shut down either manually or by another process.

### Kill Unsafe Running Processes and Sub-Processes

- **Not Selected**
  - If selected, processes and sub-processes are quarantined and terminated regardless of their state when a threat is detected (exe or dll). Although a process or sub-process is terminated, the command prompt window remains open. If a file has been determined to be Safe and allowed to run and then a threat model update occurs that results in the file being identified as unsafe, the process is automatically terminated. Dell recommends that you review threat model updates before selecting this policy. For more information, see Threat Model Updates.

### Background Threat Detection

- **Run Once**
  - If set to Run Recurring or Run Once, a full-disk scan is run to detect and analyze any dormant threats on the disk. An update to the Threat Model triggers a full-disk scan.

### Watch for New Files

- **Selected**
  - If selected, any new or modified files are detected and analyzed for dormant threats. Dell recommends enabling this policy. However, if Auto Quarantine is enabled for all Unsafe or Abnormal files, all malicious files are blocked at execution. Therefore, it is not necessary to enable this policy with Auto Quarantine mode unless you prefer to quarantine a file as it is added to a disk but before execution.

### Set Maximum Archive File Size to Scan

- **150 MB**
  - The default setting is 150 MB. Specify the maximum size of archive (compressed) files, including .jar files to be scanned. Because scanning compressed files can negatively affect computer performance, Dell recommends Quick-Scan - Scan Archives and Full-Scan - Scan Archives to run during off-work hours.

### Protection Settings

#### Enable Exclude Specific Folders (includes subfolders)

- **Selected**
  - Allow specific folders to be excluded from Auto Quarantine and Auto Upload. This policy must be selected to use the Exclude Specific Folders policy.

#### Exclude Specific Folders (includes subfolders)

- **String**
  - Folders specified in this policy are excluded from actions performed based on Background Threat Detection and Watch for New Files, when these policies are enabled. This exclusion extends to subfolders of folders that are specified in this policy. All exclusions must be specified using the Absolute path of that executable file. Windows requires an absolute path (requires a drive letter) MacOS requires an absolute path (macOS does not use a drive letter)

Correct (Windows): C:\Program Files\Dell
Correct (Mac): /Mac\ HD/Users/Application\ Support/Dell
Incorrect: C:\Program Files\Dell\Executable.exe

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Incorrect: `\Program Files\Dell\`  
Spaces only must be escaped on Mac-based exclusions.

### Application Control

<table>
<thead>
<tr>
<th>Policy</th>
<th>Selected</th>
<th>Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If selected, specified devices are locked down, restricting any changes. Only applications that exist on a device before the lock-down are allowed to execute on that device. Any new applications, as well as changes to the executables of existing applications, are denied. The Advanced Threat Prevention agent updater is also disabled. Additionally, certain File Action, Memory Action, and Execution Control policies are automatically set. These policies may be changed after they are automatically set, without disabling Application Control. See <a href="#">Policies Set by Application Control</a> for a list of policies that are automatically set when the Application Control policy is selected. To exclude specific folders from lockdown, specify the folders in the Application Control Allowed Folders policy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Application Control Allowed Folders</strong></td>
<td>String</td>
<td>String</td>
</tr>
<tr>
<td>Enable Change Window</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| If selected, Application Control is temporarily disabled to allow, edit, and run new applications or perform updates. This includes updating the Advanced Threat Prevention agent. After performing the necessary changes, deselect Enable Change Window.  
**Note:** Enable Change Window retains changes made to Application Control. Deselecting Application Control and resetting back to Selected resets Application Control to default values. 
This policy does not apply to Mac clients. |

### Script Control

<table>
<thead>
<tr>
<th>Policy</th>
<th>Selected</th>
<th>Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Script Control</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| If selected, Script Control protects devices by blocking malicious scripts from running. 
**Note:** Script Control is currently only available for PowerShell and Active Scripts. |
| **Script Control Mode**            | Alert    |              |
| Alert monitors scripts running in the environment. Recommended for initial deployment. 
Block allows scripts to run only from specific folders. This should be used only after testing in Alert mode. |
| **Active Script**                  | Alert    |              |
| Alert monitors Active Scripts running in the environment. Recommended for initial deployment. 
Block allows Active Scripts to run only from specific folders. This should be used only after testing in Alert mode. |
| **Macros**                         | Alert    |              |
### Manage Policies

<table>
<thead>
<tr>
<th>Policy Name</th>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Macros</td>
<td>Alert</td>
<td>Alert monitors Office macros running in the environment. Recommended for initial deployment. Block allows Office macros to run only from specific folders. This should be used only after testing in Alert mode. Note: Starting with Office 2013, macros are disabled by default. Most of the time, users should not be required to enable macros to view the content of an Office document. Dell recommends enabling macros only for documents from trusted users. Otherwise, macros should always be disabled.</td>
</tr>
<tr>
<td>PowerShell Alert Block</td>
<td>Alert</td>
<td>Alert (default) - Monitors PowerShell scripts running in the environment. Recommended for initial deployment. Block - Allow PowerShell scripts to run only from specific folders. This should be used only after testing in Alert mode. This policy does not apply to Mac clients.</td>
</tr>
<tr>
<td>PowerShell Console Block</td>
<td>Allow</td>
<td>Allow (default) - Allows the PowerShell v3 console to be launched. Block - Blocks the PowerShell v3 console from being launched. Provides additional security by protecting against the use of PowerShell one-liners. Note: If this policy is set to Block and you use a script that launches the PowerShell console, the script will fail. It is recommended that users change their scripts to invoke the PowerShell scripts, not the PowerShell console. This policy applies only to PowerShell v3 and does not apply to Mac clients.</td>
</tr>
<tr>
<td>Enable Approve Scripts in Folders (and Subfolders)</td>
<td>Not Selected</td>
<td>Allows scripts stored in specific folders to be automatically approved to run. This policy must be selected to use the Script Control Approve Scripts in Folders (and Subfolders policy).</td>
</tr>
<tr>
<td>Approve Scripts in Folders (and Subfolders)</td>
<td>String</td>
<td>Folders specified in this policy are excluded from actions performed based on the Script Control policy. This exclusion extends to subfolders of folders that are specified with this policy. A folder must be specified using its relative path. A path may not include the drive letter. Example: <code>\Cases\ScriptsAllowed</code> A specified path may represent any of the following: - local drive path - mapped network drive path - universal naming convention (UNC) path</td>
</tr>
<tr>
<td>Quarantine</td>
<td>String</td>
<td>The value of this policy includes a collection of hashes for portable executable that need to be automatically quarantined within the Endpoint Group or on the specific Endpoint. This policy will force quarantine files based on a SHA256 hash of the specific portable executable.</td>
</tr>
<tr>
<td>Setting</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Waive</td>
<td>String</td>
<td>The value of this policy includes a collection of hashes for portable executable that need to be allowed to run within the Endpoint Group or on the specific Endpoint. This policy will force allow files based on a SHA256 hash of the specific portable executable.</td>
</tr>
<tr>
<td>Global Allow</td>
<td>String</td>
<td>This policy defines a change to the local math model to prevent problematic portable executable to properly run on the machine. This is used in situations where normal exclusions may not properly apply to the files that are needing to be waived. The value of this policy will consist of an XML blob that can be provided by support if it is required. The value of this policy must include the entire contents of the policy.xml file. Copy and paste the contents of policy.xml into the policy editor as shown in this example.</td>
</tr>
<tr>
<td>Global Quarantine List</td>
<td>String</td>
<td>The value of this policy includes a collection of hashes for portable executable that need to be automatically quarantined within the enterprise. This policy will force quarantine files based on a SHA256 hash of the specific portable executable.</td>
</tr>
<tr>
<td>Global Safe List</td>
<td>String</td>
<td>The value of this policy includes a collection of hashes for portable executable that need to be allowed to run within the enterprise. This policy will force allow files based on a SHA256 hash of the specific portable executable.</td>
</tr>
<tr>
<td>Agent Settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppress Pop-up Notifications</td>
<td>Not Selected</td>
<td>If Selected, pop-up notifications for Advanced Threat Prevention events do not display on the client computer.</td>
</tr>
<tr>
<td>Minimum Pop-up Notification Level</td>
<td>High</td>
<td>Severity level of events that result in pop-up notifications that display on the client computer. A setting of High allows only notifications of critical events to display. A setting of Low displays all on-screen notifications for all events. Listed below are examples of events that fall into the severity levels: High 1) Protection status has changed. (Protected means that the Advanced Threat Prevention service is running and protecting the computer and needs no user or administrator interaction.) 2) A threat is detected and policy is not set to automatically address the threat. Medium 1) Execution Control blocked a process from starting because it was detected as a threat. 2) A threat is detected that has an associated mitigation (for example, the threat was manually quarantined), so the process has been terminated. 3) A process was blocked or terminated due to a memory violation. 4) A memory violation was detected and no automatic mitigation policy is in effect for that violation type. Low 1) A file that was identified as a threat has been added to the Global Safe List or deleted from the file system. 2) A threat has been detected and automatically</td>
</tr>
</tbody>
</table>
3) A file has been identified as a threat but waived on the computer.
4) The status of a current threat has changed (for example, Threat to Quarantined, Quarantined to Waived, or Waived to Quarantined).

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable BIOS Assurance</td>
<td>Selected</td>
<td>If selected, BIOS integrity checks are performed on endpoints computers to validate that the BIOS has not been modified from the Dell factory version. A custom factory image cannot be used with this feature, as the BIOS has been modified. This feature is available only on Dell platforms. Platforms available with this feature include the newest release of select XPS, Latitude, Optiplex, Precision Workstations, and Venues. Speak to your Sales Associates for details or contact Dell ProSupport. This policy does not apply to Mac clients.</td>
</tr>
<tr>
<td>Enable Auto-upload of Log Files</td>
<td>Not Selected</td>
<td>If selected, log files are automatically uploaded at 12:00 am or when their size reaches 100 MB. If this policy is Not Selected, logs can still be manually uploaded.</td>
</tr>
<tr>
<td>Enable Standard UI</td>
<td>Not Selected</td>
<td>If Selected, the User Interface that will show individual details for threat events that have occurred on the local client is enabled.</td>
</tr>
</tbody>
</table>

See basic settings

Threat Protection
This technology protects computers by identifying and taking action against threats of malware and malicious activity involving files, folders, the registry, and processes.
### Threat Protection

<table>
<thead>
<tr>
<th>Action on Malicious Activity for Files and Folders</th>
<th>Toggle to ON to enable Threat Protection. If toggled to OFF, no Threat Protection policies are applied. Threat Protection includes Malware Protection, Web Protection, and Client Firewall.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block and Report</td>
<td>Prevents users from modifying or deleting Threat Protection system files and folders and sets the action to take upon attempt. Block Only: Blocks activity but does not report to the Dell Server. Report Only: Reports activity to the Dell Server but does not block activity. Block and Report (default): Blocks and reports activity to the Dell Server.</td>
</tr>
</tbody>
</table>

### Action on Malicious Activity for Registry

| Block and Report | Prevents users from modifying or deleting Threat Protection registry keys and values and sets the action to take upon attempt. Block Only: Blocks activity but does not report to the Dell Server. Report Only: Reports activity to the Dell Server but does not block activity. Block and Report (default): Blocks and reports activity to the Dell Server. |

### Action on Malicious Activity for Processes


### Exclude Processes

| String | Excludes specific process files from Threat Protection scans. Enter the exact resource name of a process to exclude. |

### Client Update

| Selected | This policy is the “master policy” for all other Client Scheduling policies. If this policy is Not Selected, no Client Scheduling takes place, regardless of other policy values. A Selected value enables the Client Scheduling options. |
# Manage Policies

The schedule configuration defines when the task should run. Schedule types are Daily, Weekly, and Monthly.

**Daily**
- Runs the task every day at the specified Schedule Start Time.

**Weekly**
- Runs the task weekly on the days specified in Day of the Week.

**Monthly**
- Runs the task monthly on the specified Day of the Month.

<table>
<thead>
<tr>
<th>Schedule Repeats</th>
<th>Daily</th>
<th>Schedule Start Time</th>
<th>String - format is [HH:mm tt]. Example: 11:59 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of the Week</td>
<td>Wednesday</td>
<td>String</td>
<td>The day of the week the task should run.</td>
</tr>
<tr>
<td>Day of the Month</td>
<td>1</td>
<td>String</td>
<td>The day of the month the task should run.</td>
</tr>
</tbody>
</table>

**Debug Logging for Malware and Exploit Protection**
- Not Selected
  - A Selected value enables debug logging of Malware and Exploit Protection activity.

**Exploit Protection**
- Off
  - Toggle to ON to enable Exploit Protection. If toggled to OFF, no Exploit Protection policies are applied.
  - Exploit Protection protects the critical operating system resources from changes made by malware or other unauthorized processes.

**On-Access Protection**
- Off
  - Toggle to ON to enable On-Access Protection. If toggled to OFF, no On-Access Protection policies are applied.
  - On-Access Protection protects the critical operating system resources from changes made by malware or other unauthorized processes at the time a resource is accessed.

**Max Seconds for Scan**
- 45
  - Specifies the maximum number of seconds for each file scan. Limits each file scan to the specified number of seconds. If a scan exceeds the time limit, the scan stops and logs a message.

**On-Access Scan**
- Selected
  - Examines the disk boot sector. Consider disabling this policy if a disk contains a unique or abnormal boot sector that cannot be scanned.

---

The time the task should run.

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of the Month</td>
<td>1</td>
</tr>
</tbody>
</table>

Example: 17.
### Security Management Server Virtual v10.2.11 AdminHelp

**Scan Processes on Enable**

- **Not Selected**

  Rescans all processes that are currently in memory each time:
  - On-Access Scan is disabled and re-enabled.
  - The computer starts.

  When the on-access scanner is enabled, it always scans all processes when they are executed.

  Because some programs or executables start automatically when the computer starts, enabling this option can slow the computer and increase computer startup time.

**Scan Trusted Installers**

- **Not Selected**

  Scans MSI files or Windows Trusted Installer service files. Disable this option to improve the performance of large Microsoft application installers.

**Scan When Copying Between Local Folders**

- **Not Selected**

  Scans files whenever the user copies from one local folder to another. If disabled, only items in the destination folder are scanned. If enabled, items in both source and destination folders are scanned.

**Reputation Service Sensitivity**

- **Medium**

  When enabled, samples are submitted to the lab to determine if they are malware. Sensitivity level configures the sensitivity level to use when determining if a detected sample is malware.

  The higher the sensitivity level, the higher the number of malware detections. However, allowing more detections might result in more false positive results.

  **Risk levels:**
  - **Very low** - The detections and risk of false positives are the same as with regular content files. A detection is made available to Threat Protection when the lab publishes it instead of waiting for the next file update. Use this setting for desktops and servers with restricted user rights and a strong security footprint. This setting results in an average of 10-15 queries per day, per computer.
  - **Low** - This setting is the minimum recommendation for laptops or desktops and servers with a strong security footprint. This setting results in an average of 10-15 queries per day, per computer.
  - **Medium** - Use this level when the regular risk of exposure to malware is greater than the risk of a false positive. The proprietary, heuristic checks result in detections that are likely to be malware. However, some detections might result in a false positive. With this setting, the lab checks that popular applications and operating system files do not result in a false positive. This setting is the minimum recommendation for laptops or desktops and servers. This setting results in an average of 20-25 queries per day, per computer.
  - **High** - Use this setting for deployment to systems or areas which are regularly infected. This setting results in an average of 20-25 queries per day, per computer.
  - **Very high** - Dell recommends using this level only for scanning volumes and directories that do not support
executing programs or operating systems. Detections found with this level are presumed malicious, but have not been fully tested to determine if they are false positives. Use this setting for on-demand scans on non-operating system volumes. This setting results in an average of 20–25 queries per day, per computer.

<table>
<thead>
<tr>
<th>Policy</th>
<th>On-Demand Protection - Full Scan</th>
<th>Boot Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected</td>
<td>Selected</td>
<td>Selected</td>
</tr>
<tr>
<td>Not Selected</td>
<td></td>
<td>Not Selected</td>
</tr>
</tbody>
</table>

This policy is the "master policy" for all other On-Demand Protection: Full Scan policies. If this policy is Not Selected, no On-Demand Protection: Full Scan policies are enforced, regardless of other policy values.

A Selected value means that On-Demand Protection: Full Scan is enabled.

This policy must be set to Selected to enable On-Demand Protection: Full Scan settings. If this policy is Not Selected, no On-Demand Protection: Full Scan policies are applied.

By default, every time Full Scan runs, it scans the following locations for threats:
- the computer memory for installed rootkits, hidden processes, and other behavior that suggests malware is attempting to hide itself. This scan occurs before all other scans.
- the memory of all running processes.
- all drives and their subfolders on the computer.

By default, the scanner scans all file types, regardless of extension.

Examines the disk boot sector. Consider disabling this policy if a disk contains a unique or abnormal boot sector that cannot be scanned.
| Unwanted Programs      | Selected   | **Selected**
|                       |            | Enables the scanner to detect potentially unwanted programs. The scanner uses configured information to detect potentially unwanted programs.
| Decode MIME Files     | Not Selected | **Selected**
|                       |            | Detects, decodes, and scans Multipurpose Internet Mail Extensions (MIME) encoded files.
| Scan Archives         | Selected   | **Selected**
|                       |            | Examines the contents of archive (compressed) files, including .jar files. Because scanning compressed files can negatively affect computer performance, Dell recommends using this option in scans during off-work hours.
| Files Migrated to Storage | Not Selected | **Selected**
|                       |            | Scans files that remote storage manages. When the scanner encounters a file with migrated content, it restores the file to the local computer before scanning.
| Program Threats       | Selected   | **Selected**
|                       |            | Detects executable files that have code that resembles malware.
| Macro Threats         | Selected   | **Selected**
|                       |            | Detects unknown macro viruses.
| Scan Subfolders       | Selected   | **Selected**
|                       |            | Examines all subfolders of the specified folder.
When enabled, samples are submitted to the lab to determine if they are malware. Sensitivity level configures the sensitivity level to use when determining if a detected sample is malware. The higher the sensitivity level, the higher the number of malware detections. However, allowing more detections might result in more false positive results.

**Risk levels:**

- **Very low** - The detections and risk of false positives are the same as with regular content files. A detection is made available to Threat Protection when the lab publishes it instead of waiting for the next content file update. Use this setting for desktops and servers with restricted user rights and a strong security footprint. This setting results in an average of 10–15 queries per day, per computer.

- **Low** - This setting is the minimum recommendation for laptops or desktops and servers with a strong security footprint. This setting results in an average of 10–15 queries per day, per computer.

- **Medium** - Use this level when the regular risk of exposure to malware is greater than the risk of a false positive. The proprietary, heuristic checks result in detections that are likely to be malware. However, some detections might result in a false positive. With this setting, the lab checks that popular applications and operating system files do not result in a false positive. This setting is the minimum recommendation for laptops or desktops and servers. This setting results in an average of 20–25 queries per day, per computer.

- **High** - Use this setting for deployment to systems or areas which are regularly infected. This setting results in an average of 20–25 queries per day, per computer.

- **Very high** - Dell recommends using this level only for scanning volumes and directories that do not support executing programs or operating systems. Detections found with this level are presumed malicious, but have not been fully tested to determine if they are false positives. Use this setting for on-demand scans on non-operating system volumes. This setting results in an average of 20–25 queries per day, per computer.
### Exclusions

**String**

Specify files, folders, and drives to exclude from scanning.

Comma-separated list of parameters:

- `<ExclusionType>,<ExclusionData>,<ExcludeSubfolders`  
  (only applies to FileOrFolder type)`

Possible values:

- `<FileOrFolder|FileType|ModifiedAge|AccessedAge|CreatedAge>,<PathToFileOrFolder|FileType|Age>,<true|false>`

Examples:

- `FileOrFolder,C:\Users,false`
- `FileType,xml,false`
- `FileType,mp?,false`
- `ModifiedAge,120,true`
- `AccessedAge,150,false`
- `CreatedAge,300,true`

### Threat First Response

**Clean file**

Specifies the first action for the scanner to take when a threat is detected.

Clean files - Removes the threat from the detected file, if possible.
Delete files - Deletes files with potential threats.
Continue scanning - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.

### Threat First Response Fails

**Delete file**

Specifies the action for the scanner to take when a threat is detected if the first action fails.

Clean files - Removes the threat from the detected file, if possible.
Delete files - Deletes files with potential threats.
Continue scanning - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.

### Exploit First Response

**Clean file**

Specifies the first action for the scanner to take when a potentially unwanted program is detected.

Clean files - Removes the threat from the detected file, if possible.
Delete files - Deletes files with potential threats.
Continue scanning - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.
### Manage Policies

| Exploit First Response Fails | Delete file | **Clean file**  
|-----------------------------|-------------|-----------------  
|                             |             | **Delete file**  
|                             |             | **Continue scanning**  
| Specifies the action for the scanner to take when an unwanted program is detected if the first action fails. Clean files - Removes the threat from the detected file, if possible. Delete files - Deletes files with potential threats. Continue scanning - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine. |

| Use Scan Cache | Selected | **Selected**  
|----------------|----------|-----------------  
|                |          | **Not Selected**  
| A Selected value enables the scanner to use the existing clean scan results. A Selected value reduces duplicate scanning and improves performance. |

| System Utilization | Below Normal | **Low Priority**  
|--------------------|--------------|------------------  
|                    |              | **Below Normal**  
|                    |              | **Normal**  
| Enables the operating system to specify the amount of CPU time that the scanner receives during the scan. Each task runs independently, unaware of the limits for other tasks. Low Priority - Provides improved performance for other running applications. Select this option for computers with end user activity. Below Normal - Sets the computer utilization for the scan to the default. Normal - Enables the scan to complete faster. Select this option for computers that have large volumes and low user activity. |

| Scan on Battery Power | Not Selected | **Selected**  
|-----------------------|--------------|-----------------  
|                       |              | **Not Selected**  
| A Selected value allows the scan when the computer is using battery power. Not Selected postpones the scan until the computer is no longer using battery power. |

| Schedule Repeats | Daily | **Daily**  
|------------------|-------|-----------------  
|                  |       | **Weekly**  
|                  |       | **Monthly**  
| The schedule configuration defines when the task should run. Schedule types are Daily, Weekly, and Monthly. Daily: Runs the task every day at the specified Full-Scan Schedule Start Time. Weekly: Runs the task weekly on the days specified in Full-Scan Schedule Day of the Week. Monthly: Runs the task monthly on the specified Full-Scan Schedule Day of the Month. |

| Schedule Start Time | String | **String**  
|--------------------|--------|-----------------  
|                    |        | The time the task should run. |

| Day of the Week | Wednesday | **Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday**  
|----------------|-----------|-----------------  
| The day of the week the task should run. |

| Day of the Month | 1 | **1-31**  
|-----------------|---|-----------------  
| The day of the month the task should run. Example: 17. |

<p>| Quick Scan | 212 |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Demand Protection - Quick Scan</td>
<td><strong>Selected</strong></td>
<td>This policy is the &quot;master policy&quot; for all other On-Demand Protection: Quick Scan policies. If this policy is Not Selected, no On-Demand Protection: Quick Scan policies are enforced, regardless of other policy values. A Selected value means that On-Demand Protection: Quick Scan is enabled. This policy must be set to Selected to enable On-Demand Protection: Quick Scan settings. If this policy is Not Selected, no On-Demand Protection: Quick Scan policies are applied. By default, every time Quick Scan runs, it scans the following locations for threats: - the memory of all running processes - the files that the Windows Registry references - the contents of the Windows folder - the contents of the Temp folder By default, the scanner scans all file types, regardless of extension.</td>
</tr>
<tr>
<td>Boot Sectors</td>
<td><strong>Selected</strong></td>
<td>Examines the disk boot sector. Consider disabling this policy if a disk contains a unique or abnormal boot sector that cannot be scanned.</td>
</tr>
<tr>
<td>Unwanted Programs</td>
<td><strong>Selected</strong></td>
<td>Enables the scanner to detect potentially unwanted programs. The scanner uses configured information to detect potentially unwanted programs.</td>
</tr>
<tr>
<td>Decode MIME Files</td>
<td><strong>Not Selected</strong></td>
<td>Detects, decodes, and scans Multipurpose Internet Mail Extensions (MIME) encoded files.</td>
</tr>
<tr>
<td>Scan Archives</td>
<td><strong>Selected</strong></td>
<td>Examines the contents of archive (compressed) files, including .jar files. Because scanning compressed files can negatively affect computer performance, Dell recommends using this option in scans during off-work hours.</td>
</tr>
<tr>
<td>Files Migrated to Storage</td>
<td><strong>Not Selected</strong></td>
<td>Scans files that remote storage manages. When the scanner encounters a file with migrated content, it restores the file to the local computer before scanning.</td>
</tr>
<tr>
<td>Program Threats</td>
<td><strong>Selected</strong></td>
<td>Detects executable files that have code that resembles malware.</td>
</tr>
<tr>
<td>Macro Threats</td>
<td><strong>Selected</strong></td>
<td>Detects unknown macro viruses.</td>
</tr>
<tr>
<td>Scan Subfolders</td>
<td><strong>Selected</strong></td>
<td>Examines all subfolders of the specified folder.</td>
</tr>
<tr>
<td>Reputation</td>
<td>Service</td>
<td>Sensitivity</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>

When enabled, samples are submitted to the lab to determine if they are malware. Sensitivity level configures the sensitivity level to use when determining if a detected sample is malware. The higher the sensitivity level, the higher the number of malware detections. However, allowing more detections might result in more false positive results.

Risk levels:

- **Very low** - The detections and risk of false positives are the same as with regular content files. A detection is made available to Threat Protection when the lab publishes it instead of waiting for the next content file update. Use this setting for desktops and servers with restricted user rights and a strong security footprint. This setting results in an average of 10–15 queries per day, per computer.

- **Low** - This setting is the minimum recommendation for laptops or desktops and servers with a strong security footprint. This setting results in an average of 10–15 queries per day, per computer.

- **Medium** - Use this level when the regular risk of exposure to malware is greater than the risk of a false positive. The proprietary, heuristic checks result in detections that are likely to be malware. However, some detections might result in a false positive. With this setting, the lab checks that popular applications and operating system files do not result in a false positive. This setting is the minimum recommendation for laptops or desktops and servers. This setting results in an average of 20–25 queries per day, per computer.

- **High** - Use this setting for deployment to systems or areas which are regularly infected. This setting results in an average of 20–25 queries per day, per computer.

- **Very high** - Dell recommends using this level only for scanning volumes and directories that do not support executing programs or operating systems. Detections found with this level are presumed malicious, but have not been fully tested to determine if they are false positives. Use this setting for on-demand scans on non-operating system volumes. This setting results in an average of 20–25 queries per day, per computer.
### Exclusions

**Type:** String

Specify files, folders, and drives to exclude from scanning.

Comma-separated list of parameters:

- `<ExclusionType>,<ExclusionData>,<ExcludeSubfolders` (only applies to FileOrFolder type)

Possible values: `<FileOrFolder|FileType|ModifiedAge|AccessedAge|CreatedAge>,<PathToFileOrFolder|FileType|Age>,<true|false`

Examples:
- `FileOrFolder,C:\Users,false`
- `FileType,xml,false`
- `FileType,mp?,false`
- `ModifiedAge,120,true`
- `AccessedAge,150,false`
- `CreatedAge,300,true`

### Threat First Response

**First Action:** Clean file

Specifies the first action for the scanner to take when a threat is detected.

- **Clean files** - Removes the threat from the detected file, if possible.
- **Delete files** - Deletes files with potential threats.
- **Continue scanning** - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.

### Threat First Response Fails

**First Action:** Delete file

Specifies the action for the scanner to take when a threat is detected if the first action fails.

- **Clean files** - Removes the threat from the detected file, if possible.
- **Delete files** - Deletes files with potential threats.
- **Continue scanning** - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.

### Exploit First Response

**First Action:** Clean file

Specifies the first action for the scanner to take when a potential exploit is detected.

- **Clean files** - Removes the threat from the detected file, if possible.
- **Delete files** - Deletes files with potential threats.
- **Continue scanning** - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploit First Response Fails</strong></td>
<td>Delete file</td>
<td>Specifies the action for the scanner to take when an exploit is detected if the first action fails. <strong>Clean file</strong> - Removes the threat from the detected file, if possible. <strong>Delete files</strong> - Deletes files with potential threats. <strong>Continue scanning</strong> - Continues scanning files when a threat is detected. The scanner does not move items to the quarantine.</td>
</tr>
<tr>
<td><strong>Use Scan Cache</strong></td>
<td>Selected</td>
<td>A Selected value enables the scanner to use the existing clean scan results. A Selected value reduces duplicate scanning and improves performance.</td>
</tr>
<tr>
<td><strong>System Utilization</strong></td>
<td>Below Normal</td>
<td>Enables the operating system to specify the amount of CPU time that the scanner receives during the scan. Each task runs independently, unaware of the limits for other tasks. <strong>Low Priority</strong> - Provides improved performance for other running applications. Select this option for computers with user activity. <strong>Below Normal</strong> - Sets the computer utilization for the scan to the default. <strong>Normal</strong> - Enables the scan to complete faster. Select this option for computers that have large volumes and low user activity.</td>
</tr>
<tr>
<td><strong>Scan on Battery Power</strong></td>
<td>Not Selected</td>
<td>A Selected value allows the scan when the computer is using battery power. Not Selected postpones the scan until the computer is no longer using battery power.</td>
</tr>
<tr>
<td><strong>Schedule Repeats</strong></td>
<td>Daily</td>
<td>The schedule configuration defines when the task should run. Schedule types are Daily, Weekly, and Monthly. <strong>Daily</strong>: Runs the task every day at the specified Quick-Scan Schedule Start Time. <strong>Weekly</strong>: Runs the task weekly on the days specified in Quick-Scan Schedule Day of the Week. <strong>Monthly</strong>: Runs the task monthly on the specified Quick-Scan Schedule Day of the Month.</td>
</tr>
<tr>
<td><strong>Schedule Start Time</strong></td>
<td>String</td>
<td>The time the task should run. Format is [HH:mm tt]. Example: 11:59 PM</td>
</tr>
<tr>
<td><strong>Day of the Week</strong></td>
<td>Wednesday</td>
<td>The day of the week the task should run.</td>
</tr>
<tr>
<td><strong>Day of the Month</strong></td>
<td>1</td>
<td>The day of the month the task should run. Example: 17.</td>
</tr>
<tr>
<td><strong>Access Protection</strong></td>
<td>Selected</td>
<td>Access Protection prevents other computers from making a connection and creating or altering autorun (autorun.inf) files from CDs. The rule prevents spyware and adware</td>
</tr>
<tr>
<td>Policy</td>
<td>Default Setting</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Web Protection</td>
<td>Off</td>
<td>On</td>
</tr>
<tr>
<td>Enforcement - Action to Apply to Sites Not Verified</td>
<td>Allow</td>
<td>Block, Allow, Warn</td>
</tr>
<tr>
<td>Enforcement - Enable File Scanning for File Downloads</td>
<td>Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>

Script Scan Protection
This policy enables scanning JavaScript and VBScript scripts to prevent unwanted scripts from executing.

Note: If Script Scan Protection is disabled when Internet Explorer is launched, and then is enabled, it doesn't detect malicious scripts in that instance of Internet Explorer.

Source Sites for Updates
To modify the source sites your clients access for Malware Protection signature updates, click the **Source Sites for Updates** link. To modify the priority level or availability of an external source site, click either NAIHttp or NAIftp, edit the necessary fields, and click **OK**.

To designate an internal signature update server, see **Designate a Threat Protection Signature Update Server**. Designating a signature update server within your network allows client computers to obtain signature updates without accessing the Internet.

See basic settings

---

### Web Protection
This technology protects computers by leveraging a web-based content ranking system to determine if a site that a user is browsing is considered safe or not. This technology also grants the administrator the ability to define what happens when an unsafe site is navigated to (allow, block, warn).

<table>
<thead>
<tr>
<th>Web Protection</th>
<th>Off</th>
<th>On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcement - Action to Apply to Sites Not Verified</td>
<td>Allow</td>
<td>Block, Allow, Warn</td>
</tr>
<tr>
<td>Enforcement - Enable File Scanning for File Downloads</td>
<td>Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>

**Enforcement - Action to Apply to Sites Not Verified**
Specifies the default action to apply to sites that have not been verified.
Block: Prevents users from accessing the site and displays a message that the site is blocked.
Allow: Permits users to access the site.
Warn: Displays a warning to notify users of potential dangers associated with the site. Users must dismiss the warning before continuing.

**Enforcement - Enable File Scanning for File Downloads**
A Selected value scans all files (including .zip files) before downloading. This option prevents users from accessing a downloaded file until Threat Protection marks the file as clean.
Downloaded files are sent to Threat Protection for scanning. Threat Protection performs a Reputation Service lookup on the file. If a downloaded file is detected as a threat, Threat Protection takes action on the file and alerts the user.

**NOTE:** This policy does not apply when Web Protection is installed as an optional feature with Advanced Threat
<table>
<thead>
<tr>
<th>Feature</th>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable HTML iFrames Support</td>
<td>Selected</td>
<td>A Selected value blocks access to malicious (Red) and warn (Yellow) sites that display in an HTML iframe.</td>
</tr>
<tr>
<td>Block Sites by Default if Reputation Service Server is not Reachable</td>
<td>Not Selected</td>
<td>A Selected value blocks access to websites if Web Control cannot reach the Reputation Service server.</td>
</tr>
<tr>
<td>Block Phishing Pages for All Sites</td>
<td>Selected</td>
<td>A Selected value blocks all phishing pages, overriding content rating actions.</td>
</tr>
<tr>
<td>Specify Reputation Service Risk Level to Block</td>
<td>Very High</td>
<td>Specifies the Reputation Service risk level to block when the Threat Protection on-demand scan feature is not installed and enabled. Web Protection uses the risk level to calculate the score when retrieving the checksum reputation from the Reputation Service.</td>
</tr>
<tr>
<td>IP Exclusions for Web Protection</td>
<td>String</td>
<td>String - IP or IP Range Configures Web Protection not to rate or act on the specified private IP address range. The format is the IP address or IP address range.</td>
</tr>
<tr>
<td>Enable Secure Search</td>
<td>Not Selected</td>
<td>A Selected value enables Secure Search, automatically blocking malicious sites in search results based on safety rating.</td>
</tr>
<tr>
<td>Set Default Search Engine</td>
<td>Google</td>
<td>Specifies the default search engine to use for supported browsers: Google, Yahoo, Bing, Ask.</td>
</tr>
<tr>
<td>Block Links to Risky Sites in Search Results</td>
<td>Not Selected</td>
<td>A Selected value prevents users from clicking links to risky sites in search results.</td>
</tr>
<tr>
<td>Rating Action for Red Sites</td>
<td>Block</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Specifies the action to apply to sites that are rated Red. Block: Prevents users from accessing the site and displays a message that the site is blocked. Block is the default for Red sites. Allow: Permits users to access the site. Warn: Displays a warning to notify users of potential dangers associated with the site. Users must dismiss the warning before canceling or proceeding to the site. Green-rated sites and downloads are automatically allowed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating Action for Yellow Sites</th>
<th>Warn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the action to apply to sites that are rated Yellow. Block: Prevents users from accessing the site and displays a message that the site is blocked. Allow: Permits users to access the site. Warn: Displays a warning to notify users of potential dangers associated with the site. Users must dismiss the warning before canceling or proceeding to the site. Warn is the default for Yellow sites. Green-rated sites and downloads are automatically allowed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating Action for Unrated Sites</th>
<th>Allow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the action to apply to sites that are Unrated. Block: Prevents users from accessing the site and displays a message that the site is blocked. Allow: Permits users to access the site. Allow is the default for Unrated sites. Warn: Displays a warning to notify users of potential dangers associated with the site. Users must dismiss the warning before canceling or proceeding to the site. Green-rated sites and downloads are automatically allowed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating Action for Red Downloads</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the action to apply to file downloads that are rated Red. Block: Prevents users from downloading the file and displays a message that the download is blocked. Block is the default for Red downloads. Allow: Permits users to proceed with the download. Warn: Displays a warning to notify users of potential dangers associated with the download file. Users must dismiss the warning before ending or proceeding with the download.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating Action for Yellow Downloads</th>
<th>Warn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the action to apply to file downloads that are rated Yellow. Block: Prevents users from downloading the file and displays a message that the download is blocked. Allow: Permits users to proceed with the download. Warn: Displays a warning to notify users of potential dangers associated with the download file. Users must dismiss the warning before ending or proceeding with the download. Warn is the default for Yellow sites.</td>
<td></td>
</tr>
</tbody>
</table>
### Rating Action for Unrated Downloads

<table>
<thead>
<tr>
<th>Allow</th>
<th>Block</th>
<th>Allow</th>
<th>Warn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the action to apply to file downloads that are Unrated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block: Prevents users from downloading the file and displays a message that the download is blocked.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allow: Permits users to proceed with the download. Allow is the default for Unrated downloads.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warn: Displays a warning to notify users of potential dangers associated with the download file. Users must dismiss the warning before ending or proceeding with the download.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Web Event Logging

<table>
<thead>
<tr>
<th>Log Web Control iFrame Events</th>
<th>Not Selected</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>When this policy is selected, blocked Red (malicious) and Yellow (warn) sites that display in an HTML iFrame are logged.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Web Categories Green Rated Sites</th>
<th>Not Selected</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>When this policy is selected, content categories are logged for all green-rated sites. Selecting this policy may affect Server performance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enable Web Category Blocking</th>
<th>Not Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>When this policy is selected, web sites can be blocked based on category.</td>
<td></td>
</tr>
<tr>
<td><strong>Web Categories that can be blocked</strong></td>
<td></td>
</tr>
<tr>
<td>When this policy is selected, the following categories can be blocked. Select the check box next to a category to block that category. Categories indicated with * are selected and blocked by default when this policy is selected.</td>
<td></td>
</tr>
<tr>
<td>Art/Culture/Heritage</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
<td>Anonymizers</td>
<td></td>
</tr>
<tr>
<td>Anonymizing Utilities</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
</tr>
<tr>
<td>Chat</td>
<td></td>
</tr>
<tr>
<td>Public Information</td>
<td></td>
</tr>
<tr>
<td>Potential Criminal Activities</td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
</tr>
<tr>
<td>Education/Reference</td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td></td>
</tr>
<tr>
<td>Extreme</td>
<td></td>
</tr>
<tr>
<td>Finance/Banking</td>
<td></td>
</tr>
<tr>
<td>Gambling</td>
<td></td>
</tr>
<tr>
<td>Games</td>
<td></td>
</tr>
<tr>
<td>Government/Military</td>
<td></td>
</tr>
<tr>
<td>Potential Hacking/Computer Crime*</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Humor/Comics</td>
<td></td>
</tr>
<tr>
<td>Discrimination</td>
<td></td>
</tr>
<tr>
<td>Instant Messaging</td>
<td></td>
</tr>
<tr>
<td>Stock Trading</td>
<td></td>
</tr>
<tr>
<td>Internet Radio/TV</td>
<td></td>
</tr>
<tr>
<td>Job Search</td>
<td></td>
</tr>
<tr>
<td>Information Security</td>
<td></td>
</tr>
<tr>
<td>Dating/Social Networking</td>
<td></td>
</tr>
<tr>
<td>Mobile Phone</td>
<td></td>
</tr>
<tr>
<td>Media Downloads</td>
<td></td>
</tr>
<tr>
<td>Malicious Sites*</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>Usenet News</td>
<td></td>
</tr>
<tr>
<td>Nudity</td>
<td></td>
</tr>
<tr>
<td>Non-Profit/Advocacy/NGO</td>
<td></td>
</tr>
<tr>
<td>General News</td>
<td></td>
</tr>
<tr>
<td>Online Shopping</td>
<td></td>
</tr>
<tr>
<td>Provocative Attire</td>
<td></td>
</tr>
<tr>
<td>P2P/File Sharing</td>
<td></td>
</tr>
<tr>
<td>Politics/Opinion</td>
<td></td>
</tr>
<tr>
<td>Personal Pages</td>
<td></td>
</tr>
<tr>
<td>Portal Sites</td>
<td></td>
</tr>
<tr>
<td>Remote Access</td>
<td></td>
</tr>
<tr>
<td>Religion/Ideology</td>
<td></td>
</tr>
<tr>
<td>Resource Sharing</td>
<td></td>
</tr>
<tr>
<td>Search Engines</td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
</tr>
<tr>
<td>Streaming Media</td>
<td></td>
</tr>
<tr>
<td>Shareware/Freeware</td>
<td></td>
</tr>
<tr>
<td>Pornography*</td>
<td></td>
</tr>
<tr>
<td>Spyware/Adware/Keyloggers*</td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td></td>
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<tr>
<td>Violence</td>
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<tr>
<td>Web Ads</td>
<td></td>
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<tr>
<td>Weapons</td>
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<tr>
<td>Web Mail</td>
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<tr>
<td>Web Phone</td>
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<tr>
<td>Auctions/Classifieds</td>
<td></td>
</tr>
<tr>
<td>Forum/Bulletin Boards</td>
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<tr>
<td>Profanity</td>
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<tr>
<td>School Cheating Information</td>
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<tr>
<td>Sexual Materials</td>
<td></td>
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<tr>
<td>Gruesome Content</td>
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<tr>
<td>Visual Search Engine</td>
<td></td>
</tr>
<tr>
<td>Technical/Business Forums</td>
<td></td>
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<tr>
<td>Gambling Related</td>
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<tr>
<td>Messaging</td>
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<tr>
<td>Game/Cartoon Violence</td>
<td></td>
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<tr>
<td>Phishing*</td>
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<tr>
<td>Personal Network Storage</td>
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<tr>
<td>Spam URLs</td>
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<tr>
<td>Interactive Web</td>
<td></td>
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<tr>
<td>Fashion/Beauty</td>
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<tr>
<td>Software/Hardware</td>
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<tr>
<td>Potential Illegal Software</td>
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<tr>
<td>Content Server</td>
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<tr>
<td>Internet Services</td>
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<tr>
<td>Media Sharing</td>
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<tr>
<td>Incidental Nudity</td>
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<tr>
<td>Marketing/Merchandising</td>
<td></td>
</tr>
<tr>
<td>Parked Domain</td>
<td></td>
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<tr>
<td>Pharmacy</td>
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<tr>
<td>Restaurants</td>
<td></td>
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<tr>
<td>Real Estate</td>
<td></td>
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<tr>
<td>Recreation/Hobbies</td>
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<tr>
<td>Blogs/wiki</td>
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<tr>
<td>Digital Postcards</td>
<td></td>
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<tr>
<td>Historical Revisionism</td>
<td></td>
</tr>
<tr>
<td>Technical Information</td>
<td></td>
</tr>
<tr>
<td>Dating/Personals</td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td></td>
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<tr>
<td>Professional Networking</td>
<td></td>
</tr>
<tr>
<td>Social Networking</td>
<td></td>
</tr>
</tbody>
</table>
Client Firewall
This technology protects computers by allowing administrators to determine which network traffic is permitted to pass between end user computers and the network.

### Client Firewall

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Firewall</td>
<td>Off</td>
<td>On</td>
</tr>
</tbody>
</table>

Toggle to ON to enable Client Firewall. If toggled to OFF, no Client Firewall Settings or Rules are applied. Client firewall is a stateful firewall.

### Settings and Rules

See [Client Firewall Settings and Rules](#).

### Client Firewall Options

In the Client Firewall policy, Settings and Rules, click **View/Edit**.

In the Settings window, you can set **Client Firewall Options** and **Client Firewall Rules**.

**Return to Client Firewall Policies**

### Protection Options

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow traffic for unsupported protocols</td>
<td>Check box</td>
<td>Allows all traffic that uses unsupported protocols. When disabled, all traffic using unsupported protocols is blocked.</td>
</tr>
<tr>
<td>Allow only outgoing traffic until firewall services have started</td>
<td>Check box</td>
<td>Allows outgoing traffic but no incoming traffic until the Firewall service starts. If this option disabled, Firewall allows all traffic before services</td>
</tr>
<tr>
<td>Setting</td>
<td>UI Control</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Allow bridged traffic</td>
<td>Check box</td>
<td>Allows traffic with a local MAC address. The MAC address is an address in the list of VMs that Firewall supports, not the local system's MAC address. Use this option to allow traffic through a bridged environment with virtual machines.</td>
</tr>
<tr>
<td>Enable IP spoof protection</td>
<td>Check box</td>
<td>Blocks network traffic from non-local host IP addresses or from local processes that attempt to spoof their IP address.</td>
</tr>
<tr>
<td>Enable firewall intrusion alerts</td>
<td>Check box</td>
<td>Displays alerts automatically when Firewall detects a potential attack.</td>
</tr>
</tbody>
</table>

### Tuning Options

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Adaptive mode</td>
<td>Check box</td>
<td>Creates rules automatically to allow traffic. <strong>NOTE:</strong> Enable this option temporarily while tuning a deployment.</td>
</tr>
<tr>
<td>Log all blocked traffic to client activity log</td>
<td>Check box</td>
<td><strong>Enabled by default</strong> Logs all blocked traffic to the Firewall event log (FirewallEventMonitor.log) on the Endpoint Security Client.</td>
</tr>
<tr>
<td>Log all allowed traffic to client activity log</td>
<td>Check box</td>
<td><strong>Disabled by default</strong> Logs all allowed traffic to the Firewall event log (FirewallEventMonitor.log) on the Endpoint Security Client. <strong>NOTE:</strong> Enabling this option might negatively impact performance.</td>
</tr>
</tbody>
</table>

### Network Reputation

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incoming network - reputation threshold</td>
<td>Drop-down menu</td>
<td><strong>High Risk</strong> Specifies the rating threshold for blocking incoming or outgoing traffic from a network connection. <strong>Unverified</strong> Sends or hosts potentially malicious content/traffic that is considered risky. <strong>Do not block</strong> This site appears to be a legitimate source or destination of content/traffic, but also displays properties suggesting that further inspection is necessary. <strong>Medium Risk</strong> This source/destination sends or hosts potentially malicious content/traffic that is considered risky. <strong>Do not block</strong> This site is a...</td>
</tr>
<tr>
<td>Setting</td>
<td>UI Control</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Outgoing network - reputation threshold</td>
<td>Drop-down menu</td>
<td>legitimate source or destination of content/traffic. Medium Risk - This source/destination shows behavior that is considered suspicious. Any content/traffic from the site requires special scrutiny.</td>
</tr>
<tr>
<td>Stateful Firewall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of seconds (1-240) before TCP connections time out</td>
<td>Up/down number selector</td>
<td>Specifies the time, in seconds, that an unestablished TCP connection remains active if no more packets matching the connection are sent or received. The default number is 60; the valid range is 1-240.</td>
</tr>
<tr>
<td>Number of seconds (1-300) before UDP and ICMP echo virtual connections time out</td>
<td>Up/down number selector</td>
<td>Specifies the time, in seconds, that a UDP or ICMP Echo virtual connection remains active if no more packets matching the connection are sent or received. This option resets to its configured value every time a packet that matches the virtual connection is sent or received. The default number is 60; the valid range is 1-300.</td>
</tr>
</tbody>
</table>
### DNS Blocking

<table>
<thead>
<tr>
<th>Domain name</th>
<th>Button/text input field</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td></td>
</tr>
<tr>
<td>Defines domain names to block. When applied, this setting adds a rule near the top of the firewall rules that blocks connections to the IP addresses resolving to the domain names. Add - To add a domain name to block, click Add, then enter a domain name. You can use the * and ? wildcards. For example, *domain.com. Separate multiple domains with a comma (,) or a carriage return. Duplicate entries are automatically removed. Delete - To remove a domain name from the blocked list, select the domain name and click Delete.</td>
<td></td>
</tr>
</tbody>
</table>

### Client Firewall Rules

Client Firewall applies the rule at the top of the firewall rules list.

1. Client Firewall applies the rule at the top of the firewall rules list. If the traffic meets this rule's conditions, Client Firewall allows or blocks the traffic. It doesn't try to apply any other rules in the list.

2. If the traffic doesn't meet the first rule's conditions, Client Firewall continues to the next rule in the list until it finds a rule that the traffic matches.

3. If no rule matches, the firewall automatically blocks the traffic.

To modify Core Networking or Default Rules, expand either Core Networking Rules or Default Rules, select the rule to modify, and edit the desired settings, and click OK. The settings are described in the table below.

Alternatively, click one of the following buttons to perform the desired action:

- **Add Rule** - Adds a firewall rule.
- **Duplicate** - Creates a copy of the selected item.
- **Delete** - Removes a selected firewall item.

### Setting Table

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Text input field</td>
<td>Specifies the descriptive name of the item.</td>
</tr>
<tr>
<td>Status</td>
<td>Check box</td>
<td>Select Enable rule to make the rule active.</td>
</tr>
</tbody>
</table>
### Actions

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks</td>
<td>Radio button/Check box</td>
<td>Allow - Allows traffic through the firewall if the item is matched. Block - Stops traffic from passing through the firewall if the item is matched. Treat match as intrusion - Treats traffic that matches the rule as an attack and generates an event that is sent to the Reputation Service. The Block action for the rule must be selected for an event to be generated. Log matching traffic - Preserves a record of matching traffic in the Firewall activity log on the Endpoint Security Client.</td>
</tr>
</tbody>
</table>

### Direction

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks</td>
<td>Drop-down menu</td>
<td>In - Monitors incoming traffic. Out - Monitors outgoing traffic. Either - Monitors both incoming and outgoing traffic.</td>
</tr>
</tbody>
</table>

### Notes

<table>
<thead>
<tr>
<th>Setting</th>
<th>UI Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks</td>
<td>Text input field</td>
<td>Provides more information about the rule.</td>
</tr>
</tbody>
</table>
To add a network, click Add, then specify the following:
Name - Specifies the network address name (required).
Type - Select either Local Network or Remote Network.
Click Add, then specify the following:
Network type - Specifies the origin or destination of traffic. Select from the network types Single IP, Subnet, Local subnet, Range, or Fully qualified domain name
IP address - Specifies the IP address to add to the network. Wildcards are valid.

<table>
<thead>
<tr>
<th>Specify Networks</th>
<th>Button/Drop-down menu/text input field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>String</td>
</tr>
<tr>
<td>Type</td>
<td>String</td>
</tr>
<tr>
<td>IP address</td>
<td>String</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport</th>
<th>Select the transport protocol from the menu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport protocol</td>
<td>Drop-down menu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Executables</th>
<th>The name that you use for the executable to add or edit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>String</td>
</tr>
<tr>
<td>File path</td>
<td>String</td>
</tr>
</tbody>
</table>
### Manage Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Setting When Application Control policy is Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Executable Auto Quarantine With Executable Control Enabled</td>
<td>Selected</td>
</tr>
<tr>
<td>Abnormal Executable Auto Quarantine With Executable Control Enabled</td>
<td>Selected</td>
</tr>
<tr>
<td>Memory Protection Enabled</td>
<td>Selected</td>
</tr>
<tr>
<td>Exploitation: Stack Pivot</td>
<td>Terminate</td>
</tr>
<tr>
<td>Exploitation: Stack Protect</td>
<td>Terminate</td>
</tr>
<tr>
<td>Exploitation: Overwrite Code</td>
<td>Terminate</td>
</tr>
<tr>
<td>Exploitation: Scanner Memory Search</td>
<td>Terminate</td>
</tr>
<tr>
<td>Exploitation: Malicious Payload</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Allocation of Memory</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Mapping of Memory</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Write to Memory</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Write PE to Memory</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Overwrite Code</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Unmap of Memory</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote Thread Creation</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote APC Scheduled</td>
<td>Terminate</td>
</tr>
<tr>
<td>Process Injection: Remote DYLD Injection (Mac OS X only)</td>
<td>Terminate</td>
</tr>
<tr>
<td>Escalation: LSASS Read</td>
<td>Terminate</td>
</tr>
<tr>
<td>Escalation: Zero Allocate</td>
<td>Terminate</td>
</tr>
<tr>
<td>Watch for New Files</td>
<td>Selected</td>
</tr>
</tbody>
</table>

### Advanced Threat Events tab fields and filters

The Advanced Threat Events tab displays information about events for the entire enterprise based on information available in the Dell Server.

The tab displays if the Advanced Threat Prevention service is provisioned and licenses are available.

To access the Enterprise Advanced Threats tab, follow these steps:

1. In the left pane, click **Populations > Enterprise**.
2. Select the **Advanced Threat Events** tab.

Use the following filters to select content to display on the Advanced Threat Events tab:

- **Type** - Threat Found, Threat Blocked, Threat Terminated, Memory Violation Blocked, Memory Violation Terminated, Memory Violation (Detected), Threat Removed, Threat Quarantined, Threat Waived, Threat Changed, Protection Status Changed.
- **Severity** - Severity level of the event: Critical, Major, Minor, Caution, or Informational.
- **Timeframe (in days)** - 1, 7, 14, 30, 60, 90
- **Columns** - Allows you to select the following additional columns to display:

- **Hostname** - The fully qualified name of the computer
- **Data** - Details about the event
- **Created** - Date and time that the event was captured
- **Machine Name** - Name of the computer on which the threat event was detected
- **Path** - Path to the file in which the threat was detected
- **Sha256** - The file's 256-character Secure Hash Algorithm can be compared with an expected result to indicate whether the file has been tampered with.
- **Score** - The threat file's score, indicating the confidence level that the file is malware. The higher the number, the greater the confidence.

- **Manage Enterprise Advanced Threats - Protection**
The Protection tab provides information about files and scripts that are potentially harmful.

**Threats**

The table lists all events found across the organization. An event may also be a threat but is not necessarily so.

View additional information about a specific threat either by clicking on the threat name link to view details displayed on a new page or by clicking anywhere in the row of the threat to view details at the bottom of the page.

To view additional threat information in the table, click the drop-down arrow on a column header to select and add columns. Columns display metadata about the file, such as Classifications, Cylance Score (confidence level), AV Industry conviction (links to VirusTotal.com for comparison with other vendors), Date first found, Data last found, SHA256, MD5, File information (author, description, version), and Signature details.

**Filter Events Table Data**

Click the Threat Filters list at the upper right side of the table to view data about events by Priority, Status: Last 24 Hours, and Status: Total.

The number of events occurring in each subcategory are shown in parentheses.

**Priority: Unsafe** - Select a priority to view only events that match the selected priority. High, Medium, or Low.

**Status: Last 24 Hours** - Select a status to view only events that have had changes to this status in the last 24 hours.

**Status: Total** - Select a status to only events with that status.

The predictive threat model used to protect devices receives periodic updates to improve detection rates. To understand differences in how a new threat model affects information about files in your organization, see Threat Model Updates.

**Commands**

Select a threat to act on it. On this page, you can do the following to the selected threat data:

**Export** - Export threat data to a CSV file.

Select the rows to export, and then click Export.

Open the file with Microsoft Excel or similar application, which allows you to sort and organize the data.

**Global Quarantine** - Add a file to the global quarantine list. The threat is permanently quarantined from all devices.

Add the selected file to the Global Quarantine list to prevent it from being run on any device in the organization. Adding a file to Quarantine removes it from lists of Unsafe files.

1. Select a threat.
2. Click Global Quarantine.
3. Enter a reason that this file should be global quarantined and click Yes.

**Safe** - Add a file to the safe list. The file is permanently treated as safe across all devices.

1. Select the file to list as safe.
2. Click Safe.
3. Select the category that fits the file.
4. Enter a reason why the file should be listed as safe, and click Yes.

Note: Occasionally, a “good” file may be reported as unsafe (this could happen if the features of that file strongly resemble those of malicious files). Waiving or safelisting the file can be useful in these instances.

**Edit Global List** - Add or remove files from the global quarantine list.

1. Click **Edit Global List**.
2. Select the items to change.
3. Select **Safe** to add the selected items to the safelist, or select **Remove from list** to remove the selected files from the Global Quarantine list.

**Manually Add File to the Global Quarantine list**

1. Click **Edit Global List**.
2. Click **Add File**.
3. Enter the file’s SHA256 hash number (required).
4. Enter the file’s MD5 number, if available.
5. Enter the file name, if available.
6. Enter the reason the file should be quarantined.
7. Click **Submit**.

**View Threat Details** - Click a threat name to display details of the threat details on a new page. Click anywhere in the threat’s row to display the same threat details on the left side of this page, under the table.

**File Details**

**Details: [file name]**

At the bottom of the page, this section displays details about the file that triggered an event. To display this information, select the row that displays the file name in the Advanced Events table.

Click the file name next to Details: to display the same information about the event on a new page.

**Overview**

The overview contains summary information about the file.

**Threat Indicators**

Threat Indicators are observations about a file that has been analyzed.

These indicators help administrators understand the reason for a file’s classification and provide insight into its attributes and behavior. Threat Indicators are grouped into categories.

**Devices**

In the Devices pane, the administrator can view a list of devices that have unsafe or abnormal files and quarantine or waive them.

The device list can be filtered by file state: Unsafe, Quarantined, Waived, or Abnormal.

Waiving a file will allow that file to run on the device.

**Detailed Threat Data**
If the file has been uploaded for analysis, the Detailed Threat Data pane may display a comprehensive summary of the static and dynamic characteristics of the file including additional file metadata, file structure details, and dynamic behaviors such as files dropped, registry keys created or modified, and URLs with which it attempted to communicate.

**Note:** If no results display in the Detailed Threat Data pane, the file has not yet been uploaded for analysis. Debug logging may provide information about why the file was not uploaded.

**Script Control Table**

The table lists details about Active and PowerShell scripts that have been blocked or have triggered an alert and the affected devices.

Columns display the file name, interpreter (PowerShell or ActiveScript), last found, drive type (such as internal hard drive), SHA256, Number of devices on which the script is found, and Number of occurrences that were blocked or triggered alerts.

To filter column data, click the filter icon on a column header and select values to include or exclude.

**Manage Enterprise Advanced Threats - Agents**

After an Advanced Threat Prevention client is installed on an endpoint computer, it is recognized by the Dell Server as an agent.

**Agents Table Data, Explained**

- **Name** - The name of the agent on the endpoint computer.
- **State** - State of the agent, online or offline. A computer is in the offline state after three failed attempts in a 15-minute period to contact the Cylance server.
- **Offline Date** - If applicable, the date on which the agent went offline.
- **Files Analyzed** - Number of files analyzed on the endpoint computer.
- **Unsafe** - Number of files deemed Unsafe on the device. An unsafe file has characteristics that greatly resemble malware.
- **Quarantined** - Number of files Quarantined on the device.
- **Waived** - Number of Waived files on the device.
- **Abnormal** - Number of Quarantined files on the device.
- **Exploit Attempts** - Number of exploit attempts on the device.

**Commands**

To export details about an agent or remove an agent from the list:

- **Export** - Creates and downloads a CSV file that contains device information (Name, State, Policy, etc.).
- **Remove** - Removes selected agents from the Agent Table. This does not uninstall the agent from the device.

**Manage Enterprise Advanced Threats - Certificate**

The Certificate tab allows you to upload a certificate for the purpose of safelisting it.

Certificates must be in .cer or .crt format.

To upload a certificate, follow these steps:
1. Navigate to Populations > Enterprise > Advanced Threats tab > Certificate tab.
2. Click Browse.
3. Select a certificate and click Open.
4. Click Upload Certificate.
5. Click OK once the upload is successful.

For instructions about how to safelist a certificate, see Manage Enterprise Advanced Threats - Global List.

Manage Enterprise Advanced Threats - Cylance Score and Threat Model Updates

A Cylance score is assigned to each file that is deemed Abnormal or Unsafe. The score represents the confidence level that the file is malware. The higher the number, the greater the confidence.

Threat Model Updates

The predictive threat model used to protect devices receives periodic updates to improve detection rates.

Two columns on the Protection page in the Management Console show how a new threat model affects your organization. Display and compare the Production Status and New Status columns to see which files on devices might be impacted by a model change.

To view the Production Status and New Status columns:
1. In the left pane, click Populations > Enterprise.
2. Select the Advanced Threats tab.
3. Click the Protection tab.
4. Click the down-arrow on a column header in the table.
5. Hover over Columns.
6. Select the Production Status and New Status columns.

Production Status - Current model status (Safe, Abnormal or Unsafe) for the file.

New Status - Model status for the file in the new model.

For example, a file that was considered Safe in the current model might change to Unsafe in the new model. If your organization needs that file, you can add it to the Safe list. A file that has never been seen or score by the current model might be considered Unsafe by the new model. If your organization needs that file, you can add it to the Safe list.

Only files found on device in your organization and that have a change in its Cylance Score are displayed. Some files might have a score change but still remain within its current Status. For example, if the score for a file goes from 10 to 20, the file status may remain Abnormal and the file appears in the updated model list (if this file exists on devices in your organization).

The information for the model comparison comes from the database, not your devices. So no re-analysis is done for the model comparison. However, when a new model is available and the proper Agent is installed, a re-analysis is done on your organization and any model changes are applied.

Compare Current Model with New Model

You can now review differences between the current model and the new model.

The two scenarios you should be aware of are:
Manage Policies

Production Status = Safe, New Status = Abnormal or Unsafe

- Your Organization considers the file as Safe
- Your Organization has Abnormal and/or Unsafe set to Auto-Quarantine

Production Status = Null (not seen or scored), New Status = Abnormal or Unsafe

- Your Organization considers the file as Safe
- Your Organization has Abnormal and/or Unsafe set to Auto-Quarantine

In the above scenarios, the recommendation is to Safelist the files to allow in your organization.

Identify Classifications

To identify classifications that could impact your organization, Dell recommends the following approach:

1. Apply a filter to the New Status column to display all Unsafe, Abnormal, and Quarantined files.
2. Apply a filter to the Production Status column to display all Safe files.
3. Apply a filter to the Classification column to only show Trusted - Local threats.

Trusted - Local files have been analyzed by Cylance and found to be safe. Safelist these items after review. If you have a lot of files in the filtered list, you may need to prioritize using more attributes. For example, add a filter to the Detected By column to review threats found by Execution Control. These were convicted when a user attempted to execute an application and need more urgent attention than dormant files convicted by Background Threat Detection or File Watcher.

Manage Enterprise Advanced Threats - Global List

The Global Quarantine, Safe, and Unassigned tables provide a view of files in list as well as options to perform actions on these files.

Global Quarantine

Global Quarantine lists files that are permanently quarantined from all devices.

Add a file to the global quarantine list

Add the selected file to the Global Quarantine list to prevent it from being run on any device in the organization. Adding a file to Quarantine removes it from lists of Unsafe or Unassigned files.

1. Select Global Quarantine (n).
2. Select a threat.
3. Click Add File.
4. Enter a reason that this file should be global quarantined and click Yes.

Manually Add File to the Global Quarantine list

1. Select Global Quarantine (n).
2. Click Add File.
3. Enter the file’s SHA256 hash number. (required)
4. Enter the file’s MD5 number, if available.
5. Enter the file name, if available.
6. Enter the reason the file should be quarantined.
7. Click Submit.

**Remove a file from the global quarantine list**

Remove the selected file from the Global Quarantine list to allow it to run on any device in the organization.

1. Select Global Quarantine (n).
2. Select a file.
3. Click Remove from List.

**Safelist a file from the global quarantine list**

Safelist the selected file from the Global Quarantine list to allow it to run on any device in the organization.

1. Select Global Quarantine (n).
2. Select a file.
3. Click Safe.

**Safe**

Safelisted files and certificates are permanently treated as safe across all devices. Any certificate that is safelisted is a known safe certificate for the Advanced Threat Prevention tenant.

**Add a file to the safe list**

Safelisting a file allows that file to run on any device across the entire organization.

**Note:** Occasionally, a “good” file may be reported as unsafe (this could happen if the features of that file strongly resemble those of malicious files). Waiving or safelisting the file can be useful in these instances.

1. Select Safe (n).
2. Click Add File.
3. Enter the file's SHA256 hash number. (required)
4. Enter the file's MD5 number, if available.
5. Enter the file name, if available.
6. Enter the reason the file should be safelisted.
7. Click Submit.

**Remove a file from the safe list**

1. Select Safe (n).
2. Select Files (n).
3. Select the file to remove from the safe list.
4. Click Remove from List.

**Add a certificate to the safe list**

Safelisting a certificate allows access to that certificate, as needed, across the entire organization.
1. Select Safe (n).
2. Select Certificates (n).
3. Select the certificate to list as safe.
4. Click Add Certificate.
5. Select the category that fits the certificate.
6. Enter a reason why the certificate should be listed as safe, and click Submit.

**Note:** You must upload a certificate for it to be available to safelist. For more information, see Manage Enterprise Advanced Threats - Certificate.

Remove a certificate from the safe list

1. Select Safe (n).
2. Select Certificates (n).
3. Select the certificate to remove from the safe list.
4. Click Remove from List.

Unassigned

Unassigned files can be added to the global quarantine or safe list.

**Add an unassigned file to the global quarantine list**

Add the selected file to the Global Quarantine list to prevent it from being run on any device in the organization. Adding a file to Quarantine removes it from lists of Unsafe or Unassigned files.

1. Select Unassigned (n).
2. Select a file.
3. Click Global Quarantine.
4. Enter a reason that this file should be global quarantined and click Yes.

**Manually Add File to the Global Quarantine list**

1. Select Unassigned (n).
2. Click Add File.
3. Enter the file's SHA256 hash number. (required)
4. Enter the file's MD5 number, if available.
5. Enter the file name, if available.
6. Enter the reason the file should be quarantined.
7. Click Submit.

**Add an unassigned file to the safe list**

Safelisting a file allows that file to run on any device across the entire organization.

1. Select Unassigned (n).
2. Select a file.
3. Click Safe.
4. Select the category that fits the file.

5. Enter a reason why the file should be listed as safe, and click Yes.

Note: Occasionally, a “good” file may be reported as unsafe (this could happen if the features of that file strongly resemble those of malicious files). Waiving or safelisting the file can be useful in these instances.

Manually Add File to the Safe list

1. Select Unassigned (n).

2. Click Add File.

3. Enter the file's SHA256 hash number. (required)

4. Enter the file's MD5 number, if available.

5. Enter the file name, if available.

6. Enter the reason the file should be safelisted.

7. Click Submit.

Add the selected file to the Global Quarantine list to prevent it from being run on any device in the organization. Adding a file to Quarantine removes it from lists of Unsafe or Unassigned files.

1. Select Global Quarantine (n).

2. Select a threat.

3. Click Add File

4. Enter a reason that this file should be global quarantined and click Yes.

Manually Add File to the Global Quarantine list

1. Select Global Quarantine (n).

2. Click Add File.

3. Enter the file's SHA256 hash number. (required)

4. Enter the file's MD5 number, if available.

5. Enter the file name, if available.

6. Enter the reason the file should be quarantined.

7. Click Submit.

Manage Enterprise Advanced Threats - Options

The Options tab allows you to integrate with Security Information Event Management (SIEM) software using the Syslog feature as well as export Advanced Threat data. SIEM software allows administrators to run customized analytics on threat data within their environments. Software options include Splunk, available to Splunkbase users at https://splunkbase.splunk.com/app/3233.

Syslog events are persisted at the same time Agent events are persisted to the Cylance server. For more information about supported event types, see Syslog Event Types.

To integrate with SIEM, select Syslog/SIEM on the Options tab, and complete the form that displays. For a list of syslog server IP addresses to allow, see Syslog IP Addresses.
With SIEM integration, to export data about threats, select **Threat Data Report** on the **Options** tab. For instructions and a description of exportable data, see **Threat Data Report**.

**Threat Data Report**

Select **Threat Data Report** on the **Options** tab to enable threat data export to .csv files.

The following types of data are available for export:

**Threats** - Lists all threats discovered in your organization. This information includes file name and File Status (unsafe, abnormal, waived, and quarantined).

**Devices** - Lists all devices in your organization that have an Agent installed. This information includes device name, operating system version, agent version, and policy applied.

**Events** - Lists all events related to the Threat Events graph on the dashboard for the last 30 days. This information includes file hash, device name, file path, and the date the event occurred.

**Indicators** - Lists each threat and the associated threat characteristics.

**Cleared** - Lists all files that have been cleared in your organization. This information includes files that were waived, added to the safe list, or deleted from the quarantine folder on a device.

**Export Data**

To access the exported data:

1. Select **Generate token**.
2. Copy the URL of the desired data and paste it into a web browser address field.
3. In the URL, replace [Token] with the generated token displayed in **Token**.

To disable access to the exported data, select **Delete** or **regenerate** to invalidate the current token. After regenerating a token, provide it to persons who should have continued access to the exported data.

**Advanced Threat Prevention Classifications**

The Advanced Threat Prevention Classifications pane shows a heat map of threats. The color indicates the priority classification of the threat. The size of the box indicates the relative number of endpoints that have a particular threat. This classification helps administrators determine which threats and devices to address first. Click a threat to view threat and device details.

Threat classifications include the following:

- **Malware**
  - **Trojan**
  - **Downloader**

- **Potentially Unwanted Programs (PUP)**
  - **Adware**
  - **Hacking Tool**
  - **Portable Application**

**Enable Compatibility Mode for Memory Protection**
Compatibility Mode allows applications to run on the client computer while Memory Protection or Memory Protection and Script Control policies are enabled. Compatibility Mode is enabled through a registry setting or a command on the client computer. Compatibility Mode does not apply to Mac clients.

To enable Compatibility Mode with a registry setting:

1. In the Remote Management Console, disable the Memory Protection Enabled policy. If the Script Control policy is enabled, disable it.
2. Save the policy changes, and Commit_Policies.
3. Using the Registry Editor on the client computer, go to HKEY_LOCAL_MACHINE\SOFTWARE\Cylance\Desktop.
4. Right-click Desktop, click Permissions, then take ownership and grant yourself Full Control.
5. Right-click Desktop, then select New > Binary Value.
6. For the name, type CompatibilityMode.
7. Open the registry setting and change the value to 01.
8. Click OK, then close Registry Editor.
9. In the Management Console, enable the Memory Protection Enabled policy. If the Script Control policy was enabled, enable it.
10. Save the policy changes, and Commit_Policies.

To add the registry setting with a command:

1. In the Management Console, disable the Memory Protection Enabled policy. If the Script Control policy is enabled, disable it.
2. Save the policy changes, and Commit_Policies.
3. Select one command line option to run on the client computer:

   (For one computer) Psexec:  
   psexec -s reg add HKEY_LOCAL_MACHINE\SOFTWARE\Cylance\Desktop /v CompatibilityMode /t REG_BINARY /d 01

   (For multiple computers) Invoke-Command cmdlet:  
   $servers = "testComp1","testComp2","textComp3"  
   $credential = Get-Credential -Credential {UserName}\administrator  
   Invoke-Command -ComputerName $servers -Credential $credential -ScriptBlock {New-Item -Path HKCU\Software\Cylance\Desktop -Name CompatibilityMode -Type REG_BINARY -Value 01}
4. In the Management Console, enable the Memory Protection Enabled policy. If the Script Control policy was enabled, enable it.

5. Save the policy changes, and \textit{Commit Policies}.

\textbf{Disconnected Mode Policy Examples}

Examples for Global Allow, Quarantine List, and Safe List policies are shown below.

\textbf{Global Allow policy example}

```xml
<?xml version="1.0" encoding="utf-8"?>
<disconnected_policy

<policy_name>Default</policy_name>
<policy_company>Acme</policy_company>
<policy_company_id>uxSYabW9P2nMbGLzuqJhvT9Y</policy_company_id>
<policy_utctimestamp>Date(-62135596800000+0000)</policy_utctimestamp>

<filetype_actions>

<suspicious_files file_type="executable" actions="7" />
<threat_files file_type="executable" actions="7" />

</filetype_actions>

<memoryviolation_actions>

<memory_violation violation_type="stackpivot" action="Alert" />
<memory_violation violation_type="stackprotect" action="Block" />
<memory_violation violation_type="stackpivot" action="Terminate" />
<memory_violation violation_type="overwritecode" action="None" />
<memory_violation violation_type="outofprocessallocation" action="Scuba" />
<memory_violation violation_type="outofprocessmap" action="Alert" />
<memory_violation violation_type="outofprocesswrite" action="Block" />
<memory_violation violation_type="outofprocesswritepe" action="Terminate" />
<memory_violation violation_type="outofprocessunmapmemory" action="Alert" />
<memory_violation violation_type="outofprocessoverwritecode" action="None" />
<memory_violation violation_type="outofprocessunmapmemory" action="Alert" />
<memory_violation violation_type="outofprocesscreatethread" action="Alert" />
<memory_violation violation_type="outofprocessapc" action="Alert" />
```

240
<memory_violation violation_type="lsassread" action="Alert" />

<memory_exclusion_list>
  <path>temp\files\exe1.exe</path>
  <path>stuff\folder\exe2.exe</path>
</memory_exclusion_list>

<appcontrol>
  <changewindow_enabled>0</changewindow_enabled>
  <lockdown lockdown_type="executionfromexternaldrives" action="deny" />
  <lockdown lockdown_type="pechange" action="deny" />
</appcontrol>

<policy>
  <option name="auto_blocking" value="0" />
  <option name="auto_uploading" value="1" />
  <option name="threat_report_limit" value="500" />
  <option name="low_confidence_threshold" value="-600" />
  <option name="full_disc_scan" value="0" />
  <option name="watch_for_new_files" value="0" />
  <option name="memory_exploit_detection" value="0" />
  <option name="trust_files_in_scan_exception_list" value="0" />
  <scan_exception_list>
    <path>C:\temp</path>
    <path>C:\stuff</path>
  </scan_exception_list>
</policy>

<exclusion_list>
  <checksum>3fdc391ef0e200af3e4c206e785e1de0</checksum>
  <error_rate>1E-05</error_rate>
  <size>509</size>
</exclusion_list>

<exclusionlisthash>XjxtEUkQvOFIxtTZof+f6Jb149fhxFbOHUzc3S/5Hi6zqeizrvOaM9QvGruM1un/uiOGeMw1NB31LCBD9PtwbgaYUpiz8Ne88wOmKhnerXo5TJRy+4HzPWDotDXSz+d5AHP74zbbHfH7m47KG9bFAsPa4KNhFLqSD3g/AI7ZCWLL/1OFyWcFMTTLLkeLpycDiy2pzf8QDskQVsAt8Ub1h2UGY4BggRwCQfYz9J/yJWuf1XGy9A7rMAHzYdqh0B5s4Y21B2jrd1HuGSxtNPu9gTuM1dfxE</exclusionlisthash>
Quarantine List

The Global Quarantine List contains hashes of files to be quarantined as shown in this example:

0A5F695900F1FC75070BB8B7C7A55B5BCFAAD6FE
525E7A55B5BCB6B16F25B5DD6CE11DFC6DD0B4E6

Safe List

The Global Safe List contains hashes of files to be quarantined as shown in this example:

0A5F695900F1FC75070BB8B7C7A55B5BCFAAD6FE
525E7A55B5BCB6B16F25B5DD6CE11DFC6DD0B4E6

Threat Protection Policy Overview

Threat Protection policies are divided into the following categories:

- Threat Protection
- Client Firewall
- Web Protection

When you set the Threat Protection policy to Selected, you can then set policies for these client options:

- Actions to take when malicious activity is identified (Block, Report, Block and Report)
  
  Policies allow you to set the action to take when users attempt to modify or delete Threat Protection system files, registry keys, and processes. The default setting for these policies is Block and Report: Action on Malicious Activity for Files and Folders, Action on Malicious Activity for Registry, and Action on Malicious Activity for Processes.

- Exclusion of specified processes from Threat Protection scans

- Logging locations and debug/verbose logging of certain activities
  
  Activity logging is enabled by default. Debug logging is disabled by default.

- Client update scheduling

  Client updates ensure that client computers are always protected from the latest threats through content files that include definitions of threats such as viruses and spyware, that are used to detect threats. The Client Update Schedule policy is selected (Enabled) by default. The Client Update Schedule Repeats policy, which determines the frequency of client updates, is set to Daily by default.

The following policies represent the different types of scans included in Threat Protection:

On-Access Protection – When a user accesses files, folders, and programs, the on-access scanner intercepts the operation and scans the item. Default: Selected (Enabled).

On-Demand Protection - Full Scan – Based on a schedule set in policy, the on-demand scanner runs a thorough check of all areas of the computer. Default: Selected (Enabled).

By default, every time Full Scan runs, it scans the following for threats:

- Computer memory for installed rootkits, hidden processes, and other behavior that suggests malware is attempting to hide itself. This scan occurs before all other scans.

- Memory of all running processes.
• All drives on the computer and their subfolders.

By default, the scanner scans all file types, regardless of extension.

On-Demand Protection - Quick Scan – Based on a schedule set in policy, the on-demand scanner runs a quick check of areas of the computer that are most susceptible to threats. Default: Selected (Enabled).

By default, every time Quick Scan runs, it scans the following for threats:

• Memory of all running processes.
• Files that the Windows Registry references.
• Contents of the Windows folder.
• Contents of the Temp folder.

By default, the scanner scans all file types, regardless of extension.

Access Protection – Prevents other computers from making a connection and creating or altering autorun (autorun.inf) files from CDs. The rule prevents spyware and adware distributed on CDs from being executed and automatically blocks and reports such issues. Default: Selected (Enabled).

Exploit Protection – Monitors for application vulnerabilities and keeps buffer overflow exploits from executing arbitrary code on the computer. Default: Selected (Enabled).

Script Scan Protection – Enables scanning JavaScript and VBScript scripts to prevent unwanted scripts from executing. Default: Selected (Enabled).

Actions taken if a threat, unwanted program, or exploit is detected are controlled by policy and include the following:

Full-Scan Threat First Response - Specifies the first action for the scanner to take when a threat is detected. Default: Clean file.

Full-Scan Threat First Response Fails - Specifies the action for the scanner to take when a threat is detected if the first action fails. Default: Delete file.

Full-Scan Unwanted Program First Response - Specifies the first action for the scanner to take when a potentially unwanted program is detected. Default: Clean file.

Full-Scan Unwanted Program First Response Fails - Specifies the action for the scanner to take when an unwanted program is detected if the first action fails. Default: Delete file.

Quick-Scan Threat First Response - Specifies the first action for the scanner to take when a threat is detected. Default: Clean file.

Quick-Scan Threat First Response Fails - Specifies the action for the scanner to take when a threat is detected if the first action fails. Default: Delete file.

Quick-Scan Exploit First Response - Specifies the first action for the scanner to take when a potential exploit is detected. Default: Clean file.

Quick-Scan Exploit First Response Fails - Specifies the action for the scanner to take when an exploit is detected if the first action fails. Default: Delete file.

When the Full-Scan Reputation Service Sensitivity or Quick-Scan Reputation Service Sensitivity policies are enabled, samples are submitted to the Reputation Service lab to determine if they are malware. The sensitivity level is used when determining if a detected sample is malware. The higher the sensitivity
level, the higher the number of malware detections. However, allowing more detections might result in more false positive results.

The following values can be set:

**Disable** - Samples are not submitted to the Reputation Service lab.

**Very Low** - A detection is made available to Threat Protection when the Reputation Service lab publishes it instead of waiting for the next file update. Average of 10-15 queries per day, per computer.

**Low** - This setting is the minimum recommendation for laptops or desktops and servers with a strong security footprint. This setting results in an average of 10-15 queries per day, per computer.

**Medium** - Use this level when the regular risk of exposure to malware is greater than the risk of a false positive. This setting is the minimum recommendation for laptops or desktops and servers. Average of 20-25 queries per day, per computer.

**High** - Use this setting for deployment to systems or areas which are regularly infected. This setting results in an average of 20-25 queries per day, per computer.

**Very High** - Dell recommends using this level only for scanning volumes and directories that do not support executing programs or operating systems. Detections found with this level are presumed malicious, but have not been fully tested to determine if they are false positives. Use this setting for on-demand scans on non-operating system volumes. This setting results in an average of 20-25 queries per day, per computer.

For more detail about Threat Protection policies, see [Windows Threat Protection](#).

**Client Firewall Policies**

The Client Firewall is a stateful firewall that checks all incoming and outgoing traffic against its list of rules. If the traffic matches all criteria in a rule, the Client Firewall acts according to the rule, blocking or allowing traffic through the firewall.

Configurable options and rules define how the Client Firewall works. When the master policy, *Client Firewall*, is set to *On*, you can select View/Edit in the *Settings and Rules* policy to view or configure an extensive set of Client Firewall options and rules.

Options include which subsets of traffic to block or allow and logging settings, as well as timeout parameters for TCP, UDP, and ICMP connections.

Client firewall rules define specific handling of network traffic. Each rule provides a set of conditions that traffic must meet and an action to allow or block that traffic. When Client Firewall finds traffic that matches a rule’s conditions, it performs the associated action.

Client Firewall uses precedence to apply rules and applies the rule at the top of the firewall rules list.

1. If the traffic meets the conditions of the rule at the top of the list, Client Firewall allows or blocks the traffic. It does not try to apply any other rules in the list.
2. If the traffic does not meet the first rule’s conditions, Client Firewall continues to the next rule in the list until it finds a rule that the traffic matches.
3. If no rule matches, the firewall automatically blocks the traffic.

For a list of Client Firewall rules and their descriptions, see [Client Firewall Settings and Rules](#).

**Web Protection Policies**
Web Protection monitors web browsing and downloads to identify threats and enforce action set by policy when a threat is detected, based on ratings for websites. When you set the master policy, **Web Protection**, to **On**, you can set other policies for Web Protection.

The Reputation Service analyzes each website and assigns a color-coded safety rating based on test results. The color indicates the level of safety for the site:

- **Red** – Malicious
- **Yellow** – Potentially malicious
- **Green** - Safe

Through the following policies, you can assign actions to implement when a user accesses a website or attempts a download, based on website ratings:

**Rating Action for Red Sites** - Specifies the action to apply to sites that are rated Red. Default: Block.

**Rating Action for Yellow Sites** - Specifies the action to apply to sites that are rated Yellow. Default: Warn.

**Rating Action for Unrated Sites** - Specifies the action to apply to sites that are Unrated. Default: Allow.

**Rating Action for Red Downloads** - Specifies the action to apply to file downloads that are rated Red. Default: Block.

**Rating Action for Yellow Downloads** - Specifies the action to apply to file downloads that are rated Yellow. Default: Warn.

**Rating Action for Unrated Downloads** - Specifies the action to apply to file downloads that are Unrated. Default: Allow.

Configurable actions for website access or download attempts include the following:

- **Block** – Prevents users from accessing the site or downloading a file from the site. A message is displayed.
- **Allow** – Permits users to access the site or proceed with the download.
- **Warn** – Displays a warning to notify users of potential dangers associated with the site or download file. Users must dismiss the warning before ending the web session or proceeding with the download.

To exclude a private IP address or range of addresses from Web Protection content rating actions, specify the IP address or IP address range in the **IP Exclusions for Web Protection** policy.

To block all phishing pages, without regard to policy values that control content rating actions, select the **Enforcement - Block Phishing Pages for All Sites** policy.

**Designate a Threat Protection Signature Update Server**

Both an HTTP and FTP signature update server are pre-configured with your Dell Server installation. You can also, optionally, designate an internal signature update server or servers within your network.

Designating a signature update server within your network allows client computers to obtain signature updates without accessing the Internet. Rather than individual clients contacting an external update server, they contact your internal update server, which maintains current signatures through contact with the external signature update server.

To designate a signature update server, follow these steps:

1. As an administrator on the server to be the internal update server, run the appropriate command:
   
   VSSETUP_86.EXE /SetRelayServerEnable=1
2. Restart the internal update server.
4. In Malware Protection advanced settings, click Source Sites for Updates.
5. Click Add.
6. Enter a Name for the internal update server.
7. To enable connections to the internal update server, select Enabled. To enable later, clear the Enabled check box.
8. In Order, set the sequence in which clients will contact the internal update server in relation to other update servers. Dell recommends that you set the Order for internal update servers to precede the Order for external update servers.
9. Select the type of repository or path to the update server: HTTP repository, FTP repository, UNC path, or Local path.
10. Enter the URL or path to the internal update server.
11. Complete the remaining fields in the form, and click OK.
12. Repeat these steps to designate additional internal update servers.

To revert an internal update server to non-update server status, enter the appropriate command:

```
VSSETUP_64.EXE /SetRelayServerEnable=0
```

Removable Media Encryption

Removable Media Encryption

A note about Removable Media policies: Mac Media Encryption policies are device-based policies. This is different behavior than Windows Media Encryption, which are user-based.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Media Encryption</td>
<td>Off</td>
<td>This technology works on Windows computers using Dell Encryption External Media to encrypt data on removable devices, which can be accessed using a user-defined password. These policies allow configuration of the Encryption External Media password requirements and the removable media allowed.</td>
</tr>
<tr>
<td>EMS Scan External Media</td>
<td>Not Selected</td>
<td>This policy must be selected to use all other removable media policies. Not Selected means that no encryption of removable media takes place, regardless of other policy values.</td>
</tr>
<tr>
<td>EMS Access to unShielded Media</td>
<td>Read Only</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td><strong>Manage Policies</strong></td>
<td>scanned every time it is inserted. When this policy is Not Selected and the Windows Media Encryption policy is Selected, only new and changed files are encrypted.</td>
<td>A scan occurs at every insertion so that any files added to the removable media without authenticating can be caught. Files can be added to the media if authentication is declined, but encrypted data cannot be accessed. The files added are not encrypted in this case, so the next time the media is authenticated (to work with encrypted data), any files that may have been added are scanned and encrypted.</td>
</tr>
<tr>
<td>EMS Block Access to UnShieldable Media</td>
<td>Selected</td>
<td></td>
</tr>
<tr>
<td><strong>Manage Policies</strong></td>
<td>Block, Read Only, Full Access</td>
<td>This policy interacts with the Port Control System - Class: Storage &gt; Subclass Storage: External Drive Control policy. If you intend to set this policy to Full Access, ensure that Subclass Storage: External Drive Control is not set to Read Only or Blocked.</td>
</tr>
<tr>
<td><strong>Manage Policies</strong></td>
<td>More... When this policy is set to Block Access, you have no access to media unless it is encrypted. Choosing either Read-Only or Full Access allows you to decide what media to encrypt. If you choose not to encrypt removable media and this policy is set to Full Access, you have full read/write access to media. If you choose not to encrypt media and this policy is set to Read-Only, you can read or delete existing files on the unencrypted removable storage, but files cannot be edited on, or added to, the media.</td>
<td></td>
</tr>
<tr>
<td><strong>Manage Policies</strong></td>
<td>More... All access is blocked if Windows Media Encryption and this policy are both Selected. If Windows Media Encryption is Selected, but this policy is Not Selected, data can be read from the unencryptable media, but write access to the media is blocked. If Windows Media Encryption is Off, then this policy has no effect and access to unencryptable media is not impacted.</td>
<td></td>
</tr>
</tbody>
</table>

See [advanced settings](#)
<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac Media Encryption</td>
<td>Off</td>
<td>Toggle On to enable Mac Removable Media Encryption policies. If this policy is toggled to OFF, no Mac Removable Media Encryption takes place, regardless of other policies. HFS Plus is supported and must be enabled. For instructions to enable HFS Plus, see the Encryption Enterprise for Mac Administrator Guide. Media containing Time Machine backups are not supported. However, media recognized by computers as Time Machine backup destinations are automatically whitelisted, to allow backups to continue. All other removable media with Time Machine backups are handled based on EMS Access to unShielded Media and EMS Block Access to UnShieldable Media policies.</td>
</tr>
<tr>
<td>EMS Scan External Media</td>
<td>Not Selected</td>
<td>Selected allows removable media to be scanned every time it is inserted. When this policy is Not Selected and the Windows Media Encryption policy is Selected, only new and changed files are encrypted. More... A scan occurs at every insertion so that any files added to the removable media without authenticating can be caught. Files can be added to the media if authentication is declined, but encrypted data cannot be accessed. The files added are not encrypted in this case, so the next time the media is authenticated (to work with encrypted data), any files that may have been added are scanned and encrypted.</td>
</tr>
<tr>
<td>EMS Access to unShielded Media</td>
<td>Read Only</td>
<td>Block, Read Only, Full Access When this policy is set to Block Access, you have no access to removable media unless it is encrypted. Choosing either Read-Only or Full Access allows you to decide what media to encrypt. If you choose not to encrypt removable storage and this policy is set to Full Access, you have full read/write access to removable media. If you choose not to encrypt...</td>
</tr>
</tbody>
</table>
removable media and this policy is set to Read-Only, you cannot read or delete existing files on the unencrypted media, but no files can be edited on, or added to, the media unless it is encrypted.

**EMS Block Access to UnShieldable Media**

Block access to any removable media that is less than 55 MB and thus has insufficient storage capacity to host Encryption External Media (such as a 1.44MB floppy disk). All access is blocked if EMS Encrypt External Media and this policy are both selected. If EMS Encrypt External Media is True, but this policy is False, data can be read from the unencryptable media, but write access to the media is blocked. If EMS Encrypt External Media is False, then this policy has no effect and access to unencryptable media is not impacted.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Encryption Settings</td>
<td></td>
<td>This technology allows definition of what media encryption events to retain in logs.</td>
</tr>
</tbody>
</table>

| Event Retention | | "security", "Fail", "30" "security", "success", "30" "application", "error", "30" "application", "warn", "15" "application", "info", "5" "application", "debug", "5" Defines the amount of time (in days) that Encryption External Media, and PCS event types are maintained in the event log. Each event type is defined by category and level. You may set different retention times for each event level in each category. The Security category represents events related to user authentication, authorization, or encryption. This includes events for Dell-encrypting devices, updating security policies, or failed authentication attempts. Security events are further differentiated by a fail or success indicating the outcome of the event. The Application category (application type event, rather than a security type event) represents events related to general application actions. These events are further differentiated by a set of severity levels - error, warn, info, and debug. You should use longer retention times for more |

See advanced settings
Removable Media Policies that Require Logoff

- Windows Media Encryption
- EMS Scan External Media
- EMS Encryption Algorithm
- EMS Exclude CD/DVD Encryption
- EMS Data Encryption Key

Advanced Removable Media Encryption

A note about Removable Media Encryption policies: Mac Media Encryption policies are device-based policies. This is different behavior than Windows Media Encryption, which are user-based.

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Media Encryption</td>
<td>Off</td>
<td>This policy must be selected to use all other removable media policies. Not Selected means that no encryption of removable media takes place, regardless of other policy values.</td>
</tr>
<tr>
<td>EMS Exclude CD/DVD Encryption</td>
<td>Not Selected</td>
<td>False encrypts CD/DVD devices.</td>
</tr>
<tr>
<td>EMS Allow Read-access to unShielded Media (5.4.x Only)</td>
<td>Selected</td>
<td>This policy applies to 5.4.x Windows Encryption clients only. More... If a user chooses not to encrypt media and this policy is set to True, they are able to read or delete existing files on the media that are not encrypted, but the client does not allow any files to be edited on or added to the media unless it is Dell-encrypted.</td>
</tr>
<tr>
<td>EMS Encryption Algorithm</td>
<td>AES256</td>
<td>AES 256, AES 128, 3DES Encryption algorithm used to encrypt removable media. Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES.</td>
</tr>
<tr>
<td>EMS Data Encryption Key</td>
<td>User Roaming</td>
<td>Common, User, User Roaming Choose a key to be used by the Encryption client to encrypt all data encrypted by the Encryption External Media. More... You cannot save a policy where this policy has the same value as either User Data Encryption Key policy or Application Data Encryption Key policy, the error message Policy Constraint Violation: The value for EMS Data Encryption Key conflicts with User Data Encryption Key and/or Application Data Encryption Key will display.</td>
</tr>
<tr>
<td>EMS Automatic Authentication</td>
<td>Disabled</td>
<td>Disabled, Local, Roaming Local automatic authentication allows the encrypted media to be automatically authenticated when inserted in the originally encrypting computer when the owner of that media is logged in. When automatic</td>
</tr>
<tr>
<td><strong>EMS Access Encrypted Data on unShielded Device</strong></td>
<td><strong>Selected</strong></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>authentication is Disabled, users must always manually authenticate to access encrypted media. Not Selecting Roaming automatic authentication helps to prevent users from forgetting their password when they take the media home or share it with a colleague. Not selecting Roaming automatic authentication also promotes a sense of awareness from a security perspective for users that the data being written to that media is protected.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EMS Device Whitelist

**String - Maximum of 150 devices with a maximum of 500 characters per PNPDeviceID. Maximum of 2048 total characters allowed. Spaces and "Enter" characters count in the total characters used.**

This policy allows the specification of removable media devices to exclude from encryption [using the device's Plug and Play device identifier (PNPDeviceID)], thereby allowing users full access to the specified removable media devices.

This policy is available on an Enterprise, Domain, Group, and User level. Local settings override inherited settings. If a user is in more than one group, all EMS Device Whitelist entries, across all Groups, apply.

This policy is particularly useful when using removable media devices which provide hardware encryption. However, this policy should be used with caution. This policy does not check whether external media devices on this list provide hardware encryption. Whitelisting removable storage devices that do not have hardware encryption do not have enforced security and are not protected.

For example, the Kingston® DataTraveler® Vault Privacy model enforces that encryption is enabled to use the device. However, the Kingston DataTraveler Vault model has an unsecured partition and a secured partition. Because it is the same physical removable media device with only one PNPDeviceID, the two partitions cannot be distinguished, meaning that whitelisting this particular device would allow unencrypted data to leave the endpoint.

Additionally, if a removable media device is encrypted and is subsequently added to the EMS Device Whitelist policy, it remains encrypted and requires a reformat of the device to remove encryption. The following is an example of a PNPDeviceID, which contains the manufacturer identifier, product identifier, revision, and hardware serial number:

```
USB3.10\07005831\A8004B48G
```

To whitelist a removable media device, provide a string value that matches portions of the device's PNPDeviceID. Multiple device PNPDeviceIDs are allowed.

For example, to whitelist all Kingston DataTraveler Vault Privacy models, input the string:

```
PROD_DTVault_Privacy
```

To whitelist both models of Kingston DataTraveler, the Vault and Vault Privacy models, input the string:

```
PROD_DTVault_Privacy;
PROD_DT_Vault
```

Space characters are considered part of the substring to match to a PNPDeviceID. Using the previous PNPDeviceID as an example, a space before and after the semicolon would cause neither of the substrings to be matched, because the space character is not part of the PNPDeviceID.

### Instructions

To find the PNPDeviceID for removable media:

1. Right-click the removable storage drive in Device Manager > View > Show Hidden Devices.
2. Right-click the removable storage drive and select Properties.
3. Select the Hardware tab > Device Installation Options > Advanced Device Installation Options....
4. Click Device ID Information....
5. Copy the PNPDeviceID and paste into the EMS Device Whitelist policy.
1. Insert the removable media device into an encrypted computer.
2. Open the EMS\Service.Log in C:\Programdata\Dell\Dell Data Protection\Encryption\EMS.
3. Find PNPDeviceID=

For example:
14.03.18 18:50:06.834 [I] [Volume "F:\"] PnPDeviceID = USBSTOR\DISK&VEN_SEAGATE&PROD_USB&REV_0409\2HC015KJ&0
VEN=Vendor; Green highlighted text is for the vendor to be excluded
PROD=Product/Model Name; Adding text highlighted blue also excludes all of Seagate’s USB drives
REV=Firmware Revision; Adding text highlighted gray also excludes the specific model being used
Serial number (in this example); Adding text highlighted yellow excludes just this device

OR

To find the PNPDeviceID for removable media on Windows 7 or later:
1. Insert the removable media device.
2. Open the Control Panel and go to Administrative Tools > Computer Management.
3. Select the Hardware tab, select the drive, and click Properties.

The PNPDeviceID is displayed in Value.

### Available Delimiters:
- Tabs
- Commas
- Semi colons
- Hex character 0x1E (Record separator character)

| EMS Alpha Characters Required in Password | Selected | Selected requires one or more letters in the password. |
| EMS Mixed Case Required in Password | Selected | Selected requires at least one uppercase and one lowercase letter in the password. |
| EMS Number of Characters Required in Password | | 1-40 characters Minimum number of characters required in the password. |
| EMS Numeric Characters Required in Password | Selected | Selected requires one or more numeric characters in the password. |
| EMS Password Attempts Allowed | 3 | 1-10 Number of times the user can attempt to enter the correct password. |
| EMS Special Characters Required in Password | Not Selected | Selected requires one or more special characters in the password. |
| EMS Access and Device Code Length | 16 | 8, 16, 32 Number of characters access and device codes have. 32 characters is the most secure, while 8 is the easiest to enter. |
| EMS Access Code Attempts Allowed | 3 | 1-10 Number of times the user can attempt to enter the access code. |
| EMS Access Code Failure Action | Apply Cooldown | Apply Cooldown, Wipe Encryption Keys Action to take following unsuccessful EMS Access Code Attempts Allowed:
- Apply Cooldown to allow another round of attempts following the specified cooldown period (EMS Cooldown Time Delay and EMS Cooldown Time Increment policies) |
| EMS Access Code Required Message | **String** - 5-512 characters - Authentication Failed: Please contact your system administrator. Message that displays when a user needs to contact you for an access code (after authentication failure). |
| EMS Cooldown Time Delay | **0-5000 seconds** - Number of seconds the user must wait before attempting to enter the access code after failing the specified number of times. |
| EMS Cooldown Time Increment | **0-5000 seconds** - Incremental time to add to the cooldown time each time the user fails to enter the correct access code in the specified number of attempts. |
| EMS Access Code Failed Message | **String** - 5-512 characters - You are not authorized to use this media. Please contact your system administrator. Message that displays following unsuccessful Access Code Attempts Allowed. |
| EMS Encryption Rules | Encryption rules to be used to encrypt/not encrypt certain drives, directories, and folders. A total of 2048 characters are allowed. "Space" and "Enter" characters used to add lines between rows count as characters used. Any rules exceeding the 2048 limit are ignored. See Encryption Rules for information. Storage devices which incorporate multi-interface connections, such as Firewire, USB, eSATA, etc. may require the use of both EMS and encryption rules to encrypt the endpoint. This is necessary due to differences in how the Windows operating system handles storage devices based on interface type. To ensure encrypting an iPod via EMS does not make the device unusable, use the following rules: `-R#:\Calendars`  `-R#:\Contacts`  `-R#:\iPod_Control`  `-R#:\Notes`  `-R#:\Photos`  You can also force encryption of specific file types in the directories above. Adding the following rules will ensure that ppt, pptx, doc, docx, xls, and xlsx files are encrypted in the directories excluded from encryption via the previous rules: `^R#:\Calendars`  `;ppt.doc`  `.xls.pptx`  `.docx.xlsx`  `^R#:\Contacts`  `;ppt`  `.doc.xlx`  `.pptx.docx`
Replacing these five rules with the following rule will force encryption of ppt, pptx, doc, docx, xls, and xlsx files in any directory on the iPod, including Calendars, Contacts, iPod_Control, Notes, and Photos:

```
^R#:\;ppt.doc.xls.pptx.docx.xlsx
```

These rules disable or enable encryption for these folders and file types for all removable devices - not just an iPod. Use care when defining rules to exclude an iPod from encryption.

These rules have been tested against the following iPods:
- iPod Video 30gb fifth generation
- iPod Nano 2gb second generation
- iPod Mini 4gb second generation

Dell does not recommend the use of the iPod Shuffle, as unexpected results may occur.

As iPods change, this information could also change, so caution is advised when allowing the use of iPods on EMS-enabled computers.

Because folder names on iPods are dependent on the model of the iPod, Dell recommends creating an exclusion encryption policy which covers all folder names, across all iPod models.

---

**Mac Media Encryption**

This technology works on Mac computers using Dell Encryption External Media to encrypt data on removable devices, which can be accessed using a user-defined password. These policies allow configuration of the Encryption External Media password requirements and the removable media allowed.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac Media Encryption</td>
<td>Off</td>
<td>Toggle On to enable Mac Removable Media Encryption policies. If this policy is toggled to OFF, no Mac Removable Media Encryption takes place, regardless of other policies.</td>
</tr>
<tr>
<td>EMS Encryption Algorithm</td>
<td>AES256</td>
<td>AES 256, AES 128, 3DES Encryption algorithm used to encrypt removable storage. Encryption algorithms in order of speed, fastest first, are AES 128, AES 256, 3DES.</td>
</tr>
<tr>
<td>EMS Data Encryption Key</td>
<td>User Roaming</td>
<td>Common, User, User Roaming <strong>Although Common is available, it is not implemented in this release.</strong> Choose a key to be used by the Encryption client to encrypt all data encrypted by the Encryption External Media.</td>
</tr>
<tr>
<td>EMS Alpha Characters Required in Password</td>
<td>Selected</td>
<td>Selected requires one or more letters in the password.</td>
</tr>
<tr>
<td>EMS Mixed Case Required in Password</td>
<td>Selected</td>
<td>Selected requires at least one uppercase and one lowercase letter in the password.</td>
</tr>
<tr>
<td>EMS Number of Characters Required in Password</td>
<td>8</td>
<td>1-40 characters Minimum number of characters required in the password.</td>
</tr>
<tr>
<td>EMS Numeric Characters Required</td>
<td>Selected</td>
<td>Selected requires one or more numeric characters in the password.</td>
</tr>
<tr>
<td>Policy</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>EMS Password Attempts Allowed</strong></td>
<td>3</td>
<td>Number of times the user can attempt to enter the correct password.</td>
</tr>
<tr>
<td><strong>EMS Special Characters Required in Password</strong></td>
<td>Not Selected</td>
<td>Selected requires one or more special characters in the password.</td>
</tr>
<tr>
<td><strong>EMS Access and Device Code Length</strong></td>
<td>16</td>
<td>Number of characters access and device codes have. 32 characters is the most secure, while 8 is the easiest to enter.</td>
</tr>
<tr>
<td><strong>EMS Access Code Attempts Allowed</strong></td>
<td>3</td>
<td>Number of times the user can attempt to enter the access code.</td>
</tr>
</tbody>
</table>
| **EMS Access Code Failure Action**   | Apply Cooldown | Action to take following unsuccessful Access Code Attempts Allowed:  
  - Apply Cooldown to allow another round of attempts following the specified cooldown period (Cooldown Time Delay and Cooldown Time Increment policies)  
  - Wipe Encryption Keys to have the Encryption client delete the encryption keys on the removable storage, making the encrypted data inaccessible until the owner takes the media to a Dell-encrypted computer for which he has a login. |
| **EMS Access Code Required Message** | String  | 5-512 characters - Authentication Failed: Please contact your system administrator.  
  More...  
  Message policies must have non-blank values.  
  "Space" and "Enter" characters used to add lines between rows count as characters used. Messages over the 512 character limit are truncated on the client.  
  Optionally customize the second sentence of the message to include specific instructions about how to contact the help desk or security administrator for authentication failures. |
| **EMS Cooldown Time Delay**          | 30      | Number of seconds the user must wait between the first and second rounds of access code entry attempts. |
| **EMS Cooldown Time Increment**      | 20      | Incremental time to add to the previous cooldown time after each unsuccessful round of access code entry attempts. |
| **EMS Access Code Failed Message**   | String  | You are not authorized to use this media. Please contact your system administrator.  
  More...  
  Message policies must have non-blank values.  
  "Space" and "Enter" characters used to add lines between rows count as characters used. Messages over the 512 character limit are truncated on the client.  
  Optionally customize the message to include specific instructions about how to contact the help desk or security administrator. |
| **EMS Encryption Rules**             | Encryption rules to be used to encrypt/not encrypt certain drives, directories, and folders.  
  A total of 2048 characters are allowed. "Space" and "Enter" characters used to add lines between rows count as characters used. Any rules exceeding the 2048 limit are ignored.  
  See [Encryption Rules](#) for information.  
  More...  
  Storage devices which incorporate multi-interface connections, such as Firewire, USB, eSATA, etc. may require the use of both EMS and encryption rules to encrypt the endpoint. This is necessary due to differences in how the Windows operating system handles storage devices based on interface type.  
  To ensure encrypting an iPod via EMS does not make the device... |

---

Manage Policies
You can also force encryption of specific file types in the directories above. Adding the following rules will ensure that ppt, pptx, doc, docx, xls, and xlsx files are encrypted in the directories excluded from encryption via the previous rules:

```
^R#:\Calendars
^-R#:ppt.doc
^-R#:xls.pptx
^-R#:docx.xlsx
^R#:\Contacts
^-R#:ppt
^-R#:doc.xls
^-R#:pptx.docx
^-R#:xlsx
^R#:\iPod_Control
^-R#:ppt.doc
^-R#:xls.pptx
^-R#:docx.xlsx
^R#:\Notes
^-R#:ppt.doc
^-R#:xls.pptx
^-R#:docx.xlsx
^R#:\Photos
^-R#:ppt.doc
^-R#:xls.pptx
^-R#:docx.xlsx
```

Replacing these five rules with the following rule will force encryption of ppt, pptx, doc, docx, xls, and xlsx files in any directory on the iPod, including Calendars, Contacts, iPod_Control, Notes, and Photos:

```
^R#:;ppt.doc.xls.pptx.docx.xlsx
```

These rules disable or enable encryption for these folders and file types for all removable devices - not just an iPod. Use care when defining rules to exclude an iPod from encryption. These rules have been tested against the following iPods:
- iPod Video 30gb fifth generation
- iPod Nano 2gb second generation
- iPod Mini 4gb second generation

Dell does not recommend the use of the iPod Shuffle, as unexpected results may occur. As iPods change, this information could also change, so caution is advised when allowing the use of iPods on EMS-enabled computers. Because folder names on iPods are dependent on the model of the iPod, Dell recommends creating an exclusion encryption policy which covers all folder names, across all iPod models.
Manages Policies

Forgetting their password when they take the media home or share it with a colleague. Disabling Roaming Authentication also promotes a sense of awareness from a security perspective for users that the data being written to that media is protected.

EMS Access Encrypted Data on unShielded Device

| Selected | Selected allows the user to access encrypted data on removable storage whether the endpoint is encrypted or not. When this policy is Not Selected, the user can work with encrypted data when logged on to any encrypted endpoint. The user cannot work with encrypted data using any unencrypted device. |

EMS Device Whitelist

| String - Maximum of 150 devices with a maximum of 500 characters per PNPDeviceID. Maximum of 2048 total characters allowed. "Space" and "Enter" characters count in the total characters used. This policy allows the specification of removable media devices to exclude from encryption [using the device’s Plug and Play device identifier (PNPDeviceID)], thereby allowing users full access to the specified removable media devices. More... This policy is available on an Enterprise, Domain, Group, and User level. Local settings override inherited settings. If a user is in more than one group, all EMS Device Whitelist entries, across all Groups, apply. This policy is particularly useful when using removable media devices which provide hardware encryption. However, this policy should be used with caution. This policy does not check whether external media devices on this list provide hardware encryption. Whitelisting removable storage devices that do not have hardware encryption do not have enforced security and are not protected. For example, the Kingston® DataTraveler® Vault Privacy model enforces that encryption is enabled to use the device. However, the Kingston DataTraveler Vault model has an unsecured partition and a secured partition. Because it is the same physical removable media device with only one PNPDeviceID, the two partitions cannot be distinguished, meaning that whitelisting this particular device would allow unencrypted data to leave the endpoint. Additionally, if a removable media device is encrypted and is subsequently added to the EMS Device Whitelist policy, it remains encrypted and requires a reformat of the device to remove encryption. The following is an example of a PNPDeviceID, which contains the manufacturer identifier, product identifier, revision, and hardware serial number: USBSTOR\DISK\VEN_KINGSTON &PRD\DTVAULT_PRIVACY REV_1.0;07005B31A8004B80 To whitelist a removable media device, provide a string value that matches portions of the device’s PNPDeviceID. Multiple device PNPDeviceIDs are allowed. For example, to whitelist all Kingston DataTraveler Vault Privacy models, input the string: PROD_DTVault_PRIVACY To whitelist both models of Kingston DataTraveler, the Vault and Vault Privacy models, input the string: PROD_DTVault_PRIVACY; PRIDD TVAULT Space characters are considered part of the substring to match to a PNPDeviceID. Using the previous PNPDeviceID as an example, a space before and after the semicolon would cause neither of the substrings to be matched, because the space character is not part of the PNPDeviceID. Instructions... 1. Insert removable media. 2. Open System Profiler. 3. Under Hardware, select the device and find the Product ID and Vendor ID, as follows: Capacity:2.06 GB (2,055,019,008 bytes) |
Removable Media: Yes
Detach Drive: Yes
BSD Name: disk2
Product ID: 0x5406
Vendor ID: 0x0781 (SanDisk Corporation)
Version: 0.10
Serial Number: 0000188C36725BC8
Speed: Up to 480 Mb/sec
Manufacturer: SanDisk
Location ID: 0x24100000
Current Available (mA): 500
Current Required (mA): 200
Partition Map Type: MBR (Master Boot Record)
S.M.A.R.T. status: Not Supported

The following whitelist rules can be used:
- USBVendorName=abc
- USBVendorNum=0x02
- USBVendorNum=2, USBProductNum=3
- USBVendorNum=2, USBProdName=abc

For this example, add the following key/pair string to the EMS Device whitelist policy, as shown below:
"USBVendorNum=0x0781, USBProductNum=0x5406"
(including quotes)

5. When satisfied with the EMS Device Whitelist rules, save and commit the policy.

EMS Trust for Unsupported File Systems
- Ignore

Restricted user list for access to unencrypted media
- Dictionary

Restrict Access to Unencrypted Media
- Full

See basic settings

Removable Media Policies that Require Logoff
- Windows Media Encryption
- EMS Scan External Media
- EMS Encryption Algorithm
- EMS Exclude CD/DVD Encryption
- EMS Data Encryption Key

Mac Encryption

Mac Encryption
Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Volume Encryption</td>
<td>On</td>
<td>This technology allows the use of either Mac FileVault full disk encryption or Dell’s proprietary Dell Volume Encryption.</td>
</tr>
<tr>
<td>Encrypt Using FileVault for Mac</td>
<td>Not Selected</td>
<td>If selected, FileVault is enabled to encrypt all volumes including System Volumes and Fusion Drives.</td>
</tr>
<tr>
<td>Workstation Scan Priority</td>
<td>Normal</td>
<td>Specifies the relative priority of encrypted folder scanning. High and Highest prioritize scanning speed over computer responsiveness, Low and Lowest prioritize computer responsiveness over scanning speed and favor other resource-intensive activities, and Normal balances the two. The Encryption client checks for a changed Workstation Scan Priority before processing the next file. This policy applies to Dell Encryption, not FileVault encryption.</td>
</tr>
</tbody>
</table>

See [advanced settings](#).

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mac Global Settings</td>
<td>All Fixed Volumes</td>
<td>This technology defines Mac encryption behavior, including targeted volumes, polling intervals, and restart policies.</td>
</tr>
<tr>
<td>Volumes Targeted for Encryption</td>
<td>All Fixed Volumes</td>
<td>The System Volume Only setting secures only the currently running system volume.</td>
</tr>
<tr>
<td>Policy Proxy Connections</td>
<td>String</td>
<td>List fully qualified Policy Proxy hostnames, or IP addresses, separated by carriage returns.</td>
</tr>
</tbody>
</table>

String - maximum of 1500 characters

More...

Once the Encryption client finds a valid entry, the remainder of the entries are ignored.

Entries are processed in the following order:
1. GKConnections Override (this registry entry overrides all other entries)
2. GKConnections (this registry entry is set automatically by the Encryption client, based on the this policy)
3. GK
   This policy works in conjunction with the Policy Proxy Polling Interval policy.
   You cannot specify ports in this policy.
   The Encryption client communicates with Policy Proxies using the GKPORT specified during client installation (the default is 8000).
   Inherited values for this policy accumulate.
   For the Encryption client to connect to a Policy Proxy specified in this policy, it must be in the same group as the Policy Proxy specified during client installation.
   Because the Shield supports up to 255 users per endpoint, this policy is available only at the Enterprise level.

<table>
<thead>
<tr>
<th>Policy Proxy Polling Interval</th>
<th>360</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1440 minutes</td>
<td></td>
</tr>
<tr>
<td>The interval that the Encryption client attempts to poll Policy Proxy for policy updates, and send inventory information to Policy Proxy. Setting the Policy Proxy Polling Interval below 60 minutes is not recommended, due to potential degradation of performance. The Encryption client also attempts to poll Policy Proxy each time a user logs on.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Force Restart on Policy Updates</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>If this policy is set to Selected, the Encryption client will force a computer restart after the specified delay upon receiving a policy update requiring a restart. The delay is specified by the Length of Each Restart Delay and Number of Restart Delays Allowed policies. If this policy is set to Not Selected, the Encryption client will neither force nor prompt for a restart. The policy requiring the restart will take effect the next time the user restarts their computer.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Each Restart Delay</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>If Force Restart on Policy Updates is set to Selected, this value is the number of minutes the user can delay the restart before another restart prompt is displayed. If Force Restart on Policy Updates is set to Not Selected, this policy is ignored. More... The Encryption client displays the</td>
<td></td>
</tr>
</tbody>
</table>
**Manage Policies**

Restart prompt for five minutes each time. If the user does not respond to the prompt, the prompt is dismissed and next delay begins. If the five-minute timer expires and no restart delays remain, the computer restarts immediately.

Tip: Calculate the maximum possible delay as follows (a maximum delay would involve the user responding to each delay prompt immediately prior to the 5-minute mark):

\[(\text{Number of Reboot Delays Allowed} \times \text{Length of Each Reboot Delay}) + (5 \text{ minutes} \times (\text{Number of Reboot Delays Allowed} + 1))\]

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Restart Delays Allowed</td>
<td>3</td>
<td>If Force Restart on Policy Update is set to Selected, this value is the number of times the user can delay the restart. If this policy is set to &quot;0&quot;, the Encryption client prompts the user to restart immediately and forces the restart if the user does not acknowledge the prompt within five minutes. If Force Restart on Policy Updates is set to Not Selected, this policy is ignored.</td>
</tr>
</tbody>
</table>

**Advanced Mac Encryption**

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Volume Encryption</td>
<td>On</td>
<td>This technology allows the use of either Mac FileVault full disk encryption or Dell's proprietary Dell Volume Encryption.</td>
</tr>
<tr>
<td>Workstation Scan Priority</td>
<td>Normal</td>
<td>Specifies the relative Mac priority of encrypted folder scanning. High and Highest prioritize scanning speed over computer responsiveness, Low and Lowest prioritize computer responsiveness over scanning speed and favor other resource-intensive activities, and Normal balances the two. The Encryption client checks for a changed Workstation Scan Priority before processing the next file.</td>
</tr>
<tr>
<td>Encryption Algorithm</td>
<td>AES256</td>
<td>Encryption algorithm used to encrypt data at the endpoint (all users) level. Encryption algorithms in order of speed, fastest</td>
</tr>
</tbody>
</table>
first, are AES 128, AES 256.
NOTE: This policy applies to Dell Encryption, not FileVault encryption.

<table>
<thead>
<tr>
<th>Firmware Password Mode</th>
<th>Required</th>
<th>Specify if the firmware password in older hardware is optional or required for Dell Volume Encryption.</th>
</tr>
</thead>
</table>

| FileVault 2 Policy Conflict Behavior | Ignore | Ignore, Report, Convert
Specify behavior when volume is Dell encrypted and policy is for FV2 encryption.
Ignore – Default behavior, Dell encrypted volumes are reported as protected if the policy requires FV2 encryption.
Report – Conflicted volumes are reported as unprotected.
Convert – Dell encrypted volumes are converted to FV2 volumes and reported as unprotected while converting. |

See basic settings

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**Mac Global Settings**
This technology defines Mac encryption behavior, including targeted volumes, polling intervals, and restart policies.

| Max Password Delay | 300 | 0–32400 seconds
Limits the maximum delay in seconds that can be set in the system preferences “max password delay after screen saver or sleep” of the Security panel. |
|-------------------|-----|------------------------------------------------------------------|

<table>
<thead>
<tr>
<th>Delay Authentication</th>
<th>Not Selected</th>
<th>If Selected, users are not prompted to activate or authenticate to the Dell Server until required, such as to use media encrypted with Encryption External Media.</th>
</tr>
</thead>
</table>

| No Auth User List | Dictionary | Users matching this dictionary are not required to activate or authenticate to the Dell Server.
Example:
<key>NoAuthenticateUsers</key>
<dict>
<key>dsAttrTypeStandard:AuthenticationAuthority</key>
<string>;Kerberosv5;;@students.school.edu;students.school.edu</string>
</dict> |

| FileVault 2 PBA User List | Dictionary | Users matching this dictionary are allowed to add themselves to FileVault Preboot Authentication.
Example:
<key>FV2PBAUsers</key>
<dict>
<key>dsAttrTypeStandard:AuthenticationAuthority</key>
<string>;Kerberosv5;;@students.school.edu;students.school.edu</string>
</dict> |

---

**Port Control**

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Manage Policies

### Windows Port Control

This technology allows for control of all the physical ports on a Windows computer (disable/enable/bypass), and can be customized by port type.

<table>
<thead>
<tr>
<th>Port: Express Card Slot</th>
<th>Enabled</th>
<th>Enable, Disable, or Bypass ports exposed through the Express Card Slot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port: USB</td>
<td>Enabled</td>
<td>Enable, Disable, or Bypass port access to external USB ports. USB port-level blocking and HID class-level blocking is only honored if we can identify the computer chassis as a laptop/notebook form-factor. We rely on the computer's BIOS for the identification of the chassis.</td>
</tr>
<tr>
<td>Port: eSATA</td>
<td>Enabled</td>
<td>Enable, Disable, or Bypass port access to external SATA ports.</td>
</tr>
<tr>
<td>Class: Storage</td>
<td>Enabled</td>
<td>PARENT to the next 3 policies. Set this policy to Enabled to use the next 3 Subclass Storage policies. Setting this policy to Disabled disables all 3 Subclass Storage policies - no matter what their value.</td>
</tr>
</tbody>
</table>

See [advanced settings](#)

### Windows Device Control

This technology allows for control of all the devices on a Windows computer (disable/enable), and can be customized by device type.

<table>
<thead>
<tr>
<th>Class: Windows Portable Device (WPD)</th>
<th>Enabled</th>
<th>PARENT to the next policy. Set this policy to Enabled to use the Subclass Windows Portable Device (WPD): Storage policy. Setting this policy to Disabled disables the Subclass Windows Portable Device (WPD): Storage policy - no matter what its value. Control access to all Windows Portable Devices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class: Human Interface Device (HID)</td>
<td>Enabled</td>
<td>Control access to all Human Interface Devices (keyboards, mice).</td>
</tr>
</tbody>
</table>
USB port-level blocking and HID class-level blocking is only honored if we can identify the computer chassis as a laptop/notebook form-factor. We rely on the computer's BIOS for the identification of the chassis.

See advanced settings

Advanced Port Control

Policy descriptions also display in tooltips in the Management Console. In this table, master policies are in bold font.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows Port Control</td>
<td></td>
<td>This technology allows for control of all the physical ports on a Windows computer (disable/enable/bypass), and can be customized by port type.</td>
</tr>
<tr>
<td>Subclass Storage: External Drive Control</td>
<td>Full Access</td>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. This policy interacts with EMS Access to unShielded Media policy. If you intend to have Full Access to media, also set this policy to Full Access to ensure that the media is not set to read only and the port is not blocked. Full Access: External Drive port does not have read/write data restrictions applied. Read Only: Allows read capability. Write data is disabled. Blocked: Port is blocked from read/write capability. This policy is endpoint-based and cannot be overridden by user policy.</td>
</tr>
<tr>
<td>Subclass Storage: Optical Drive Control</td>
<td>UDF Only</td>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. Full Access: Optical Drive port does not have read/write data restrictions applied. UDF Only: Blocks all data writes that are not in the UDF format (CD/DVD burning, ISO burning). Read data is enabled. Read Only: Allows read capability. Write data is disabled. Blocked: Port is blocked from read/write capability. This policy is endpoint-based and cannot be overridden by user policy. Universal Disk Format (UDF) is an implementation of the specification known as ISO/IEC 13346 and ECMA-167 and is an open vendor-neutral file system format.</td>
</tr>
</tbody>
</table>

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Manage Policies

<table>
<thead>
<tr>
<th>Subclass Storage: Floppy Drive Control</th>
<th>Read Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD of Class: Storage. Class: Storage must be set to Enabled to use this policy. Full Access: Floppy Drive port does not have read/write data restrictions applied. Read Only: Allows read capability. Write data is disabled. Blocked: Port is blocked from read/write capability. This policy is endpoint-based and cannot be overridden by user policy.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port: PCMCIA</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable, Disable, or Bypass port access to PCMCIA ports.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port: Firewire (1394)</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable, Disable, or Bypass port access to external Firewire (1394) ports.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port: SD</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable, Disable, or Bypass port access to SD card ports.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port: Memory Transfer Device (MTD)</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable, Disable, or Bypass access to Memory Transfer Device (MTD) ports.</td>
<td></td>
</tr>
</tbody>
</table>

Windows Device Control
This technology allows for control of all the devices on a Windows computer (disable/enable), and can be customized by device type.

<table>
<thead>
<tr>
<th>Class: Other</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control access to all devices not covered by other Classes.</td>
<td></td>
</tr>
</tbody>
</table>

See basic settings

Global Settings
Global Settings policies are available at the Enterprise, Endpoint Groups, and Endpoints levels. All Global Settings policies are endpoint-based, meaning the policies follow the endpoint, not the user.

Audit Control policies are available at the Enterprise, Endpoint Groups, Endpoints, User Groups, and Users levels.

Policy descriptions also display in tooltips in the Management Console.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Settings</strong></td>
<td></td>
<td>This technology allows control over general settings such as polling intervals, support dialogs, in-app feedback, auto updates, data auditing, and client retention periods.</td>
</tr>
<tr>
<td>Device Lease Period</td>
<td>30</td>
<td>Defines the period of inactivity (in days) before any activated entity (a user, endpoint, or policy proxy) is</td>
</tr>
</tbody>
</table>
automatically removed from management. The inactivity period is based on the number of days since the Dell Server last received inventory information from the activated entity. Once removed, the entity is no longer included in reports, statistics, and other administrative views. If the activated entity communicates with the Dell Server after the inactivity period has expired, it returns to being in a managed state. The Dell Server always keeps encryption keys in escrow, even for removed endpoints. This ensures recoverability of data through various workflows, such as re-activation and forensic analysis.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable In-App Feedback</td>
<td>Not selected</td>
<td>When selected, a user can submit feedback and satisfaction ratings to Dell via a link within the application to a web form.</td>
</tr>
<tr>
<td>Server Polling Interval</td>
<td>360 minutes</td>
<td>1-1440 minutes How often in minutes the Manager client attempts to contact the Dell Server for updates.</td>
</tr>
<tr>
<td>Custom Support Dialog</td>
<td>String</td>
<td>Customizable text that provides information for users to contact IT support for the organization. This allows a maximum of 10,000 characters, which can be four lines with a maximum of 2500 characters each. The text cannot contain line feeds, Enters, or similar characters unless they are escaped.</td>
</tr>
<tr>
<td>Dell Data Security Auto Updates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enable Software Auto Updates</td>
<td>Not Selected</td>
<td>Selected enables the client update agent to automatically check for updates to Dell security software. If this policy is not selected, no Dell Auto Updates take place, regardless of other policies. If this policy is set, the Update Staging Location must have a network location in its value.</td>
</tr>
<tr>
<td>Update Staging Location</td>
<td>String</td>
<td>String Network location (UNC) where Dell Server stages Dell update packages. If a network location is not specified in this policy, the Enable Software Auto Updates policy should not be published.</td>
</tr>
</tbody>
</table>

See [advanced settings](#).

Audit Control Policies

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Retention Period</td>
<td>30 days</td>
<td>1-365 days. 30 days default. Specifies the number of days that the client will hold on to audit data without transmission.</td>
</tr>
</tbody>
</table>
Manage Policies

Client Retention Storage

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Retention Storage</td>
<td>512</td>
<td>Megabytes of storage space. Specifies the maximum storage space used by the client for audit data without transmission.</td>
</tr>
</tbody>
</table>

See advanced settings

Advanced Global Settings

Global Settings policies are available at the Enterprise, Endpoint Groups, and Endpoints levels. All Global Settings policies are endpoint-based, meaning the policies follow the endpoint, not the user.

Audit Control policies are available at the Enterprise, Endpoint Groups, Endpoints, User Groups, and Users levels.

Policy descriptions also display in tooltips in the Management Console.

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<tr>
<th>Policy</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings</td>
<td></td>
<td>This technology allows control over general settings such as polling intervals, support dialogs, in-app feedback, auto updates, data auditing, and client retention periods.</td>
</tr>
</tbody>
</table>

DDP Auto Updates

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Check Period</td>
<td>10080</td>
<td>1-43200 minutes (30 days). The period in minutes between checks for updates.</td>
</tr>
</tbody>
</table>

See basic settings