Revisions

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<th>Version</th>
<th>Description</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2013</td>
<td>1.0</td>
<td>Initial release</td>
<td>Tracy Alonzo</td>
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Executive summary

Remote Office Branch Office can now take advantage of quickly enabling enterprise grade and simple to deploy Wi-Fi access. Dell Networking W-Series Instant Access Points enable a rich Mobility experience for users of notebooks, tablets, phones and other mobile devices.

Dell PowerEdge™ VRTX is a new shared infrastructure product, focused on remote, branch, and small office needs. It combines Dell PowerEdge M520 and M620 server blades, shared storage, and I/O in the form of PCIe and one dedicated I/O Module slot. These elements are combined into a 5U rackable tower, providing a simpler model for Remote Office Branch Office (ROBO) and Small Medium Businesses (SMB) customers to deploy and manage.
1 Introduction

This deployment guide outlines the ease of setting up the Dell Networking W-Series Instant Access Points (IAP) with the Dell PowerEdge VRTX system platform designed for Remote Office Branch Office. The combination of Dell Networking W-Series IAP with Dell PowerEdge VRTX highlights the ability to deliver “Better Together” end-to-end solutions to the Remote Office Branch Office.

The Dell Networking W-Series portfolio is highly scalable and secure, and offers centralized WLAN or Distributed WLAN architectures. You can provide easily managed WLAN, BYOD and Application delivery optimized for your wireless users.
2 Network Topology

Figure 1  Wireless LAN Mobility for small office/branch office with PowerEdge VRTX
3 Networking W-Series Instant Access Point (IAP) Configuration

3.1 Power up and obtain IP address from DHCP server
Connect the Dell W-Series Instant Access Points (IAP) to the Dell Power-over Ethernet (POE) network switch and verify the unit powers up as shown in Figure 2, indicating the IAP is ready to be configured.

![IAP Ready](image)

Figure 2   IAP Ready

3.2 Connect to the instant SSID
The Dell W-Series Mobility Instant Access Point (IAP) advertises the default Service Set Identifier (SSID). From a mobile laptop or tablet network connect to the instant SSID as shown in Figure 3.

![Connecting to Instant SSID](image)

Figure 3   Connecting to Instant SSID
3.3 Logging into Dell Networking W-Series IAP

Open a web browser and navigate to instant.dell-pcw.com to access the Dell Virtual Controller login screen. If you enter any other URL, you are redirected to the same Dell Virtual Controller login screen.

**Note:** Connection to the Internet is required.

Figure 4 shows the Dell Virtual Controller's login screen. Enter Username *admin* and Password *admin*, and then click **Log In**.

After logging in, the Virtual Controller main dashboard appears as shown in Figure 5.

**Note:** This IAP is the only IAP in the network, and is the Master Virtual Controller.
Figure 5 shows the wireless client receiving an IP address from the IAP Virtual Controller. The IAP receives an IP address from the network DHCP in the subnet.

![Virtual Controller Main Dashboard](image)

**3.4 Create New Employee SSID**

From the Virtual Controller main dashboard in Figure 5, under **Network**, click **New** as shown in Figure 6.

![New Employee SSID](image)
3.5 **New WLAN Settings**

In the **New WLAN** screen, enter a name (SSID). In the example below, the SSID is Dell_ROBO. Next to **Primary usage**, select **Employee**, and click **Next** as shown in Figure 7:

![New WLAN Settings](image)

*Figure 7  New WLAN*
3.5.1 Client IP and VLAN Assignment

See Figure 8. For client IP assignment, Network assigned is the default setting. This allows wireless clients connecting to the Employee network to be assigned an IP address from the network.

The client VLAN assignment default setting uses VLAN1 for the wireless client.

![Client IP and VLAN Assignment](image)

Figure 8  Client IP and VLAN Assignment
3.5.2 Security

See Figure 9. Set the **Security Level** slide bar to **Personal**. From the **Key management** field drop down menu, select **WPA-2 Personal**. Enter the passphrase then click **Next**.

**Note:** The IAP Enterprise security setting allows IEEE 802.1x authentication using WPA-2 with AES encryption. Please reference the *Instant Access Point Users Guide*.

![Security Settings Diagram](image-url)

Figure 9  Security Settings
3.6 WLAN Access Settings

Figure 10 illustrates the Access link. The default is **Unrestricted**, allowing wireless clients access to any and all protocols and destinations. Click **Finish**.

**Note:** Dell EMC recommends network access rules and policies be set according to the customer’s unique security policy requirements.

![Access Setting Diagram](image)

3.7 Employee WLAN

See Figure 11. Disconnect the wireless client from Instant SSID. Connect the wireless client to the new wireless network SSID. Notice a wireless client is now associated with the new WLAN and the IP address for...
the wireless client is now assigned by the network DHCP. Once the new WLAN is created and connected to a wireless client, the default Instant SSID is removed.

3.8 Create New Guest SSID

From the Virtual Controller main dashboard in Figure 11, under Network, click New, as shown in Figure 12.

Figure 11  Employee WLAN

Figure 12  New Guest SSID
3.9 **Guest WLAN Setting**

See Figure 13. In the **New WLAN** screen, enter a name in the **Name (SSID)** field. Next to **Primary usage**, select **Guest** and then click **Next**.

![New WLAN screen](image)

**Figure 13**  Guest WLAN
3.9.1 Guest Client IP and VLAN Assignment

See Figure 14. **Virtual Controller assigned** is the default setting. This allows the wireless clients connecting to the Guest network to have the IP address assigned by the Virtual Controller. Click **Next**.

![Client IP & VLAN Assignment](image)

**Figure 14** Guest IP Assignment
3.9.2 Guest Security

Figure 15 illustrates the security-level splash page default requiring username and password entries into the internal database. Click the **Users** link.

---

**Figure 15**  Guest Security Level

See Figure 16. In the **Users** screen, add a new user. Enter the username and password, and then click **OK**.

---

**Figure 16**  Guest User Database
3.9.3 Guest Access

Figure 17 shows the network-based access rules to add. Click New, and then click Finish. The rules will be executed in the order shown.

**Note:** Dell EMC recommends setting network access rules and policies according to the customer's unique security policy requirements.
3.9.4 Connect to the Guest SSID

From a mobile device, connect to the Guest SSID. Open a web browser and connect to any internet website. Figure 18 shows the Guest Welcome page that appears. Agree to the terms, and then enter the user name and password for the guest user.

At this point, users now have an Employee and Guest WLAN to which they can connect.

![Welcome to Guest Network](image)

Figure 18  Guest Welcome Page
Components for this Deployment: (for deployment outside US, equivalent SKU’s are available)

### Table 1  Dell Networking 5524P

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<td>225-0848</td>
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<tr>
<td>Powercord, 125 Volt, 15 Amp, 10 Foot</td>
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<td>330-6870</td>
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<td>Asset Recovery, Program Managed</td>
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### Table 2  Dell Networking W-IAP105

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<td>W-IAP Documentation Kit</td>
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B Additional Resources

B.1 Recommended Dell EMC publications:

Dell Networking W-Series Mobility
Dell Networking W-Series Mobility Support
Microsoft Lync Server 2010 on Dell Systems

B.2 Recommended Microsoft publications:

Microsoft® Lync® Qualified Infrastructure