System Quick Sync Profile
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# System Quick Sync Profile

## 1 Scope

The DCIM SystemQuickSync Profile describes the properties and interfaces for executing system management tasks related to the management of QuickSync/NFC devices within a system. The profile standardizes and aggregates the description for the QuickSync properties into a SystemQuickSync view representation as well as provides static methodology for the clients to query the SystemQuickSync views without substantial traversal of the model.

## 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- DMTF DSP1033, *Profile Registration Profile 1.0.0*
- DMTF DSP0226, *Web Services for Management (WS-Management) Specification 1.1.0*
- DMTF DSP0227, *WS-Management CIM Binding Specification 1.0.0*
- *Dell WSMAN Licenses and Privileges 1.0*
- `DCIM_SystemQuickSyncView.mof`
- `DCIM_LCEnumeration.mof`
- `DCIM_LCRegisteredProfile.mof`

## 3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1 conditional

indicates requirements to be followed strictly in order to conform to the document when the specified conditions are met

### 3.2 mandatory

indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted
3.3 may indicates a course of action permissible within the limits of the document

3.4 optional indicates a course of action permissible within the limits of the document

3.5 referencing profile indicates a profile that owns the definition of this class and can include a reference to this profile in its “Related Profiles” table

3.6 shall indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted

3.7 FQDD Fully Qualified Device Descriptor is used to identify a particular component in a system.

3.8 Interop Namespace Interop Namespace is where instrumentation instantiates classes to advertise its capabilities for client discovery.

3.9 Implementation Namespace Implementation Namespace is where instrumentation instantiates classes relevant to executing core management tasks.

3.10 ENUMERATE Refers to WS-MAN ENUMERATE operation as described in Section 8.2 of DSP0226_V1.1 and Section 9.1 of DSP0227_V1.0

3.11 GET Refers to WS-MAN GET operation as defined in Section 7.3 of DSP00226_V1.1 and Section 7.1 of DSP0227_V1.0
4 Symbols and Abbreviated Terms

4.1 CIM
Common Information Model

4.2 iDRAC
integrated Dell Remote Access Controller – management controller for blades and monolithic servers

4.3 CMC
Chassis Manager Controller – management controller for the modular chassis

4.4 WBEM
Web-Based Enterprise Management

4.5 NFC
Near Field Communication.

5 Synopsis
Profile Name: SystemQuickSync
Version: 1.1.0
Organization: Dell
CIM Schema Version: 2.26 Experimental
Dell Schema Version: 1.0.0
Interop Namespace: root/interop
Implementation Namespace: root/dcim
Central Class: DCIM_SystemQuickSyncView
Scoping Class: DCIM_ComputerSystem

The Dell SystemQuickSync Profile is a component profile that contains the Dell specific implementation requirements for SystemQuickSync view.

DCIM_SystemQuickSyncView shall be the Central Class.

Table 1 identifies profiles that are related to this profile.
6 Description

The Dell SystemQuickSync Profile describes platform’s QuickSync/NFC device. NFC information is represented by an instance of DCIM_SystemQuickSyncView class.

Figure 1 details the class diagram of the Dell SystemQuickSync Profile.
Figure 2 details typical Dell SystemQuickSync Profile implementation for a platform containing QuickSync/NFC devices. In order for client to discover the instrumentation’s support of this profile, SystemQuickSyncProfile is instantiated in the Interop Namespace. SystemQuickSync Profile instance describes the information about the implemented profile: most importantly, the name and version of the profile and the organization name that produced the profile.

QuickSync1 is the SystemQuickSync view representing the QuickSync/NFC device in the Implementation Namespace. They are associated to the Interop namespace’s SystemQuickSync Profile instance.

![Diagram of SystemQuickSync Profile Implementation](attachment:diagram.png)

Figure 2 – SystemQuickSync Profile Implementation
7 Implementation Description

This section describes the requirements and guidelines for implementing Dell SystemQuickSync Profile.

### Table 2 – Class Requirements: SystemQuickSync Profile

<table>
<thead>
<tr>
<th>Element Name</th>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCIM_SystemQuickSyncView</td>
<td>Mandatory</td>
<td>The class shall be implemented in the Implementation Namespace.</td>
</tr>
<tr>
<td>DCIM_LCElementConformsToProfile</td>
<td>Mandatory</td>
<td>The class shall be implemented in the Implementation Namespace.</td>
</tr>
<tr>
<td>DCIM_LCElementConformsToProfile</td>
<td>Mandatory</td>
<td>The class shall be implemented in the Interop Namespace.</td>
</tr>
<tr>
<td>DCIM_LCRegisteredProfile</td>
<td>Mandatory</td>
<td>The class shall be implemented in the Interop Namespace.</td>
</tr>
<tr>
<td>Indications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None defined in this profile</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.1 SystemQuickSync View

This section describes the implementation for the DCIM_SystemQuickSyncView class.

This class shall be instantiated in the Implementation Namespace.

The DCIM_LCElementConformsToProfile association(s) shall reference the DCIM_SystemQuickSyncView instance(s).

#### 7.1.1 Resource URIs for WinRM®

The class Resource URI shall be "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_SystemQuickSyncView?__cimnamespace=root/dcim"

The key property shall be the InstanceID.

The instance Resource URI for DCIM_SystemQuickSyncView instance shall be: "http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_SystemQuickSyncView?__cimnamespace=root/dcim+InstanceID=<FQDD>"

7.1.2 Operations

The following table details the implemented operations on DCIM_SystemQuickSyncView.

Table 3 – DCIM_SystemQuickSyncView - Operations

<table>
<thead>
<tr>
<th>Operation Name</th>
<th>Requirements</th>
<th>Required Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get</td>
<td>Mandatory</td>
<td>Instance URI</td>
</tr>
<tr>
<td>Enumerate</td>
<td>Mandatory</td>
<td>Class URI</td>
</tr>
</tbody>
</table>
### 7.1.3 Properties

The following table details the implemented properties for DCIM_SystemQuickSyncView instance representing a QuickSync/NFC device in a system. The “Requirements” column shall denote the implementation requirement for the corresponding property. If the column “Property Name” matches the property name, the property either shall have the value denoted in the corresponding column “Additional Requirement”, or shall be implemented according to the requirements in the corresponding column “Additional Requirement”.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Requirements</th>
<th>Type</th>
<th>Requirement and description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InstanceID</td>
<td>Mandatory</td>
<td>String</td>
<td>The property value shall be the FQDD property value.</td>
</tr>
<tr>
<td>FQDD</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent, a string containing the Fully Qualified Device Description, a user-friendly name for the object.</td>
</tr>
<tr>
<td>DeviceDescription</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the friendly Fully Qualified Device Description, a user-friendly name for the object.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the name of the organization responsible for producing the QuickSync device.</td>
</tr>
<tr>
<td>SerialNumber</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent a manufacturer-allocated number used to identify the physical element.</td>
</tr>
<tr>
<td>PartNumber</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the part number of the QuickSync device.</td>
</tr>
<tr>
<td>ProductName</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the product name of the QuickSync device.</td>
</tr>
<tr>
<td>Version</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the hardware version of the QuickSync device.</td>
</tr>
<tr>
<td>FWVersion</td>
<td>Mandatory</td>
<td>String</td>
<td>The property shall represent the firmware version of the QuickSync device.</td>
</tr>
</tbody>
</table>

### 7.2 SystemQuickSync Profile Registration

This section describes the implementation for the DCIM_LCRegisteredProfile class.

This class shall be instantiated in the Interop Namespace.

The DCIM_ElementConformsToProfile association(s) shall reference the DCIM_LCRegisteredProfile instance.

#### 7.2.1 Resource URIs for WinRM®

The class Resource URI shall be "http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_RegisteredProfile?__cimnamespace=root/interop"

The key property shall be the InstanceID property.

7.2.2 Operations

The following table details the implemented operations on DCIM_LCRegisteredProfile.

Table 5 – DCIM_LCRegisteredProfile - Operations

<table>
<thead>
<tr>
<th>Operation Name</th>
<th>Requirements</th>
<th>Required Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get</td>
<td>Mandatory</td>
<td>Instance URI</td>
</tr>
<tr>
<td>Enumerate</td>
<td>Mandatory</td>
<td>Class URI</td>
</tr>
</tbody>
</table>

7.2.3 Properties

The following table details the implemented properties for DCIM_LCRegisteredProfile instance representing SystemQuickSync Profile implementation. The “Requirements” column shall denote the implementation requirement for the corresponding property. If the column “Name” matches the property name, the property either shall have the value denoted in the corresponding column “Additional Requirements”, or shall be implemented according to the requirements in the corresponding column “Additional Requirements”.

Table 6 – DCIM_LCRegisteredProfile

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Requirement</th>
<th>String</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>InstanceID</td>
<td>Mandatory</td>
<td>String</td>
<td>DCIM:SystemQuickSync:1.0.0</td>
</tr>
<tr>
<td>RegisteredName</td>
<td>Mandatory</td>
<td>String</td>
<td>This property shall have a value of “SystemQuickSync”.</td>
</tr>
<tr>
<td>RegisteredVersion</td>
<td>Mandatory</td>
<td>String</td>
<td>This property shall have a value of “1.1.0”.</td>
</tr>
<tr>
<td>RegisteredOrganization</td>
<td>Mandatory</td>
<td>Uint16</td>
<td>This property shall have a value of 1 (Other).</td>
</tr>
<tr>
<td>OtherRegisteredOrganization</td>
<td>Mandatory</td>
<td>String</td>
<td>The property value shall match “DCIM”.</td>
</tr>
<tr>
<td>AdvertisedTypes[]</td>
<td>Mandatory</td>
<td>Uint16</td>
<td>This property array shall contain [1(Other), 1 (Other)].</td>
</tr>
<tr>
<td>AdvertiseTypeDescriptions[]</td>
<td>Mandatory</td>
<td>String</td>
<td>This property array shall contain [“WS-Identify”, “Interop Namespace”].</td>
</tr>
<tr>
<td>ProfileRequireLicense[]</td>
<td>Mandatory</td>
<td>String</td>
<td>This property array shall describe the required licenses for this profile.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If no license is required for the profile, the property shall have value NULL.</td>
</tr>
<tr>
<td>ProfileRequireLicenseStatus[]</td>
<td>Mandatory</td>
<td>String</td>
<td>This property array shall contain the status for the corresponding license in the same element index of the ProfileRequireLicense array property. Each array element shall contain:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• “LICENSED”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• “NOT_LICENSED”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If no license is required for the profile, the property shall have value NULL.</td>
</tr>
</tbody>
</table>
8 Methods

9 No methods are defined for this profile and class. Use Cases

See Lifecycle Controller (LC) Integration Best Practices Guide.

10 CIM Elements

No additional details specified.

11 Privilege and License Requirement

The following table describes the privilege and license requirements for the listed operations. For the detailed explanation of the privileges and licenses, refer to the Dell WSMAN Licenses and Privileges specification.

<table>
<thead>
<tr>
<th>Class and Method</th>
<th>Operation</th>
<th>User Privilege Required</th>
<th>License Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCIM_SystemQuickSyncView</td>
<td>ENUMERATE, GET</td>
<td>Login</td>
<td>None</td>
</tr>
<tr>
<td>DCIM_LCRegisteredProfile</td>
<td>ENUMERATE, GET</td>
<td>Login</td>
<td>None</td>
</tr>
<tr>
<td>DCIM_LCElementConformsToProfile</td>
<td>ENUMERATE, GET</td>
<td>Login</td>
<td>None</td>
</tr>
</tbody>
</table>