Power Supply Profile

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1. Scope

The DCIM Power Supply Profile describes the properties and interfaces for executing system management tasks related to the management of power supplies within a system. The profile standardizes and aggregates the description for the power supply properties into a power supply view representation and provides static methodology for the clients to query the power supply views without substantial traversal of the model. Alternatively, the profile describes the CIM interface based on the DMTF Power Supply Profile.

2. Normative References

Refer to the following documents for more information.

NOTE: 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 DSP1015, Power Supply Profile 1.1.0
- DMTF DSP0226, Web Services for Management (WS-Management) Specification 1.1.0
- DMTF DSP0227, WS-Management CIM Binding Specification 1.0.0
- Intelligent Platform Management Interface (IPMI) Specification 1.5
- Dell Lifecycle Controller Best Practices Guide 1.0, http://en.community.dell.com/techcenter/extras/m/white_papers/20066173.aspx
- Dell WSMAN Licenses and Privileges 1.0
- Dell Tech Center MOF Library: http://www.delltechcenter.com/page/DCIM.Library.MOF
- Related Managed Object Format (MOF) files:
    - DCIM_PowerSupplyView.mof
    - DCIM_PowerSupply.mof
    - DCIM_PowerRedundancySet.mof
    - DCIM_PSMemberOfCollection.mof
    - DCIM_PSOwningCollectionElement.mof
    - DCIM_CSHostedPowerRedundancy.mof
    - DCIM_SystemPSDevice.mof
    - DCIM_ElementConformsToProfile.mof
    - DCIM_RegisteredProfile.mof
    - DCIM_LCElementConformsToProfile.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. Can

Used for statements of possibility and capability, whether material, physical, or causal.

3.6. Cannot

Used for statements of possibility and capability, whether material, physical, or causal.

3.7. Need not

Indicates a course of action permissible within the limits of the document.

3.8. 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.

3.9. Shall

Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted.

3.10. Shall not

Indicates requirements to be followed strictly in order to conform to the document and from which no deviation is permitted.

3.11. Should

Indicates that among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required.

3.12. Should not

Indicates that a certain possibility or course of action is deprecated but not prohibited

3.13. FQDD

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

3.14. Interop Namespace

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

3.15. Implementation Namespace

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

3.16. 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

3.17. 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. CSIOR

Collection of System Inventory on Reboot

5. Synopsis

Profile Name: Power Supply

DMTF Version: 1.1.0

Version: 4.0.0

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_PowerSupplyView

Scoping Class: DCIM_ComputerSystem

The Dell Power Supply Profile is a component profile that contains the Dell specific implementation requirements for power supply view.

DCIM_PowerSupplyView shall be the Central Class.

Table 1 identifies profiles that are related to this profile.

Table 1. Related Profiles

Profile Name	Organization	Version	Relationship
Power Supply	DMTF	1.1	Specialize
Profile Registration	DCIM	1.0	Reference

6. Description

The Dell Power Supply Profile describes the platform's power supply information. Each platform power supply is represented by an instance of DCIM_PowerSupplyView class.

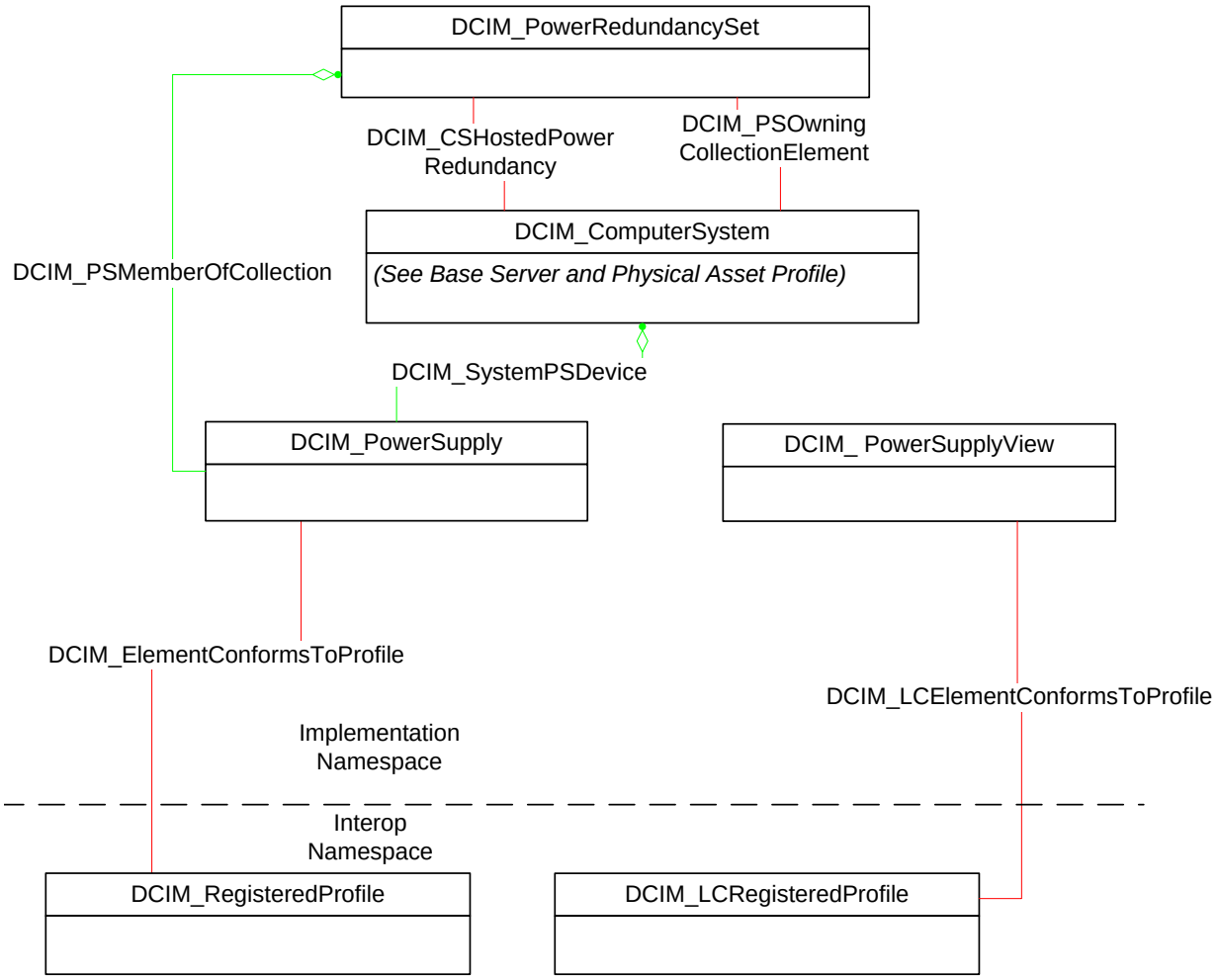

Figure 1. Class Diagram

Figure 2 details typical Dell Power Supply Profile implementation for a platform containing two power supplies. For the client to discover the instrumentation's support of this profile, LCRegisteredProfile and RegisteredProfile are instantiated in the Interop Namespace.

LCRegisteredProfile instance provides information about the implemented DCIM profile: most importantly, the profile name, version of the profile, and the organization name that produced the profile.

RegisteredProfile provides the information about the DMTF profile

Psu1 and psu2 are the power supply views representing the two power supplies in the Implementation Namespace. They are associated to the Interop namespace's PowerSupplyProfile instance.

Pwrsupply1 and pwrsupply2 represent the same two power supplies as well but in the DMTF Power Supply Profile described interface.

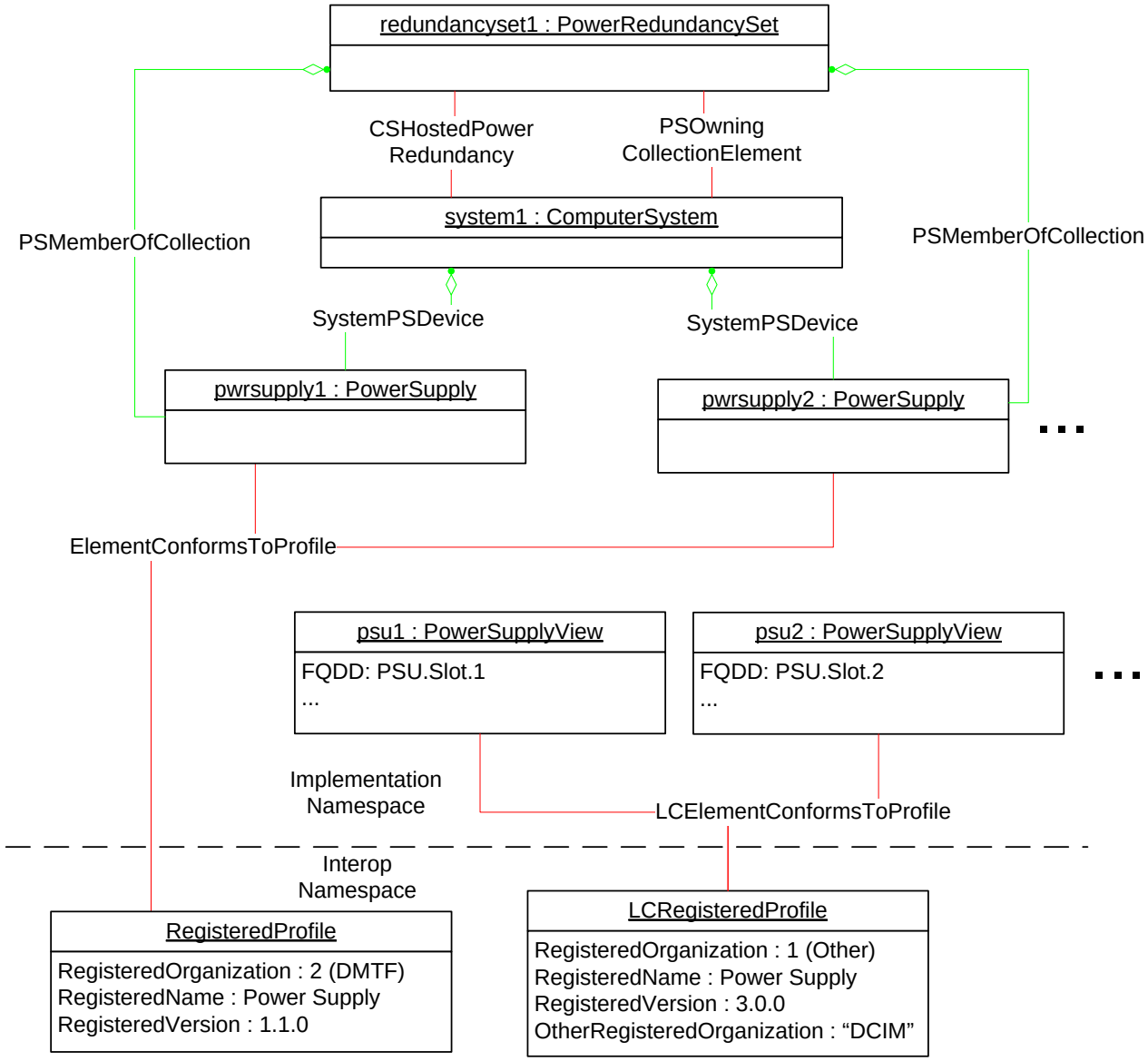

Figure 2. Power Supply Profile Implementation

7. Implementation Requirements

This section describes the requirements and guidelines for implementing Power Supply Profile.

Table 2. Class Requirements: Power Supply Profile

Element Name	Requirement	Description
Classes		
DCIM_PowerSupplyView	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.1.
DCIM_PowerSupply	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 0.

Element Name	Requirement	Description
DCIM_PowerRedundancySet	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.3.
DCIM_PSMemberOfCollection	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 0 and 7.3.
DCIM_PSOwningCollectionElement	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.3.
DCIM_CSHostedPowerRedundancy	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 7.3.
DCIM_SystemPSDevice	Mandatory	The class shall be implemented in the *Implementation Namespace*. See section 0.
DCIM_ElementConformsToProfile	Mandatory	The class shall be implemented in both the *Interop* and *Implementation Namespaces*. See section 7.5
DCIM_RegisteredProfile	Mandatory	The class shall be implemented in the *Interop Namespace.* See section 7.5
DCIM_LCElementConformsToProfile	Mandatory	The class shall be implemented in both the *Interop* and *Implementation Namespaces*. See section 7.4
DCIM_LCRegisteredProfile	Mandatory	The class shall be implemented in the Interop Namespace. See section 7.4
Indications		
None defined in this profile		

7.1. Power Supply View – DCIM_PowerSupplyView

This section describes the implementation for the DCIM_PowerSupplyView class that represents a power supply and its aggregate characteristics.

This class shall be instantiated in the Implementation Namespace.

The DCIM_LCElementConformsToProfile association(s) shall reference the DCIM_PowerSupplyView 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_PowerSupplyView?__cimnamespace=root/dcim”

The key property shall be the InstanceID.

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

7.1.2. Operations

The following table lists the operations implemented on DCIM_PowerSupplyView.

Table 3. DCIM_PowerSupplyView - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.1.3. Class Properties

The following table lists the implemented properties for DCIM_PowerSupplyView instance in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

Table 4. DCIM_PowerSupplyView - Properties

Property Name	Requirements	Type	Additional Requirements
InstanceID	Mandatory	string	The property value shall be the FQDD property value.
DeviceDescription	Mandatory	String	A string containing the friendly Fully Qualified Device Description. This property describes the device and its location
FQDD	Mandatory	string	A string containing the Fully Qualified Device Description, a user-friendly name for the object.
TotalOutputPower	Mandatory	uint32	Represents the total output power of the power supply in Watts. The property value shall be in Watts. 0 shall mean “Unknown”.
InputVoltage	Mandatory	uint32	This property provides the input voltage for the supply in Volts. The property value shall be in Volts. 0 shall mean “Unknown”.
PrimaryStatus	Mandatory	uint32	This property provides a high level status value, intended to align with Red-Yellow-Green type representation of status. • 0(Unknown) • 1(OK) • 2(Degraded) • 3 (Error)
Type	Mandatory	uint16	This property indicates the device type of the power supply and shall have the following values: • 0 (AC) • 1 (DC).

Property Name	Requirements	Type	Additional Requirements
DetailedState	Mandatory	string	This property describes the further status of the power supply as enumerated for IPMI power supply sensor such as: • Predictive Failure • Power Supply AC lost • AC lost or out-of-range • AC out-of-range, but present.
RedundancyStatus	Mandatory	uint16	This property provides information on the state of the power supply redundancy. The property value shall be one of the following: • 0(Unknown) • 2 (Fully Redundant) • 3(Degraded Redundancy) • 4 (Redundancy Lost) • 5 (Overall Failure)
Manufacturer	Mandatory	string	The name of the organization responsible for producing the power supply.
Model	Mandatory	string	The make and or model of the product.
SerialNumber	Mandatory	string	A manufacturer-allocated number used to identify the power supply.
PartNumber	Mandatory	string	The part number assigned by the organization that is responsible for producing or manufacturing the power supply.
FirmwareVersion	Mandatory	string	A string containing the power supply's firmware version.
LastSystemInventoryTime	Mandatory	string	This property provides the last time Collection of System Inventory on Reboot (CSIOR) was performed. The value is represented as yyyymmddHHMMSS.
LastUpdateTime	Mandatory	string	This property provides the last time the data was updated. The value is represented as yyyymmddHHMMSS
PMBusMonitoring	Mandatory	Uint8	TRUE If PS is a power monotoring capable device
Range1MaxInputPower	Mandatory	uint32	Represents the Input rated power of the PowerSupply in Watts. 0 denotes 'unknown'
RedMinNumberNeeded	Mandatory	uint32	MinNumberNeeded indicates the smallest number of elements that MUST be operational in order to function. For example, in an N+1 redundancy relationship, the MinNumberNeeded property is set equal to N. In a "LimitedSparing" environment, this property sis meaningless and SHOULD be set to zero.

Property Name	Requirements	Type	Additional Requirements
RedTypeOfSet	Mandatory	Uint16	TypeOfSet provides information on the type of redundancy. N+1 (=2) indicates all members are active, are unaware and function independent of one another. However, there exist at least one extra member to achieve functionality. \'Sparing\' is implied (i.e. each member can be a spare for the other(s). An example of N+1 is a system that has 2 power supplies, but needs only 1 power supply to functioning properly. N+1 is a special case of N+M redundancy where M=1. A value of N+1 (=2) shall be used for N+M redundancy. • Sparing (=4) indicates that all members are active and are aware of each others. However, their functionality is independent until failover. Each member can be a spare for the other(s). • Input Power Redundancy (=32768) indicates that the power supply redundancy policy is set to \'Input Power Redundancy\'. • ValueMap { "2", "4", "32768" }, • Values { "N+1", "Sparing", "Input Power Redundancy" }

Note: Some of the properties will show NULL depending upon platform

7.2. Power Supply – DCIM_PowerSupply

This section describes the implementation for the DCIM_PowerSupply class that represents a power supply..

This class shall be instantiated in the Implementation Namespace.

The DCIM_SystemPSDevice association shall reference DCIM_PowerSupply instances and the DCIM_ComputerSystem instance.

The DCIM_PSMemberOfCollection association shall reference DCIM_PowerSupply instances and the DCIM_PowerRedundancySet instance.

7.2.1. Resource URIs for WinRM®

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

The key properties shall be the SystemCreationClassName, SystemName, CreationClassName and DeviceID.

The instance Resource URI for DCIM_PowerSupply instance shall be:
“http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_PowerSupplyView?
?__cimnamespace=root/dcim+SystemCreationClassName=DCIM_ComputerSystem+SystemName=srv:system+CreationClassName=DCIM_PowerSupply+DeviceID =<DeviceID>”

7.2.2. Operations

The following table lists the operations implemented on DCIM_PowerSupply.

Table 5. DCIM_PowerSupply - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.2.3. Class Properties

The following table lists the implemented properties for DCIM_PowerSupply instance in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

Table 6. DCIM_PowerSupply - Properties

Property Name	Requirements	Type	Additional Requirement
SystemCreationClassName	Mandatory	string	This property value shall be "DCIM_ComputerSystem"
SystemName	Mandatory	string	This property value shall be"srv:system"
CreationClassName	Mandatory	string	This property value shall be "DCIM_PowerSupply"
DeviceID	Mandatory	string	The property value shall be unique identifier.
ElementName	Mandatory	string	This property value shall be "Power Supply".
InputPowerUnits	Mandatory	string	This property indicates the programmatic units for the input power properties. This property value shall be in "watt".
RatedMaxOutputPower	Mandatory	uint32	This property indicates the maximum amount of output (DC) power. • 0 shall mean “Unknown”.
TotalOutputPower	Mandatory	uint32	This property represents the total output power of the PowerSupply in milli-watts. 0 shall mean “Unknown”.
RequestedState	Mandatory	uint16	The property value shall be 12 (Not Applicable).
ActiveInputVoltage	Mandatory	uint16	This property indicates the input voltage range that is currently in use. The property value shall be: • 2 (Unknown), • 3 (Range1).
EnabledState	Mandatory	uint16	The property value shall be 2 (Enabled).
IsSwitchingSupply	Mandatory	boolean	This property indicates that the Power Supply is a switching (instead of linear) supply. This property shall have a value of "TRUE".
IsACInput	Mandatory	boolean	The property shall indicate whether power supply is direct current (DC) or alternating current (AC) powered. A value of true shall indicate the required input of the PowerSupply is AC.
IsACOutput	Mandatory	boolean	A value of false shall indicate the output from the PowerSource is direct current (DC). This property shall have a value of "FALSE"
Range1InputVoltageHigh	Mandatory	uint32	The high voltage of Input Voltage Range 1 for this Power Supply. The property value shall be in Milli Volts
Range1MaxInputPower	Mandatory	uint32	This property indicates the maximum amount of power that this Power Supply may draw. The property value shall be in Watts.

Property Name	Requirements	Type	Additional Requirement
OperationalStatus[]	Mandatory	uint16	The property value shall be one of the following: • 0 (Unknown) • 2 (OK) • 3 (Degraded) • 6 (Error)
PrimaryStatus	Mandatory	uint16	The property value shall be one of the following: 0(Unknown) • 1 (OK) • 2 (Degraded) • 3 (Error)
HealthState	Mandatory	uint16	The property value shall be one of the following: 0(Unknown) • 5 (OK) • 10 (Degraded/Warning) • 25 (Critical Failure)

7.3. Power Redundancy Set – DCIM_PowerRedundancySet

This section describes the implementation for the DCIM_PowerRedundancySet class represents the characteristics of the power supply redundancy.

This class shall be instantiated in the Implementation Namespace.

The DCIM_PSMemberOfCollection association shall reference DCIM_PowerSupply instances and the DCIM_PowerRedundancySet instance.

The DCIM_PSOwningCollectionElement association shall reference the DCIM_PowerRedundancySet instance and the DCIM_ComputerSystem instance.

The DCIM_CSHostedPowerRedundancy association shall reference the DCIM_PowerRedundancySet instance and the DCIM_ComputerSystem instance.

7.3.1. Resource URIs for WinRM®

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

The key property shall be the InstanceID.

The instance Resource URI for DCIM_PowerRedundancySet instance shall be: “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_PowerRedundancySet??__cimnamespace=root/dcim+InstanceID= RedundancySet:1”

7.3.2. Operations

The following table lists the operations implemented on DCIM_PowerRedundancySet.

Table 7. DCIM_PowerRedundancySet - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.3.3. Class Properties

The following table lists the implemented properties for DCIM_PowerSupply instance in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

Table 8. DCIM_PowerRedundancySet - Properties

Property Name	Requirements	Type	Additional Requirement
InstanceID	Mandatory	string	The property value shall be “RedundancySet:1”
MinNumberNeeded	Mandatory	uint32	This property value shall be 1.
TypeOfSet[]	Mandatory	uint16	This property value shall always contain 2(N+1) redundancy and may contain: • 32768 (Input Power Redundancy), if the PSRedundancyPolicy attribute is set to “Input Power Redundant”, • 4 (Sparing), if the PSRapidOn and PrimaryPSU attributes are set.
RedundancyStatus	Mandatory	uint16	The property value shall be one of the following: • 0 (Unknown) • 2 (Fully Redundant) • 3 (Degraded Redundancy) • 4 (Redundancy Lost) • 5 (Overall Failure)
ElementName	Mandatory	string	This property value shall be "System Board PS Redundancy".

7.4. DCIM_LCRegisteredProfile – DCIM Power Supply Profile Registration

This section describes the implementation for the DCIM_LCRegisteredProfile class.

This class shall be instantiated in the Interop Namespace.

The DCIM_LCElementConformsToProfile association shall reference the DCIM_LCRegisteredProfile instance and the DCIM_PowerSupplyView instances.

7.4.1. Resource URIs for WinRM®

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

The instance Resource URI shall be: “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_LCRegisteredProfile?__cimnamespace=root/interop+InstanceID= DCIM:PowerSupply:2.0.0”

The key property shall be the InstanceID property.

7.4.2. Operations

The following table lists the operations implemented on CIM_RegisteredProfile .

Table 9. DCIM_LCRegisteredProfile - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.4.3. Class Properties

The following table lists the implemented properties for DCIM_LCRegisteredProfile instance in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

Table 10. DCIM_LCRegisteredProfile

Property Name	Requirement	Type	Additional Requirements
InstanceID	Mandatory	string	The property value shall be “DCIM:PowerSupply:2.0.0”.
RegisteredName	Mandatory	string	This property shall be "Power Supply".
RegisteredVersion	Mandatory	string	This property shall be "2.1.0".
RegisteredOrganization	Mandatory	uint16	This property shall be 1 (Other).
OtherRegisteredOrganization	Mandatory	string	The property value shall be “DCIM”.
ProfileRequireLicense[]	Mandatory	String	This property array shall describe the required licenses for this profile. If no license is required for the profile, the property shall have value NULL.
ProfileRequireLicenseStatus[]	Mandatory	String	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: • “LICENSED” • “NOT_LICENSED” If no license is required for the profile, the property shall have value NULL.

7.5. DCIM_RegisteredProfile – DMTF Power Supply Profile Registration

This section describes the implementation for the DCIM_RegisteredProfile class.

This class shall be instantiated in the Interop Namespace.

The DCIM_ElementConformsToProfile association shall reference the DCIM_RegisteredProfile instance and DCIM_PowerSupply instances.

7.5.1. Resource URIs for WinRM®

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

The instance Resource URI shall be: “http://schemas.dell.com/wbem/wscim/1/cim-schema/2/DCIM_RegisteredProfile?__cimnamespace=root/interop+InstanceID= DCIM:PowerSupplyRegisteredProfile:1”

The key property shall be the InstanceID property.

The DCIM_ElementConformsToProfile association shall reference the DCIM_RegisteredProfile instance.

7.5.2. Operations

The following table lists the operations implemented on DCIM_RegisteredProfile .

Table 11. DCIM_RegisteredProfile - Operations

Operation Name	Requirements	Required Input
Get	Mandatory	Instance URI
Enumerate	Mandatory	Class URI

7.5.3. Class Properties

The following table lists the implemented properties for DCIM_RegisteredProfile instance in a system. The “Requirements” column shall denote whether the property is implemented (for requirement definitions, see section 3). The “Additional Requirements” column shall denote either possible values for the property, or requirements on the value formulation.

Table 12. DCIM_RegisteredProfile

Property Name	Requirement	Type	Additional Requirements
InstanceID	Mandatory	string	The property value shall be “DCIM:PowerSupplyRegisteredProfile:1”.
RegisteredName	Mandatory	string	This property shall be "Power Supply".
RegisteredVersion	Mandatory	string	This property shall be "1.1.0".
RegisteredOrganization	Mandatory	uint16	This property shall be 2 (DMTF).
AdvertisedTypes[]	Mandatory	uint16	This property array shall contain [1(Other), 1 (Other)].
AdvertiseTypeDescriptions[]	Mandatory	string	This property array shall contain ["WS-Identify", "Interop Namespace"].

8. Methods

No additional details specified.

9. Use Cases

See Lifecycle Controller (LC) Integration Best Practices Guide.

10. CIM Elements

No additional requirements have been defined.

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 13. Privilege and License Requirements

Class and Method	Operation	User Privilege Required	License Required
DCIM_PowerSupplyView	ENUMERATE, GET	Login	LM_REMOTE_ASSET_INVENTORY
DCIM_PowerSupply	ENUMERATE, GET	Login	LM_DEVICE_MONITORING
DCIM_PowerRedundancySet	ENUMERATE, GET	Login	LM_DEVICE_MONITORING
DCIM_PSMemberOfCollection	ENUMERATE, GET	Login	LM_DEVICE_MONITORING
DCIM_PSOwningCollectionElement	ENUMERATE, GET	Login	LM_DEVICE_MONITORING

Class and Method	Operation	User Privilege Required	License Required
DCIM_CSHostedPowerRedundancy	ENUMERATE, GET	Login	LM_DEVICE_MONITORING
DCIM_SystemPSDevice	ENUMERATE, GET	Login	LM_DEVICE_MONITORING
DCIM_ElementConformsToProfile	ENUMERATE, GET	Login	None.
DCIM_RegisteredProfile	ENUMERATE, GET	Login	None.
DCIM_LCRegisteredProfile	ENUMERATE, GET	Login	None.
DCIM_LCElementConformsToProfile	ENUMERATE, GET	Login	None.