
1 HP Insight Management Power Supply Provider Overview

Description

The HP Insight Management Web-Based Enterprise Management (WBEM) Power Supply provider implements the HP Power Supply profile to model power supplies in servers.

This provider implements the following profiles and installs the necessary files:

Profile Name	Organization	Version
HP Power Supply Profile	HP WBEM TC	1.3 (P103)
HP Location Profile	HP WBEM TC	1.0 (P124)
HP Power Supply Physical Asset Profile	HP WBEM TC	1.0 (P116)

Requirements

For each hardware architecture listed, this provider requires the following distributions

SLES 10 and later

HP Integrity managed servers

RHEL 5.0 and later

SLES 11 and later

HP ProLiant managed servers

RHEL 5.3 and later

Release History

Initial release with HP Insight Management WBEM Providers for Linux v2.0.

1-1 Setting Up the Provider

Installing the Provider

There are no special installation instructions for this provider. It is installed by default as part of the HP Insight Management WBEM providers.

Configuring the Provider

This provider does not accept specific configuration adjustments beyond standard HP Insight Management WBEM support.

1-2 Using the Provider

Namespaces Supported by the Provider This provider returns instances in the root/hpq namespace.

Schema Supported by the Provider

This provider supports the following classes:

- SMX_PowerSupply
- SMX_PowerCollection
- SMX_PowerRedundancySet
- SMX_MemberOfPowerRedundancy
- SMX_HostedPowerRedundancySet
- SMX_MemberOfPowerCollection
- SMX_HostedPowerCollection
- SMX_SystemPowerSupply
- SMX_PowerSupplyLocation
- SMX_PowerSupplyElementLocation
- SMX_PowerSupplyModule
- SMX_SystemPhysicalPowerSupply
- SMX_RealizesPowerSupply
- SMX_PowerMeter
- SMX_AssociatedPowerMeter
- SMX_SystemPowerMeter
- SMX_PowerControllerFirmware
- SMX_PowerControllerInstalledFirmwareIdentity
- SMX_PowerControllerElementFirmwareIdentity

The tables in the following sections describe the properties of the supported classes. The classes are categorized by the class or superclass that defines the property, the first column is the property name (including type and units) and the second column describes how the provider determines the properties implementation. When the property implementation value is a number, the number given is the default behavior and the Managed Object Format interpretation is within parenthesis. If other values are returned, a problem is indicated.

Unless otherwise noted, all of the property implementation values given are for HP ProLiant and HP Integrity (cellular and non-cellular) systems. The location related properties and implementation values are determined based on the server type so they may differ.

1-2-1 SMX_PowerSupply Class

The SMX_PowerSupply class is used to model power supplies on servers. Power supply numbers for existing instances do not change when other power supplies are added and removed.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	<p>Short description of this power supply for the name displayed by the MP or iLO and its location.</p> <p>For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2</p>
Description	<p>Description of this power supply, including ElementName, PowerSupplyType and StatusDescription[0] and StatusDescription[1].</p> <p>For example: <i>Elementname</i> provides power for PowerSupplyType.StatusDescription</p> <p>Where: <i>Elementname</i> represents the value of ElementName, PowerSupplyType represents the corresponding string value of the PowerSupplyType enumeration, and StatusDescription represents the value of StatusDescriptions[0]and StatusDescription[1].</p>
ElementName	<p>Short description of this power supply for the name displayed by the MP or iLO and its location.</p> <p>For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2</p>
CIM_ManagedSystemElement	
OperationalStatus[0]	<p>2 (OK) – if power supply is operating properly; 3 (Degraded) – if power supply is degraded; 6 (Error) – if power supply has failed</p>
OperationalStatus[1]	Extended Warning and Error status. See the MOF and Profile

Property Name	Property Implementation
StatusDescriptions[0]	<p>Description of the status of the power supply corresponding to the OperationalStatus.</p> <p>For example: Power Supply is operating properly– if OperationalStatus[0] is 2 (OK); Power Supply is degraded – if OperationalStatus[0] is 3 (Degraded) Power Supply has failed – if OperationalStatus is 6 (Error)</p>
StatusDescriptions[1]	Description of the extended warning/error status corresponding to the OperationalStatus[1]. See Profile.
HealthState	<p>5 (OK) – if power supply is operating properly; 10 (Degraded) if power supply is degraded 20 (Major Failure) – if power supply has failed</p>
Name	<p>Unique name of this power supply from the name displayed by the MP or iLO and its location.</p> <p>For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2</p>
TimeOfLastStateChange	Time that state last changed for power supply. 0 if it has not changed since provider startup.
CIM_LogicalDevice	
CreationClassName	SMX_PowerSupply
DeviceID	Unique identifier for this power supply instance.
SystemCreationClassName	SMX_ComputerSystem.CreationClassName
SystemName	SMX_ComputerSystem.Name
CIM_EnabledLogicalElement	
EnabledDefault	2 (Enabled)
EnabledState	5 (Not Applicable)
RequestedState	12 (Not Applicable)
CIM_PowerSupply	
TotalOutputPower	0 (denotes 'unknown')

Property Name	Property Implementation
HP_PowerSupply	
PowerSupplyType	Enumeration describing the type of power supply. Refer to the Managed Object Format.

1-2-2 SMX_PowerCollection Class

The `SMX_PowerCollection` class is used to model power supply collections on servers. There is one instance of this class on servers modeling power supplies.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Power Collection
Description	This is a collection of all devices including power supplies that provide power. <i>GroupStatusDescription</i> . Where: <i>GroupStatusDescription</i> represents the value of the <i>GroupStatusDescriptions[0]</i> property.
ElementName	Power Collection
CIM_SystemSpecificCollection	
InstanceID	Unique identifier for this power collection instance
HP_GroupSystemSpecificCollection	

Property Name	Property Implementation
GroupOperationalStatus[0]	<p>Represents the most severe power redundancy status and non-fault tolerant power supply operational status:</p> <p>0 (Unknown) – if power collection status is unknown;</p> <p>2 (OK) – if power supplies are operating properly;</p> <p>3 (Degraded) – if no SMX_PowerSupply.OperationalStatus[0] for all non-fault tolerant power supplies report 6 (Error) and SMX_PowerRedundancySet.RedundancyStatus for any power redundancy sets report 3 (Degraded Redundancy) or 4 (Redundancy Lost) and no power redundancy sets report 5 (Overall Failure).</p> <p>6 (Error) – if SMX_PowerSupply.OperationalStatus[0] for any non-fault tolerant power supplies report 6 (Error) or SMX_PowerRedundancySet.RedundancyStatus for any power redundancy sets report 5 (Overall Failure).</p> <p>Note: The system starts up with a redundancy status set to 4 (Redundancy Lost) and no power supplies have been removed or failed, the GroupOperationalStatus will be set to 2 (OK) because this is a valid configuration.</p>
GroupStatusDescriptions[0]	<p>Unknown status for power supplies - if GroupOperationalStatus[0] is 0 (Unknown);</p> <p>Power supplies are operating properly if GroupOperationalStatus[0] is 2 (OK);</p> <p>Power supplies are degraded if GroupOperationalStatus[0] is 3 (Degraded);</p> <p>Power supplies have failed if GroupOperationalStatus[0] is 6 (Error)</p>

1-2-3 SMX_PowerRedundancySet Class

The SMX_PowerRedundancySet class is used to model power supply redundancy sets on servers.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	<p>Short description of this redundancy set.</p> <p>For example: Power Redundancy Set <n></p> <p>Where: <n> represents the number of the redundancy set instance.</p>
Description	Description of this redundancy set

Property Name	Property Implementation
	<p>For example: Power Redundancy Set <n> is collection of fault tolerant power supplies that provide redundant power</p> <p>Where: <n> represents the number of the redundancy set instance.</p>
ElementName	<p>User printable name for this power redundancy set.</p> <p>For example: Power Redundancy Set <n></p> <p>Where: <n> represents the number of the redundancy set instance.</p>
CIM_SystemSpecificCollection	
InstanceID	Unique identifier for this power redundancy instance.
CIM_RedundancySet	
MaxNumberSupported	Represents the maximum number of power supplies supported for this redundancy set.
MinNumberNeeded	Represents the minimum number of power supplies needed to function.
TypeOfSet	3 (Load Balanced)
LoadBalanceAlgorithm	0 (Unknown)
RedundancyStatus	<p>0 (Unknown) – if the redundancy status is unknown;</p> <p>2 (Fully Redundant) – if the all power supplies in the set are operating properly and enough to achieve redundancy;</p> <p>3 (Degraded Redundancy) – if there are at least enough power supplies for the redundancy set to provide power, but power supplies have failed;</p> <p>4 (Redundancy Lost) – if there are not enough power supplies required to achieve redundancy, but enough for the redundancy set to provide power;</p> <p>5 (Overall Failure) – if there are not enough power supplies operating properly for the redundancy set to provide power.</p>

1-2-4 SMX_MemberOfPowerRedundancy Class

The SMX_MemberOfPowerRedundancy class is used to represent an association between HP_PowerSupply and HP_PowerRedundancySet.

The following table lists the properties implemented.

Property Name	Property Implementation
Collection	References HP_PowerRedundancySet
Included	Writable Boolean property indicating if the power supply instance referenced by Member will contribute status to the HP_PowerCollection True: Include member status in collection status False: Do not include member status in collection status
Member	References HP_PowerSupply

1-2-5 SMX_HostedPowerRedundancySet Class

The SMX_HostedPowerRedundancySet class is used to represent an association between HP_PowerRedundancySet and the computer system that contains this redundancy set.

The following table lists the properties implemented.

Property Name	Property Implementation
OwningElement	References HP_ComputerSystem
OwnedElement	References HP_PowerRedundancySet

1-2-6 SMX_MemberOfPowerCollection Class

The SMX_MemberOfPowerCollection class is used to represent an association between the HP_PowerSupply and HP_PowerCollection classes.

The following table lists the properties implemented.

Property Name	Property Implementation
Collection	References HP_PowerCollection
Included	Writable Boolean property indicating if the power supply instance referenced by Member will contribute status to the HP_PowerCollection True: Include member status in collection status False: Do not include member status in collection status
Member	References HP_PowerSupply

1-2-7 SMX_HostedPowerCollection Class

The SMX_HostedPowerCollection class is used to represent an association between the HP_PowerCollection class and the computer system that contains this collection.

The following table lists the properties implemented.

Property Name	Property Implementation
Antecedent	References HP_ComputerSystem
Dependent	References HP_PowerCollection

1-2-8 SMX_SystemPowerSupply Class

The SMX_SystemPowerSupply class is used to represent an association between the HP_PowerSupply class and the computer system that contains this power supply.

The following table lists the properties implemented.

Property Name	Property Implementation
GroupComponent	References HP_ComputerSystem
PartComponent	References HP_PowerSupply

1-2-9 SMX_PowerSupplyLocation Class

The SMX_PowerSupplyLocation class is used to model power supply locations on servers.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Name of this power supply from the name displayed by the MP or iLO and its location. For example: Power Supply1 at PowerSupplySlot=2
Description	Description of this power supply location, including the location. For example on HP Proliant: The location of the power supply <n>. Please refer to power supply position <n> printed on the system. Where: <n> presents the power supply position printed on the system labeling.
ElementName	User displayable name of this power supply location, including the location.

Property Name	Property Implementation
	For example: Power Supply1 at PowerSupplySlot=2
CIM_Location	
Name	Unique identifier for this power supply location instance.
PhysicalPosition	Physical position of this Power Supply. For example on HP Proliant: Number represents the power supply position printed on the system.
HP_Location	
ElementLocationTag	Location string based on ElementLocationTagDesc. For example, on HP Proliant: Power Supply <n> Where : <n> represents the power supply position printed on the system.
ElementLocationTagDesc	On HP Proliant: 0 (HoodTag)
LocationInfoDesc	An array of tags describing the corresponding location path information contained in the LocationInformation property array.
LocationInformation	An array of string values describing the location path of a managed element containment hierarchy.

1-2-10 SMX_PowerSupplyElementLocation Class

The SMX_PowerSupplyElementLocation class is used to represent an association between the CIM_Location and CIM_ManagedElement classes.

The following table lists the properties implemented.

Property Name	Property Implementation
Element	References CIM_ManagedElement
PhysicalLocation	References CIM_Location

1-2-11 SMX_PowerSupplyModule Class

The SMX_PowerSupplyModule class is used to model physical power supplies on servers. Power supply numbers for existing instances do not change when other power supplies are added and removed.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	<p>Short description of this power supply for the name displayed by the MP or iLO and its location.</p> <p>For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2</p>
Description	<p>Description of this power supply module, including ElementName, Type and Status.</p> <p>For example: <i>ElementName</i> provides power for <i>PowerSupplyType</i>. <i>StatusDescription</i></p> <p>Where: <i>ElementName</i> represents the value of ElementName, <i>PowerSupplyType</i> represents the corresponding string value of the PowerSupplyType enumeration and <i>StatusDescription</i> represents the value of StatusDescriptions[0].</p>
ElementName	<p>Short description of this power supply for the name displayed by the MP or iLO and its location.</p> <p>For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2</p>
CIM_ManagedSystemElement	
OperationalStatus[0]	<p>2 (OK) – if power supply is operating properly; 3 (Degraded) – if power supply is degraded; 6 (Error) – if power supply has failed</p>
StatusDescriptions[0]	<p>Description of the status of the power supply corresponding to the OperationalStatus.</p> <p>For example: Power Supply is operating properly – if OperationalStatus[0] is 2 (OK); Power Supply is degraded – if OperationalStatus[0] is 3 (Degraded) Power Supply has failed – if OperationalStatus is 6 (Error)</p>
HealthState	<p>5 (OK) – if power supply is operating properly; 10 (Degraded) if power supply is degraded 20 (Major Failure) – if power supply has failed</p>

Property Name	Property Implementation
Name	Short description of this power supply for the name displayed by the MP or iLO and its location. For example: Power Supply1 at PowerSupplySlot=2, Power Supply 1a at PowerSupplySlot=2
CIM_PhysicalElement	
CreationClassName	SMX_PowerSupplyModule
PartNumber	The part number assigned by the organization that is responsible for producing or manufacturing the PhysicalElement.
SerialNumber	A manufacturer-allocated number used to identify the Physical Element.
Tag	Unique identifier for this power supply instance.
CIM_PhysicalPackage	
RemovalConditions	0 (Unknown) 3 (Removable when off) 4 (Removable when on or off)
PackageType	6 (PowerSupply)

1-2-12 SMX_SystemPhysicalPowerSupply Class

The SMX_SystemPhysicalPowerSupply class extends the CIM_Container class and association of the HP_ComputerSystemChassis instance with HP_PowerSupplyModule.

The following table lists the properties implemented.

Property Name	Property Implementation
GroupComponent	References HP_ComputerSystemChassis
PartComponent	References HP_PowerSupplyModule

1-2-13 SMX_RealizesPowerSupply Class

The SMX_RealizesPowerSupply class extends the CIM_Realizes class and associates the HP_PowerSupply instance with HP_PowerSupplyModule instances.

The following table lists the properties implemented.

Property Name	Property Implementation
Antecedent	References HP_PowerSupplyModule
Dependent	References HP_PowerSupply

1-2-14 SMX_PowerSupplySlot Class

The SMX_PowerSupplySlot class is used to model physical power supply slots on servers.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Short description of this power supply slot. For example: PowerSupplySlot=2
Description	Description of the power supply slot. For example: PowerSupplySlot=2
ElementName	Name of the power supply slot. For example: PowerSupplySlot=2
CIM_ManagedSystemElement	
OperationalStatus[0]	2 (OK) – if power supply slot is operating properly
StatusDescriptions[0]	Power supply slot is operating properly – if OperationalStatus[0] is 2 (OK)
HealthState	5 (OK) – if power supply is operating properly
Name	Name of the power supply slot. For example: PowerSupplySlot=2
CIM_PhysicalElement	
CreationClassName	SMX_PowerSupplySlot
Tag	Unique identifier for this power supply slot.

Property Name	Property Implementation
CIM_PhysicalPackage	
ConnectorLayout	6 (Slot)
Number	<n> Where: <n> represents the number of the power supply slot.

1-2-15 SMX_SystemPowerSupplySlot Class

The SMX_SystemPowerSupplySlot class extends the CIM_Container class and association of the HP_ComputerSystemChassis instance with HP_PowerSupplySlot.

The following table lists the properties implemented.

Property Name	Property Implementation
GroupComponent	References HP_ComputerSystemChassis
PartComponent	References HP_PowerSupplySlot

1-2-16 SMX_PowerSupplyInSlot Class

The SMX_PowerSupplyInSlot class extends the CIM_ElementInConnector class and associates the HP_PowerSupplySlot instance with HP_PowerSupplyModuleinstances.

The following table lists the properties implemented.

Property Name	Property Implementation
Antecedent	References HP_PowerSupplySlot
Dependent	References HP_PowerSupplyModule

1-2-17 SMX_Power Meter

SMX_PowerMeter is used to model power utilization on Servers. Please note: power supply numbers for existing instances do not change when other power supplies are added and removed. Not all systems support reporting power utilization .

Property Name	Property Implementation
CIM_ManagedElement	

Property Name	Property Implementation
Caption	<p>Short description of this power utilization sensor using the name of the power supply displayed by the MP or iLO and its location.</p> <p>For example: Power utilization sensor for Power Supply 1 at PowerSupplySlot=1</p>
Description	<p>Description of this power utilization sensor including the Caption and StatusDescriptions.</p> <p>For example: Power utilization sensor for Power Supply 1 at PowerSupplySlot=1</p> <p>Where: <i>StatusDescription</i> represents the value of <i>StatusDescriptions[0]</i></p>
ElementName	<p>Short description of this power utilization sensor using the name of the power supply displayed by the MP or iLO.</p> <p>For example: Power utilization sensor for Power Supply 1</p>
CIM_ManagedSystemElement	
OperationalStatus[0]	2 (OK) – if power utilization sensor is operating properly;
StatusDescriptions[0]	<p>Description of the status of the power utilization sensor corresponding to the OperationalStatus.</p> <p>For example: Power Supply is operating properly – if OperationalStatus[0] is 2 (OK);</p>
HealthState	5 (OK) – if power utilization sensor is operating properly;
Name	<p>Short description of this power utilization sensor using the name of the power supply displayed by the MP or iLO and location.</p> <p>For example: Power utilization sensor for Power Supply 1 at PowerSupplySlot=1.</p>
CIM_LogicalDevice:	
CreationClassName	SMX_PowerMeter
DeviceID	Unique identifier for this power utilizaton sensor.
SystemCreationClassName	SMX_ComputerSystem.CreationClassName
SystemName	SMX_ComputerSystem.Name
CIM_EnabledLogicalElement	
EnabledDefault	2 (Enabled)

Property Name	Property Implementation
EnabledState	5 (Not Applicable)
RequestedState	12 (Not Applicable)
CIM_Sensor	
SensorType	13 (Power Consumption)
CurrentState	"Normal"
PossibleStates	Array may contain the following value: PossibleStates[0] = "Normal"
CIM_NumericSensor	
CurrentReading	Current reading of the power meter
BaseUnits	7 (Watts)
RateUnits	0 (None)
UnitModifier	0

1-2-18 SMX_SystemPowerMeter

SMX_SystemPowerMeter class and associates the HP_ComputerSystem instance with HP_PowerMeter.

Property Name	Property Implementation
GroupComponent	References HP_ComputerSystem
PartComponent	References HP_PowerMeter

1-2-19 SMX_AssociatedPowerMeter

The SMX_AssociatedPowerMeter class associates the HP_PowerSupply instance with HP_PowerMeter instance.

Property Name	Property Implementation
GroupComponent	References SMX_ComputerSystem
PartComponent	References SMX_PowerMeter

1-2-20 SMX_PowerControllerFirmware

SMX_PowerControllerFirmware is used to model power controller firmware on Servers. Not all systems support reporting power controller firmware.

Property Name	Property Implementation
CIM_ManagedElement	
Caption	Power controller firmware
Description	<p>Description of this power utilization sensor including the Caption and StatusDescriptions.</p> <p>For example: Power controller firmware. <i>StatusDescription</i></p> <p>Where: <i>StatusDescription</i> represents the value of <i>StatusDescriptions</i> [0]</p>
ElementName	Power controller firmware
CIM_ManagedSystemElement	
OperationalStatus[0]	2 (OK)
StatusDescriptions[0]	<p>Description of the status of the power utilization sensor corresponding to the OperationalStatus.</p> <p>For example: OK;</p>
HealthState	5 (OK)
Name	Power controller firmware.
CIM_LogicalElement	
CIM_SoftwareIdentity	
InstanceID	Opaque key
Manufacturer	Hewlett-Packard Company
Classifications	10 (Firmware)
ClassificationDescriptions	Power controller firmware
IsEntity	TRUE
VersionString	The firmware version string
MajorVersion	The firmware major version

Property Name	Property Implementation
MinorVersion	The firmware minor version
RevisionNumber	The firmware revision number

1-2-21 SMX_PowerControllerElementFirmwareIdentity

The SMX_PowerControllerElementFirmwareIdentity class associates the HP_ComputerSystem instance with HP_PowerControllerFirmware.

Property Name	Property Implementation
Dependent	References HP_ComputerSystem
Antecedent	References HP_PowerControllerFirmware
UpgradeCondition	Owner Upgradeable (3)
ElementSoftwareStatus	2 (Current), 6 (Installed)

1-2-22 SMX_PowerControllerInstalledFirmwareIdentity

The SMX_PowerControllerInstalledFirmwareIdentity class associates the HP_ComputerSystem instance with the installed HP_PowrControllerFirmware instance.

Property Name	Property Implementation
System	References HP_ComputerSystem
InstalledSoftware	References HP_PowerControllerFirmware

1-3 Provider Indications

Indications Generated by the Provider The following tables describe the SMX WBEM Power Supply Provider indications that are implemented for HP ProLiant server platforms where available.

HP Integrity server platforms implement power supply related indications in the SMX IPMI Record Log provider.

1-3-1 Provider Indication Common Properties

Property Name	Property Implementation
CIM_Indication	

Property Name	Property Implementation
IndicationIdentifier	GUID string generated at the time of indication.
IndicationTime	Time of indication.
CIM_AlertIndication	
EventTime	Time of the event or time of the indication if event time unknown.
SystemName	SMX_ComputerSystem.Name
SystemCreationClassName	SMX_ComputerSystem.CreationClassName
HP_AlertIndication	
ProviderVersion	Provider Version in the format VV.UU.FF. For example: 01.05.00
NetworkAddresses	Contains a list of all the IP addresses of the computer system generating the indication.
OSType	On ESX, 39 (VM) On Linux, 36 (Linux)
OSVersion	The operating system version of the computer system generating the indication in the following format: major.minor.build
SystemFirmwareVersion	Array of firmware versions of the computer system generating the indication.
SystemSerialNumber	Serial number of the computer system generating the indication.
SystemProductID	Product ID of the computer system generating the indication.
SystemModel	Model name of the computer system generating the indication.
SystemGUID	Platform GUID of the computer system generating the indication.
SystemVirtualUUID[]	If Synergy is enabled, this will contain the logical UUID for the system.
SystemVirtualSerialNumber[]	If Synergy is enabled, this will contain the logical Serial Number for the system.
EnclosureName	HP_BladeEnclosureCS.Name
RackName	Rack name if one exists
RackUUID	Rack Unique Identifier if one exists

Property Name	Property Implementation
BladeName	HP_ComputerSystem.Name
BladeBay	HP_BladeCSLocation.LocationInformation[0]

1-3-2 HP_DeviceIndication: Power Supply AC Input Loss

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	5 (Major)
CIM_AlertIndication	
Description	A power supply has failed – input power lost. <i>PowerSupplyCaption</i> Where: <i>PowerSupplyCaption</i> is the <i>SMX_PowerSupply.Caption</i> for the power supply that has failed
AlertingManagedElement	Wbem Path of <i>SMX_PowerSupply</i> instance representing the failed power supply
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	"9"
ProviderName	"HP Power"
RecommendedActions	"Check the input power being supplies to the failed power supply and reconnect power."
HP_AlertIndication	
Summary	"Power supply failed – input power lost"
EventCategory	16 (System Power)
ProbableCause	89 (Power Supply Failure)
ProbableCauseDescription	"Power Supply Failed due to input power loss."

1-3-3 HP_DeviceIndication: Power Supply Removed

Property Name	Property Implementation
CIM_Indication	

Property Name	Property Implementation
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	A power supply has been removed. <i>PowerSupply</i> Where: <i>PowerSupply</i> is the system power supply that was removed.
AlertingManagedElement	Wbem Path of the SMX_PowerSupply instance.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	1
ProviderName	HP Power
RecommendedActions	Check the system power supply configuration. Verify that this power supply was removed intentionally.
HP_AlertIndication	
Summary	Power supply removed
EventCategory	16 (System Power)
ProbableCause	1 (Other)
ProbableCauseDescription	Power Supply Removed

1-3-4 HP_DeviceIndication: Power Supply Inserted

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	A power supply has been inserted. <i>PowerSupplyCaption</i> Where: <i>PowerSupplyCaption</i> is the <i>SMX_PowerSupply.Caption</i> for the power supply that has been inserted.
AlertingManagedElement	Wbem Path of <i>SMX_PowerSupply</i> instance representing the inserted power supply.

Property Name	Property Implementation
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	2
ProviderName	HP Power
RecommendedActions	No action is recommended.
HP_AlertIndication	
Summary	Power supply inserted
EventCategory	16 (System Power)
ProbableCause	1 (Other)
ProbableCauseDescription	Power Supply has been Inserted

1-3-5 HP_DeviceIndication: Power Supply Failed

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	5 (Major)
CIM_AlertIndication	
Description	A power supply has failed. <i>PowerSupplyCaption</i> Where: <i>PowerSupplyCaption</i> is the <i>SMX_PowerSupply.Caption</i> for the power supply that has failed.
AlertingManagedElement	WBEM Path of <i>SMX_PowerSupply</i> instance representing the failed power supply.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	3
ProviderName	HP Power
RecommendedActions	Check the failed power supply and replace if necessary.
HP_AlertIndication	

Property Name	Property Implementation
Summary	Power supply failed
EventCategory	16 (System Power)
ProbableCause	89 (Power Supply Failure)
ProbableCauseDescription	Power Supply Failed

1-3-6 HP_DeviceIndication: Power Supply Degraded

Important: This indication is not supported on HP Proliant systems as the power supplies do not report a degraded status.

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	5 (Major)
CIM_AlertIndication	
Description	A power supply has failed. <i>PowerSupplyCaption</i> Where: <i>PowerSupplyCaption</i> is the <i>SMX_PowerSupply.Caption</i> for the power supply that has degraded.
AlertingManagedElement	WBEM Path of <i>SMX_PowerSupply</i> instance representing the degraded power supply.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	20
ProviderName	HP Power
RecommendedActions	Check the degraded power supply and replace if necessary.
HP_AlertIndication	
Summary	Power supply degraded
EventCategory	16 (System Power)
ProbableCause	1 (Other)
ProbableCauseDescription	Power supply degraded

1-3-7 HP_DeviceIndication: Power Supply Repaired

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	A power supply has been repaired. <i>PowerSupplyCaption</i> Where: <i>PowerSupplyCaption</i> is the <i>SMX_PowerSupply.Caption</i> for the power supply that has been repaired.
AlertingManagedElement	Wbem Path of SMX_PowerSupply instance representing the repaired power supply.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	4
ProviderName	HP Power
RecommendedActions	No action is recommended.
Summary	Power supply repaired
EventCategory	16 (System Power)
ProbableCause	1 (Other)
ProbableCauseDescription	Power supply repaired

1-3-8 HP_DeviceIndication: Power Supply Redundancy Reduced

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	

Property Name	Property Implementation
Description	A fault tolerant power supply is no longer providing power for a power redundancy set. <i>RedundancySetCaption</i> Where: <i>RedundancySetCaption</i> represents the <i>SMX_PowerRedundancySet.Caption</i> for the redundancy set with reduced redundancy.
AlertingManagedElement	WBEM Path of <i>SMX_PowerRedundancySet</i> instance representing the redundancy set with reduced redundancy.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	5
ProviderName	HP Power
RecommendedActions	No action is recommended.
HP_AlertIndication	
Summary	Power redundancy reduced
EventCategory	16 (System Power)
ProbableCause	88 (Loss of Redundancy)
ProbableCauseDescription	Power Redundancy has been Reduced

1-3-9 HP_DeviceIndication: Power Supply Redundancy Lost

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	4 (Minor)
CIM_AlertIndication	
Description	Power redundancy has been lost. <i>RedundancySetCaption</i> Where: <i>RedundancySetCaption</i> represents the <i>SMX_PowerRedundancySet.Caption</i> for the redundancy set that lost redundancy.
AlertingManagedElement	WBEM Path of <i>SMX_PowerRedundancySet.Caption</i> instance representing the redundancy set where redundancy was lost.

Property Name	Property Implementation
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	6
ProviderName	HP Power
RecommendedActions	Check the power supply configuration and check the status of the power redundancy. Ensure the system is being powered adequately. Add or replace power supplies if necessary.
HP_AlertIndication	
Summary	Power redundancy lost
EventCategory	16 (System Power)
ProbableCause	88 (Loss of Redundancy)
ProbableCauseDescription	Power Redundancy has been Lost

1-3-10 HP_DeviceIndication: Power Supply Redundancy Failed

Important: This indication is not supported on HP Proliant systems since redundancy set failure, which is failure beyond redundancy lost, will cause system shutdown.

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	5 (Major)
CIM_AlertIndication	
Description	Power redundancy has been lost. <i>RedundancySetCaption</i> Where: <i>RedundancySetCaption</i> represents the <i>SMX_PowerRedundancySet.Caption</i> for the redundancy set that failed redundancy.
AlertingManagedElement	WBM Path of <i>SMX_PowerRedundancySet</i> instance representing the redundancy set where redundancy failed.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	20

Property Name	Property Implementation
ProviderName	HP Power
RecommendedActions	Check the power supply configuration and check the status of the power redundancy. Ensure the system is being powered adequately. Add or replace power supplies if necessary.
HP_AlertIndication	
Summary	Power redundancy failed
EventCategory	16 (System Power)
ProbableCause	88 (Loss of Redundancy)
ProbableCauseDescription	Power Redundancy has Failed

1-3-11 HP_DeviceIndication: Power Supply Redundancy Restored

Property Name	Property Implementation
CIM_Indication	
PerceivedSeverity	2 (Information)
CIM_AlertIndication	
Description	Power redundancy for the system has been restored. <i>RedundancySetCaption</i> Where: <i>RedundancySetCaption</i> is <i>SMX_PowerRedundancySet.Caption</i> of the redundancy set the power redundancy set with restored redundancy.
AlertingManagedElement	WBEM Path of <i>SMX_PowerRedundancySet</i> instance representing the power redundancy set with restored redundancy.
AlertingElementFormat	2 (CIMObjectPath)
AlertType	5 (Device Alert)
EventID	8
ProviderName	HP Power
RecommendedActions	No action is recommended.
HP_AlertIndication	

Property Name	Property Implementation
Summary	Power redundancy restored
EventCategory	16 (System Power)
ProbableCause	1 (Other)