

# 1 HP Insight Manager WBEM Host File System Provider Overview

## Description

The HP Insight Management Web-Based Enterprise Management (WBEM) Host Filesystem provider extends CIM classes described in this document to model the filesystems hosted by a managed node. These classes provide computational information and capabilities that serve as an aggregation point to associate one or more elements that make up hosted filesystems and logical disks.

Profile Name	Organization	Version
HP Base Server Physical Asset Profile (P00114)	HP WBEM TC	1.1.0
HP Software Inventory (P00127)	HP WBEM TC	1.0.1

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

## Requirements

### HP Integrity managed servers

SLES 10 and later

RHEL 5.0 and later

### HP ProLiant managed servers

SLES 11 and later

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_LocalFileSystem`
- `SMX_HostedLocalFileSystem`
- `SMX_LocalLogicalDisk`
- `SMX_LocalFSResidesOnExtent`

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_LocalFileSystem` Class

The `SMX_LocalFileSystem` class implements the `CIM_LocalFileSystem` class to model the files hosted on the managed node. There is only one instance of `SMX_LocalFileSystem` for each filesystem on the managed node.

The following table lists the properties implemented.

Property Name	Property Implementation
<code>CIM_ManagedElement</code>	
<code>CIM_ManagedSystemElement</code>	
<code>CIM_LogicalElement</code>	
<code>CIM_EnabledLogicalElement</code>	
<code>CIM_FileSystem</code>	
<code>CSName</code>	<code>SMX_ComputerSystem.Name</code>
<code>CSCreationClassName</code>	<code>SMX_ComputerSystem.CreationClassName</code>
<code>CreationClassName</code>	<code>SMX_LocalFileSystem</code>
<code>Name</code>	Same as Root property.
<code>Root</code>	OS path name to filesystem root location. For example: /home/users

Property Name	Property Implementation
AvailableSpace	Total amount of free space for the filesystem in bytes. Unknown = 0.
BlockSize	Read/write data block size in bytes.
FileSystemSize	Total size of the filesystem in bytes. Unknown = 0.
FileSystemType	String describing the type of filesystem. For example: ext2, reiserfs, msdos, vfat, iso0990
NumberOfFiles	Number of files contained in the filesystem
CIM_LocalFileSystem	
SMX_LocalFileSystem	

## 1-2-2 SMX\_HostedLocalFileSystem Class

The SMX\_HostedLocalFileSystem class implements the CIM\_InstalledOS class and associates the SMX\_ComputerSystem and the SMX\_LocalFileSystem instances.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_HostedFileSystem	
SMX_HostedLocalFileSystem	
PartComponent	References SMX_LocalFileSystem
GroupComponent	References SMX_ComputerSystem

## 1-2-3 SMX\_LocalLogicalDisk Class

The SMX\_LocalLogicalDisk class implements the CIM\_LogicalDisk class and presents a contiguous range of logical blocks hosted locally on the managed node. These LogicalDisks are identifiable by applications through the Name field, which contains the access path to the logical disk.

The following table lists the properties implemented.

Property Name	Property Implementation
<b>CIM_ManagedElement</b>	
<b>CIM_ManagedSystemElement</b>	
<b>CIM_LogicalElement</b>	
<b>CIM_EnabledLogicalElement</b>	
<b>CIM_LogicalDevice</b>	
SystemName	SMX_ComputerSystem.Name
SystemCreationClassName	SMX_ComputerSystem.CreationClassName
CreationClassName	SMX_LocalLogicalDisk
DeviceID	Path to logical disk. For example: /dev/cdrom1
<b>CIM_StorageExtent</b>	
BlockSize	Read/write data block size in bytes.
DataOrganization	0 (Other) 1 (Unknown) 2 (Fixed Block)
Primordial	Can the containing system create or delete this element? True or False
BlockSize	Read/write data block size in bytes.
NumberOfBlocks	Number of Blocks on the storage extent.
<b>CIM_LogicalDisk</b>	
NameFormat	1 (Other) 12 (OS Device Name)
NameNamespace	1 (Other) 8 (OS Device Namespace)
<b>SMX_LogicalDisk</b>	

## 1-2-4 SMX\_LocalFSResidesOnExtent Class

The SMX\_LocalFSResidesOnExtent class implements the CIM\_ResidesOnExtent class and associates the SMX\_LocalFileSystem and SMX\_LocalLogicalDisk instances.

The following table lists the properties implemented.

Property Name	Property Implementation
CIM_ResidesOnExtent	
SMX_LocalFSResidesOnExtent	
Antecedent	References SMX_LocalLogicalDisk
Dependent	References SMX_LocalFileSystem