

Pillar Axiom SMIProvider



Integration Guide

ORACLE

PILLAR AXIOM

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About SMIProvider

Storage Management Initiative Specification (SMI-S) is a set of management interfaces designed to make it easier for storage hardware and management applications from different vendors to work together. Integral to this initiative, an SMI provider serves as a translator between the storage hardware and management applications. With the Pillar Axiom SMIProvider, any management application written natively to the SMI-S standard can manage Pillar Axiom systems.

SMIProvider can respond to requests from SMI-based management applications in supporting network and storage administrators who need to:

- Detect newly added devices on a network.
- Use encrypted SMI connections.
- Provision logical volumes and storage resources.
- Map HBAs to specific LUNs, mask LUNs from specific HBAs, or both.

The Pillar Axiom SMIProvider has the following features:

- Caches much of the information requested by SMI clients to provide enhanced response times.
- Supports Service Location Protocol device discovery using a built-in service agent.
- Supports NAS and SAN environments.
- Supports Fibre Channel protocols.
- Supports SMI version 1.1 (CTP 1.1 certified by SNIA), version 1.2, and version 1.3.

Note: To access the services of the Pillar Axiom SMIProvider, the client needs to be compliant with SMI-S version 1.1 or later.

SMIProvider Connections and Profiles

Following the steps recommended in the SMI specification, use Service Location Protocol (SLP) within a given subnet to discover the Common Information Model object manager (CIMOM) connection information and the various profiles supported on Pillar Axiom storage systems.

Table 1 CIMOM information

Property	Value
HTTP port	5988
SSL port	5989
Interop namespace	/root/pg_interop
1.1-compliant provider namespace	/root/pillar
1.2-supported provider namespace	/root/pillar1_2
1.3-supported provider namespace	/root/pillar1_3

Table 2 Supported profiles for SMI-S 1.1

Autonomous profile	Subprofiles
Array	Block Server Performance Subprofile
	Block Services Package
	Copy Services Subprofile
	Device Credentials Subprofile
	Disk Drive Lite Subprofile
	FC Initiator Ports Profile
	FC Target Ports Profile
	Indication Profile

Table 2 Supported profiles for SMI-S 1.1 (continued)

Autonomous profile	Subprofiles
	Job Control Subprofile
	Multiple Computer System Subprofile
	Physical Package Subprofile
	Software Subprofile
	Masking and Mapping Subprofile (<i>Fibre Channel only per the FC Target Ports and FC Initiator Ports profiles</i>)
Server	Profile Registration Profile

Table 3 Supported profiles for SMI-S 1.2

Autonomous profile	Subprofiles
<i>All profiles listed in Table 2: Supported profiles for SMI-S 1.1, plus those listed below.</i>	
Self-Contained NAS	Filesystem Profile
	Filesystem Manipulation Subprofile
	File Export Profile
	File Export Manipulation Subprofile
	File Storage Profile

Table 4 Supported profiles for SMI-S 1.3

Autonomous profile	Subprofiles
Array	Block Server Performance Subprofile
	Block Services Package
	Copy Services Subprofile
	Disk Drive Lite Subprofile

Table 4 Supported profiles for SMI-S 1.3 (continued)

Autonomous profile	Subprofiles
	Software Subprofile
	Masking and Mapping Subprofile (<i>Fibre Channel only per the FC Target Ports and FC Initiator Ports profiles</i>)
	Block Storage Views Subprofile

Important! Certain older Pillar Axiom systems (such as Pillar Axiom 300 systems running on 1.x software and Pillar Axiom 500 systems upgraded from 1.x to 2.x software) may not have sufficient memory in the Pilot management controller to support SMIPProvider causing the system to disable SMIPProvider. If you suspect that SMIPProvider is disabled, contact the Pillar World Wide Customer Support Center for assistance. All Pillar Axiom systems not in the above categories have sufficient Pilot memory to support SMIPProvider.