



Aperi Production Ready Task Force Workgroup

May 2008

Topics

- Purpose/Background
- Issues
 - Specification
 - Technology
 - Implementation and Adoption Issues

Purpose/Background

- Identify issues within current CIM/SMI-S deployments from client perspective.
- Identify areas where Aperi, as an open source project can help.
- Process Flow
 - Overall Brainstorming of issues and potential solutions
 - Classification and Prioritisation

Specification Issues (1/2) – The SMI-S Spec Itself

Name	Priority	Description	Aperi Contribution
Consistency	High	Ambiguities within SMI-S specification.	Open defects
Backwards Compatibility	Medium-High	Clients often need rework when new iterations of providers are made available. Often provider implementation driven, but SMI-S has a role as well.	Open defects (SMI-S) Marketing and Messaging Testing

Specification Issues (2/2)

Name	Priority	Description	Aperi Contribution
Spec Churn	Medium	Spec changes too quickly; putting other elements at risk (like stability, backwards compatibility, etc).	Provide input to help prioritise features
Lagging Spec	Low	Spec doesn't have new features fast enough. This item must not impact other desired characteristics like backward compatibility.	Provide input to help prioritise features

Technology Issues (1/2) – Overall CIM/SMI-S Technology and Frameworks

Name	Priority	Description	Aperi Contribution
Element Managers Not using SMI-S	High	SMI-S does not target element manager workloads (e.g., response time criteria, real-time data transfer)	Add element manager workloads to Aperi; perhaps new Aperi-Lite
Lagging Embedded CIM Agents	High	Embedded providers would lower maintenance, improve performance, simplify deployment.	Marketing message – “Aperi runs better with Embedded providers.” Create Aperi best practises page to encourage embedding

Technology Issues (2/2)

Name	Priority	Description	Aperi Impact
Event Management	Medium-High	Indication storms, no QoS for indications, not reliable.	Aperi can act as testbed for prototypes to address these issues.
Clients coding to Vendor MOF	Medium	Clients tend to code implementations directly to vendor implementation rather than to the SMI-S spec and test against vendors. From MOF/models, it's hard to know where the standard ends and vendor extensions begin.	Unknown

Implementation and Adoption Issues (1/3)

Name	Priority	Description	Aperi Impact
Scalability and Performance	High	Need good performance to gain customer adoption.	Use client to demonstrate that high performance is achievable using standard SMI-S; can open defects when issues are found.
Stress Testing	High	We need better testing to ensure that implementations are stable, not just pass a functional test.	Aperi has little to offer, but likes the idea of 3 rd party testing/certification such as Olocity

Implementation and Adoption Issues (2/3)

Name	Priority	Description	Aperi Impact
Configuration and Setup	High	Need to make config easier and fail-safe	Aperi recommends embedded agents to eliminate config/setup issues (marketing message)
Host Profiles Lagging Adoption	Medium	Lots of operating systems support host profiles, but very few clients use them.	Extend Aperi client to include host-based profiles, eliminating host agents

Implementation and Adoption Issues (3/3)

Name	Priority	Description	Aperi Impact
“Bet the Farm on SMI-S”	High	Use SMI-S as a foundation for storage management functions instead of as an interoperability “feature.”	<p>Eliminate non-SMI-S APIs from Aperi clients and market SMI-S more.</p> <p>Create workgroup within Aperi to identify reusable components that we can package up and make available for others to use.</p>