Diag SIG Working Group Charter
Dated 2008-03-17
The information provided below is subject to change and reflects the current knowledge of the Working Group.

Management Problem(s) and Environment

Diagnostics is a critical component of systems management. Diagnostic services are used in problem containment to maintain availability, achieve fault isolation for system recovery, establish system integrity during boot, increase system reliability, and perform routine proactive system verification. The goal of the Common Diagnostic Model (CDM) is to define industry-standard building blocks, based on and consistent with the DMTF CIM, that enable seamless integration of vendor-supplied diagnostic services into system and SAN management frameworks.

The CDM is an architecture and methodology for exposing system diagnostic instrumentation through the CIM standard interfaces. IBM, Intel, and PC-Doctor, Inc., introduced the CDM at the DMTF annual conference in June 1999. Since then, the proposed extensions required to support diagnostics have been accepted by the DMTF and included in version 2.3 of the CIM schema.

The ability to transparently run diagnostic tests and exercisers while the user operating system is functional (no reboot required) may significantly contribute to the reduction of Total Cost of Ownership (TCO) and will also lower warranty costs by reducing the return of defect-free parts for service. This functionality is referred to as *OS-Present Diagnostics* (also known as On-line Diagnostics and Concurrent Diagnostics).

Standardization of these interfaces means that clients, providers, and tests gain a certain degree of portability and, in many cases, need only be written once to satisfy multiple environments and platforms. OEMs can differentiate their diagnostic offerings by how effectively their applications use the information and capabilities available through CIM to maintain and service their systems.

Reduced cost through standardization is accompanied by the initial investment of coding to a new interface. The CDM Forum intends to ease this burden by developing tools to generate most of the interface code necessary to communicate with CIM.

Since its introduction, the CDM has been promoted at various industry events including the Intel Developer Forums, DMTF Annual Conferences, and Microsoft WinHEC. It has been met with strong support from the technical community and is quickly becoming the de facto standard for developing OS-Present Diagnostic tools. Major OEMs are developing service tools that rely on the CDM and will require their vendors to deliver CDM-compliant diagnostic tests with their products.

Working Group Charter

The objective of this working group is to continue development of the CDM. The primary objective of the CDM is to standardize the interfaces that diagnostic developers create for their OS-Present Diagnostics in the operating environment, making the diagnostics accessible to all applications that query CIM for diagnostic data or register with CIM to execute diagnostic methods and receive results.

Alliance Partnerships

Reliance/Coordination with other WG Models

The Diag SIG WG will work with the CDM Forum to develop compliance and certification tests for the CDM.

Prior Work

- DSP1002 version 1, Diagnostic Profile
- DSP1002 version 2, Diagnostic Profile

Current Work – Overview, Deliverables and Timeline

The WG continues to extend the standardization of problem determination modules and further clarify desired behaviors of the provider. These activities include:

- Future revisions of DSP1002 to expand the scope of devices covered. This includes, but is not limited to commodity devices such as processors, memory, PCI, and USB components.
- Standard diagnostic messages definitions, including modeling a message repositories for clients to retrieve messages.
- Updates to the profile to outline the behavior of diagnostic results that should be persisted across diagnostic executions and system restarts.

DMTF Contacts

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To join the Diag SIG WG visit: http://www.dmtf.org/apps/org/workgroup/cim-core/diag/