# CiscoWorks Health and Utilization Monitor 1.2

Product Overview

CiscoWorks Health and Utilization Monitor (HUM) 1.2 is a Simple Network Management Protocol (SNMP)–based MIB polling application that monitors network elements (such as CPUs, memory, interfaces/ports, links) for their availability and utilization metrics and provides historical trends.

Please see Figure 1 for a CiscoWorks Health and Utilization Monitor deployment scenario.

Figure 1. CiscoWorks HUM Deployment Scenario
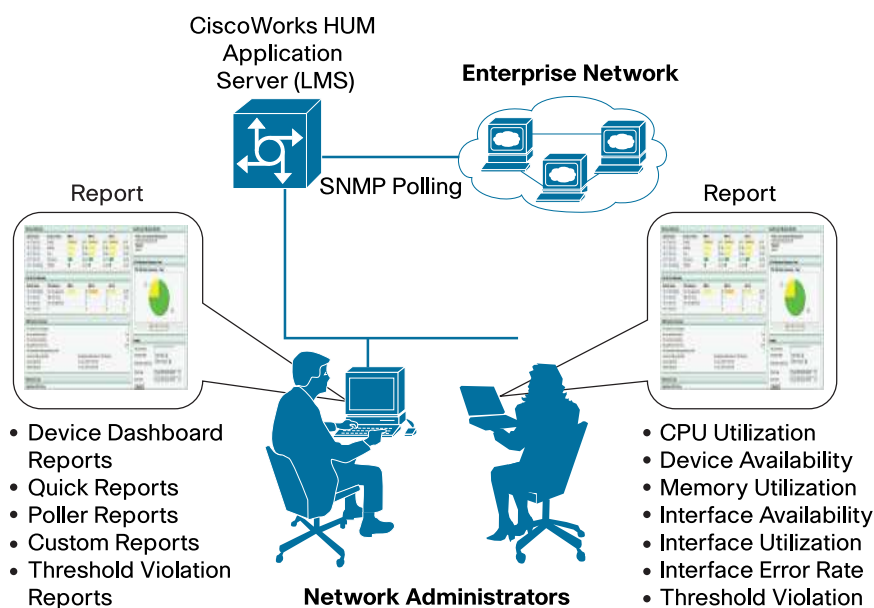
CiscoWorks HUM polls the MIB variables in a device through SNMP and collects the data. The collected data is used to generate current and historical reports that help network administrators to analyze the utilization and availability levels of devices in the network. Reports can be emailed, saved, or printed for later reference.

CiscoWorks HUM is preintegrated with CiscoWorks LAN Management Solution (LMS) 3.2 and distributed as part of the same media, under the LMS 3.2 single install framework. CiscoWorks HUM 1.2 is designed as an add-on product and fits well with the existing CiscoWorks LMS 3.2 applications. CiscoWorks HUM integrates with Cisco® Secure Access Control Server (ACS) for authorization and authentication services.

Figure 2 shows how CiscoWorks HUM is positioned within the CiscoWorks LMS architecture.

Figure 2.   How CiscoWorks HUM Is Positioned within the CiscoWorks LMS Architecture
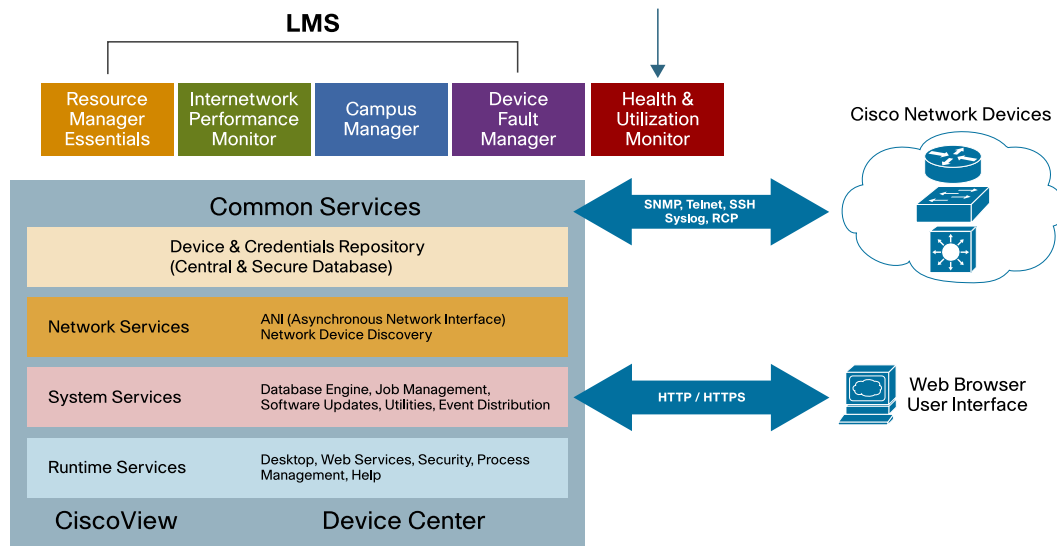
Features and Benefits

CiscoWorks HUM 1.2 provides compelling features that network administrators can use to better understand, monitor, and analyze the utilization and availability levels of devices in the network.

The following key features are provided by CiscoWorks HUM 1.2:

- Support for integration with CiscoWorks LMS 3.2
- Monitoring support for Power-over-Ethernet (PoE) enabled Cisco devices
- TrendWatch support for identifying historical network performance patterns
- Overlay graphs support for quick consumption/comparison of relative data points
- Nonhistorical threshold support for instant thresholding and notification
- Advanced Histo-GraphIt portlet with data export capability
- Live-GraphIt portlet for live troubleshooting network of performance issues
- Trap and syslog support

Table 1 outlines the features and benefits of CiscoWorks HUM 1.2.

Table 1.   Features and Benefits

Feature	Benefit
Power over Ethernet monitoring	CiscoWorks HUM provides monitoring support for PoE-enabled Cisco devices. HUM provides comprehensive reporting on top of PoE statistics both at device and port levels. HUM also provides comprehensive dashboard views with top-N power consumers.
TrendWatch support	The CiscoWorks HUM TrendWatch utility allows users to analyze performance-level patterns historically. Using the TrendWatch utility, administrators can keep a watch on performance levels over time for specific parameters (for example, CPU utilization level greater than 70 percent, N times, over a period of N days).
Overlay graphs support	Helps network administrators to quickly consume and compare related data points on a single graph instead of two.
Nonhistorical thresholding support	Helps network administrators who are more interested in setting a large number of thresholds but don't want to store the data points and still like to get notified upon threshold breaches.
Advanced Histo-GraphIt portlet	Enhancement to the Histo-GraphIt portlet that helps users to export graphed data points in the form of comma-separated values (CSVs)
Live-GraphIt portlet	Helps closer troubleshooting of problematic devices/interfaces by setting up real-time polling at an interval of 30 seconds or 45 seconds; provides live graphing of data points on the portal dashboard
Trap and syslog support	Users can configure HUM to send traps and syslogs upon threshold breaches and TrendWatch violations.

| CiscoWorks LMS 3.2 integration | Network administrators can launch CiscoWorks HUM reports such as the device dashboard from other CiscoWorks LMS applications. |

Product Specifications

Table 2 lists product specifications for CiscoWorks HUM 1.2.

Table 2.   Product Specifications

Item	Description
Product compatibility	CiscoWorks HUM 1.2 is compatible with CiscoWorks LMS 3.2, LMS 3.1, and later.
Software compatibility	CiscoWorks HUM 1.2 can be installed in a bundle environment along with other CiscoWorks LMS 3.2 and LMS 3.1 applications or can be installed separately on top of CiscoWorks Common Services.
Components	CiscoWorks HUM adds its own configuration, reporting UIs, and portal view on top of existing CiscoWorks LMS 3.2 applications.
Performance	CiscoWorks HUM 1.2 supports up to 3000 devices and can poll 100,000 MIB objects. In a Windows environment, out of 100,000 MIB objects, 40,000 MIB objects can be polled in a 1-minute interval and 60,000 MIB objects can be polled in 5-minute or above intervals. In a Solaris environment, all the 100,000 objects can be polled only on 5-minute or above intervals.

System Requirements

Please refer to Table 3 for server requirements and Table 4 for client requirements in order to install CiscoWorks HUM 1.2.

Table 3.   Server System Requirements

Component	Solaris	Windows
CiscoWorks LMS Bundle Hardware Configuration		
50 device license	1 UltraSPARC CPU with 2 GB RAM and 4 GB swap space for Solaris 9 1 UltraSPARC CPU with 4 GB RAM and 8 GB swap space for Solaris 10	1 CPU with 2 GB RAM and 4 GB swap space running Windows Server 2003 or 2008
300 device license	2 UltraSPARC CPUs with 4 GB RAM and 8 GB swap space for Solaris 9 and 10	1 CPU with 2 GB RAM and 4 GB swap space running Windows Server 2003 or 2008
3000 device license	4 UltraSPARC CPUs with 8 GB RAM and 16 GB swap space for Solaris 9 and 10	2 CPUs with 4 GB RAM and 8 GB swap space running Windows Server 2003 or 2008
Standalone Hardware Configuration		
50 device license	1 UltraSPARC CPU with 2 GB RAM and 4 GB swap space for Solaris 9 1 UltraSPARC CPU with 4 GB RAM and 8 GB swap space for Solaris 10	1 CPU with 2 GB RAM and 4 GB swap space running Windows Server 2003 or 2008
300 device license	2 UltraSPARC CPUs with 4 GB RAM and 8 GB swap space for Solaris 9 and 10	1 CPU with 2 GB RAM and 4 GB swap space running Windows Server 2003 or 2008
3000 device license	4 UltraSPARC CPUs with 8 GB RAM and 16 GB swap space for Solaris 9 and 10	2 CPUs with 4 GB RAM and 8 GB swap space running Windows Server 2003 or 2008

Table 4.   Client System Requirements

Component	Requirement
System hardware	PC-compatible system with single CPU 2.4 GHz or equivalent processor, color monitor, and CD-ROM drive (ISO 9660 compliant) on the host system
Memory	512 MB minimum RAM Either of the following: • For Solaris: 1 GB swap space • For Windows: 1 GB virtual memory Cisco recommends that you set virtual memory and swap space to twice the size of RAM.

Operating system	The recommended operating systems are:
	• Windows System:
	  ◦ Windows Server 2003 Standard and Enterprise Editions with Service Packs 1 and 2
	  ◦ Windows Server 2003 R2 Standard and Enterprise Editions with Service Packs 1 and 2
	  ◦ Windows XP with Service Pack 2
	  ◦ Windows Vista Business Edition
	  ◦ Windows Server 2008 (32 bit, 64 bit)
	CiscoWorks HUM supports only the U.S. English and Japanese versions of these operating systems.
	Set the default locale to U.S.-English for the U.S.-English version and Japanese for the Japanese version. Installation might proceed in other locales, but there might be problems in the functionality of CiscoWorks HUM.
	• Solaris System:
	  ◦ Sun UltraSPARC processor with Solaris 9 and Solaris 10 with latest patches and upgrades

Web browser	• Internet Explorer 6.0 Service Pack 1 • Internet Explorer 7.0 • Firefox 2.0, Firefox 3.0 **Note:** Solaris systems support only Firefox browsers (Solaris 9 – Firefox 2.0, Solaris 10 – Firefox 3.0).

Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

For more information about the CiscoWorks Health and Utilization Monitor application, visit http://www.cisco.com/go/hum, contact your local Cisco account representative, or send an email to the product marketing group at ask-hum-pm@cisco.com.

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