



Intel® System Management Software

Intel Modular Server Management Pack User Guide

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Revision History

Date	Revision	Description
December 20, 2007	1.0	Initial Release

Contents

- 1 Introduction 1**
 - Features 1
 - System Requirements 2
 - Other Management Packs from Intel..... 2
 - Where To Find More Information 2
- 2 Installation 3**
- 3 Using the Management Pack 7**
 - Discovering Systems 7
 - Configuring Intel® Modular Server Alerts 7
 - Using Views 8
 - Using Monitoring Tasks..... 11

1 Introduction

The Intel® Modular Server Management Pack provides essential server management tools for small and medium sized businesses. This Management Pack adds server management functionality for Intel Modular Server platforms by building upon the extensive capabilities of Microsoft® System Center Essentials 2007™.

In Microsoft® System Center Essentials 2007™ with the Intel Modular Server Management Pack, Intel Server Management Pack, and Intel Active Management Technology Management Pack, the managed computers may be modular servers, rack- or pedestal-mounted servers, desktop computers, or laptop computers. With the Intel Modular Server Management Pack, you can manage Intel Modular Servers right out of the box.

The following diagram identifies the elements in a typical small network installation of Microsoft® System Center Essentials 2007™ with the Intel Modular Server Management Pack. The Microsoft® System Center Essentials 2007™ server contains the database, server components, and user interface. The Management Console only has the user interface components.



Note: Microsoft® System Center Essentials 2007™ requires Microsoft® Active Directory® directory service and only one copy of the Microsoft® System Center Essentials 2007™ Server may be installed in a network domain. The prerequisite checker in the installer will inform you if another instance of Microsoft® System Center Essentials 2007™ has been detected.

If you have already installed Microsoft® System Center Essentials 2007™, you just need to install the Intel Modular Server Management Pack. You can also use the Intel Modular Server Management Pack with Microsoft® System Center Operations Manager 2007 (available from Microsoft).

Features

The Intel Modular Server Management Pack has the following features:

- Discovery Configuration Wizard detects networked Intel Modular Server systems.
- Displays the health and alerts from Intel Modular Server Compute Modules.
- Supports launching the Intel Modular Server Control Software web-based console.

System Requirements

This hardware and software prerequisites for Intel Modular Server Management Pack is the same as Microsoft® System Center Essentials 2007™, except where noted in this section.

Please refer to the Intel Modular Server Management Pack *Release Notes* for changes to the system requirements that occurred after this document was published.

Microsoft® System Center Essentials 2007™ Server

The system must meet the minimum hardware and software prerequisites for Microsoft® System Center Essentials 2007™. The system must have one of the following versions of Windows® (IA-32 or Intel 64 architecture version) operating system:

- Windows Server® 2003 Small Business Edition
- Windows Server® 2003 R2
- Windows Server® 2003 with SP1 or later

Managed Intel® Modular Server System

The Intel Modular Server System must have a management module version 1.0 or later. The servers may be running any operating system supported by the modular server system. No operating system agent is required for the Intel Modular Server Management Pack.

Microsoft® SCE 2007 Management Console

The system must meet the minimum hardware and software prerequisites for Microsoft® System Center Essentials 2007™ consoles, and it must have one of the following versions of Microsoft® Windows® (IA-32 or Intel 64 architecture version, unless otherwise noted) operating system:

- Windows Server® 2003 Small Business Edition
- Windows Server® 2003 R2
- Windows Server® 2003 with SP1 or later (IA-32 and Intel 64 architecture editions)
- Windows® XP Professional, with SP1 or later
- Windows® Vista™ Enterprise Edition

Other Management Packs from Intel

Please refer to the Intel System Management Software 2.0 *Release Notes* for the latest information of other Intel Management Packs that may be available.

Where To Find More Information

<http://support.intel.com> for Intel support.

<http://www.microsoft.com/systemcenter/sce/default.aspx> for Microsoft® System Center Essentials 2007™ information. Contact your system supplier for support information.

2 Installation

You must install the Intel Modular Server Management Pack on the Microsoft® System Center Essentials 2007™ or Microsoft® System Center Operations Manager 2007 management server and on the Management Console computers. The installer will detect the type of installation (server or Management Console) and install only the required components.

Before you install the Intel Modular Server Management Pack, do the following:

- Install the Windows® SNMP Service and SNMP Trap Service on the Microsoft® System Center Essentials 2007™ server.

To install the Intel Modular Server Management Pack, unzip the distribution package on your Microsoft System Center Essentials 2007™ server and run one of the following installers:

- **Intel Modular Server Management Pack x86.exe** for Intel IA-32 versions of the operating system
- **Intel Modular Server Management Pack x64.exe** for Intel 64 versions of the operating system

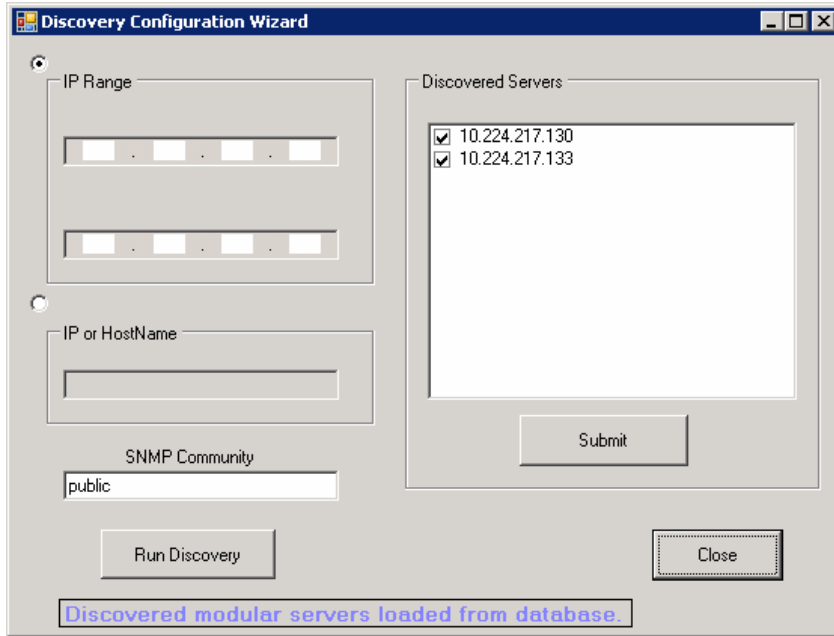
After you have installed the Intel Modular Server Management Pack, you must configure two settings:

- Set the discovery IP Address Range in Microsoft® System Center Essentials 2007™.
- Configure the SNMP Notification settings from the Intel Modular Server Control Software.

Setting the Discovery IP Address Range and SNMP Community

To configure Microsoft® System Center Essentials 2007™ with the IP address range for discovering Intel Modular Server Systems, do the following:

1. Launch Microsoft® System Center Essentials 2007™ and open the Monitoring tab.
2. Expand Intel® Modular Servers.
3. Select Configuration.
4. Right click on the management server, then select Management Group Details Tasks→Run Intel® Modular Server Discovery Wizard. The list of discovered Intel Modular Server Systems is shown in the Discovered Servers pane. (This list is loaded from the database when you first open the wizard.)

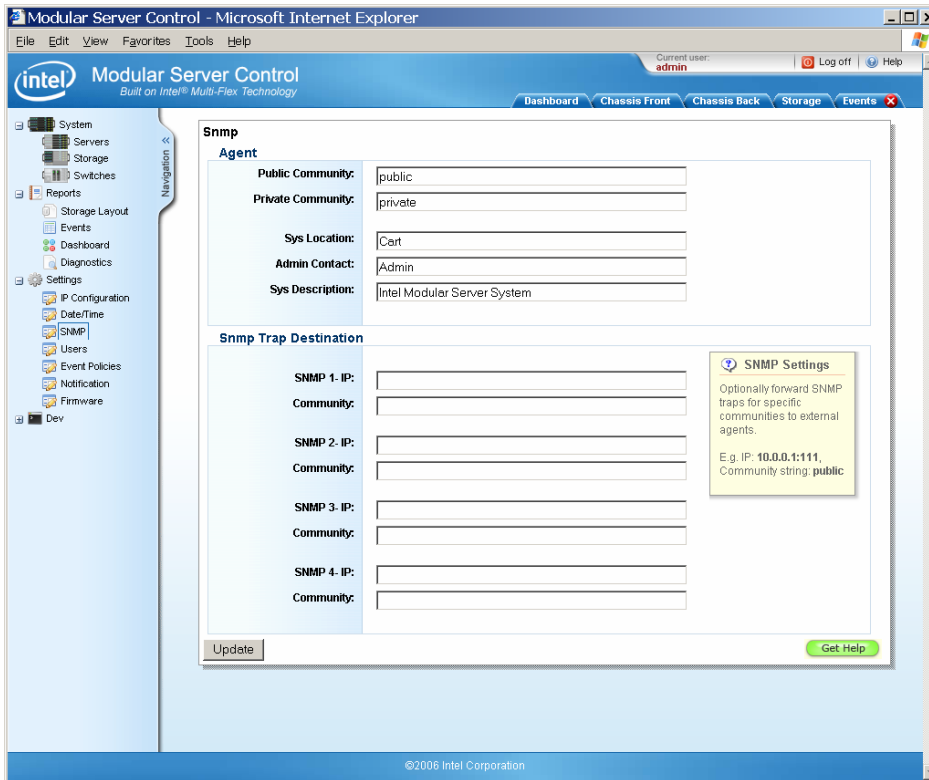


5. Enter the range of IP addresses for the discovery ranges, or, if you know the IP Address or hostname for the Intel Modular Server, enter it in the IP or HostName box.
6. Enter the SNMP community string. (This string should match one of the SNMP Community Strings set in the Intel Modular Server Control Software SNMP configuration screen.)
7. Click Run Discovery. The discovery process may take a few minutes. When it is finished, the list of all the discovered Intel Modular Servers will be listed in the right hand pane.
8. Select the checkboxes for each of the servers listed under Discovered Servers that you want to monitor in the Intel Modular Server Management Pack, then choose Submit. (Health and inventory data will be available for the discovered servers in a few minutes.)
9. Choose Close to close the Wizard.

Setting the SNMP Settings on the Intel® Modular Server

To configure SNMP community string setting on the Intel Modular Server, do the following:

1. Launch Intel Modular Server Control Software console and login with administrative privileges.
2. From the left navigation pane, select Settings→SNMP.



3. Enter the IP address and SNMP community string for the Microsoft® System Center Essentials 2007™ server in the SNMP Trap destination.
4. Click Update to save the settings.

You should verify that your network configuration will allow SNMP traps and HTTP network traffic between the Intel Modular Server and the Microsoft® System Center Essentials 2007™ server.

3 Using the Management Pack

After you have installed Microsoft® System Center Essentials 2007™ and the Intel Modular Server Management Pack, you are ready to start using it. Using the Intel Modular Server Management Pack typically consists of doing one or more of the following activities:

- Discover the existing Intel Modular Server Systems using the Discovery Wizard.
- Verify that the Alert Policies you need are configured to send SNMP alerts to the Microsoft® System Center Essentials 2007™ server.
- Use the Modular Server Systems Diagram to quickly explore the health and inventory data in the system.
- Use the Modular Server System State to quickly see the health of each Intel Modular Server System.
- Launch the Modular Server System Web GUI to change the system configuration or investigate a health issue.

Discovering Systems

Discovering the Intel Modular Server Systems in your network is a prerequisite to using the Intel Modular Server Management Pack. Use the Intel Modular Server Discovery Wizard to discover Intel Modular Servers (see page 3 for instructions on how to use the Wizard). The list of discovered Intel Modular Servers must be manually updated if you add or remove servers.

Configuring Intel® Modular Server Alerts

The Intel Modular Server Management Pack uses the SNMP traps from the Intel Modular Server System to monitor the system health. To configure which SNMP traps are sent to the Intel Modular Server Management Pack. You should review the Alert Policies when you first install the Intel Modular Server System to verify that all the Alert Policies that you require in your application have the SNMP column checked. A typical Alert Policies Definition screen is shown below with the SNMP column checked for the three Alert Policies shown.

Component Class	Event CodeOID	ID	Subsys	Type	Severity	Brief Description	Log Every	Log	Email	SNMP	<input type="checkbox"/>	act
CMM	CH_CMM_ID	1620	NA	IPMI	Info	{snsrName}: CMM Identify LED (lit)	0	✓	✓	✓	<input type="checkbox"/>	edit
CMM	CMM_INSERTION	1011	NA	IPMI	Info	Peer CMM detected	0	✓	✓	✓	<input type="checkbox"/>	edit
CMM	CMM_INT_SW_ERR	3407	NA	System	Critical	CMM Internal Firmware Error	0	✓	✓	✓	<input type="checkbox"/>	edit

To edit the Alert Policies, do the following:

1. Open the Intel Modular Server Control Software console. (Select the Intel Modular Server System in the State View or the chassis in the Modular Server Systems Diagram)

then select Launch Modular Server System WEB GUI from the Action menu.)

2. Choose Settings→Event Policies from the left navigation pane.
3. Choose the Edit link for the Alert Policy you want to modify.
4. Modify the Log Snmp setting to enable or disable the SNMP traps.

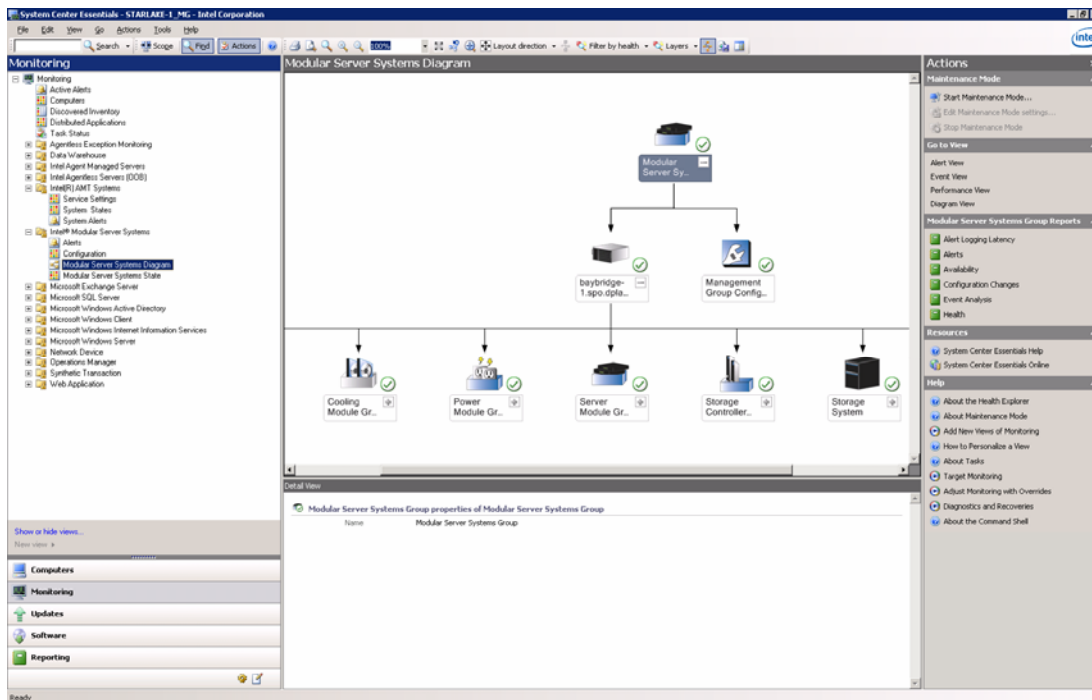
Log:	Yes
Log Email:	Yes
Log Snmp:	Yes

5. Choose Update to save the changes.

Using Views

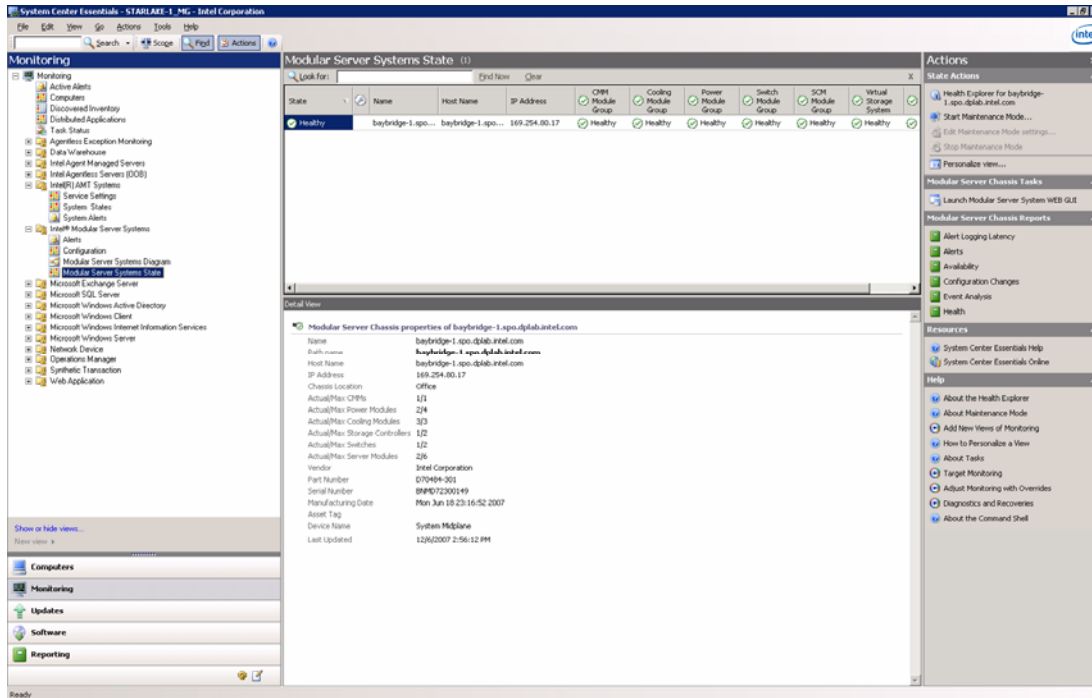
The Intel Modular Server Management Pack includes the following standard views for the Intel Modular Server:

- **Modular Server Systems Diagram**—This view shows a hierarchical diagram of the Intel Modular Server chassis and all the components present in the system. You can see the health of each component and click on each icon for additional information. To launch the Intel Modular Server Software console from this view, click on the Intel Modular Server system chassis, then choose Launch Modular Server System WEB GUI from the Actions menu.



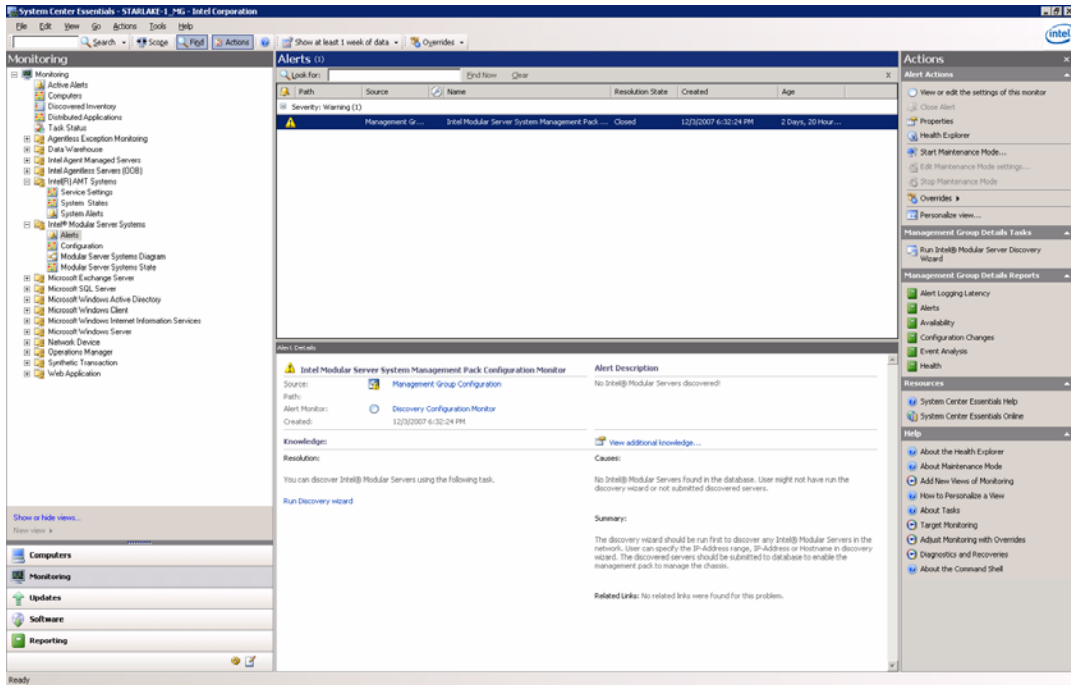
- **Modular Server System State**—This view shows the health state for each Intel Modular Server systems that has been discovered. To launch the Intel Modular Server Software console from this view, click on the row that contains details on the Intel Modular Server system you are interested in, then choose Launch Modular Server

System WEB GUI from the Actions menu.

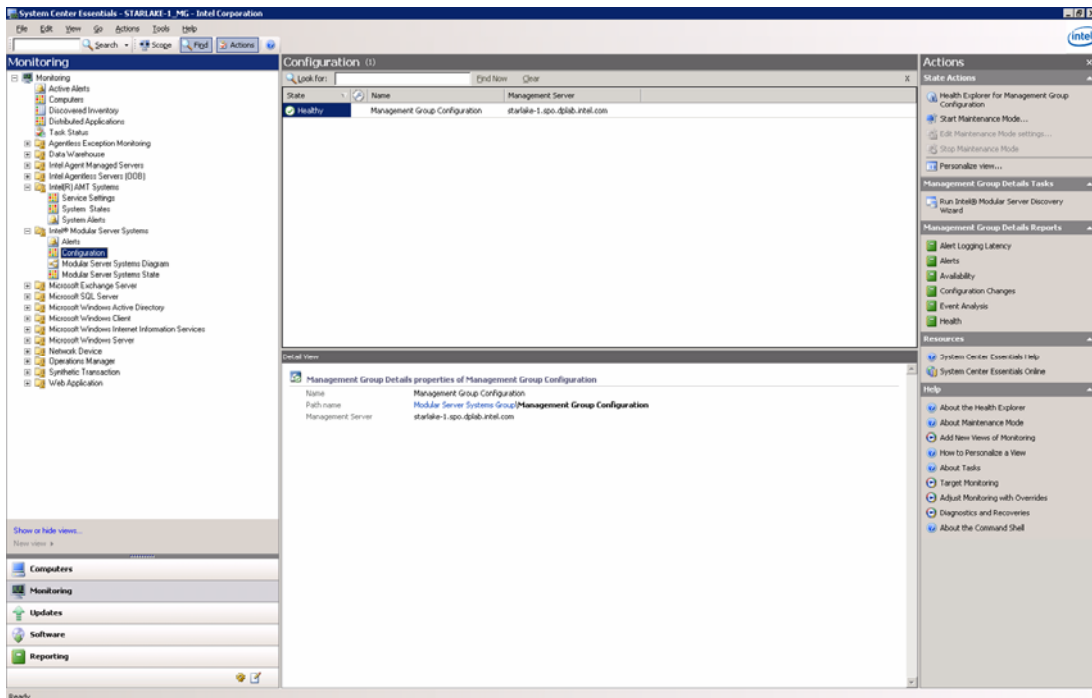


- **Alerts**—This is a standard Microsoft® System Center Essentials 2007™ view that shows the Intel Modular Server alerts. Alerts are received by the Microsoft® System Center Essentials 2007™ server as SNMP traps.

Clicking on the information icon in the Alerts view will show additional Product Knowledge for the alert. Note that the alert severity shown in the Microsoft® System Center Essentials 2007™ is the *default* severity for the Intel Modular Server Alert Policies. Any changes made by the Intel Modular Server administrator to the Alert Policy severities will not be shown in the Server Alerts view.



- **Configuration**—This view lists the discovered Intel Modular Server systems. You can launch the discovery Wizard by clicking on Run Intel® Modular Server Discovery Wizard on the Actions menu.



Using Monitoring Tasks

The Intel Modular Server Management Pack adds one Monitoring task:

- **Launch Modular Server System WEB GUI**—This task launches the Intel Modular Server Control Software console. Use the Intel Modular Server Control Software console to examine the event log, configure the storage and network controllers, power-on and -off the server compute modules, or launch KVM sessions with the server compute modules.

You will be prompted for the login credentials for the Intel Modular Server Control Software.

The Dashboard of the Intel Modular Server Control Software console is shown below.

