



HP Systems Insight Manager Best Practices



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Topics for discussion

- **HP Systems Insight Manager Introduction and Basics**
 - What's new? What's cool? What's useful?
- **Migration from Insight Manager 7**
- **Security Hardening**
- **Local iLO Configuration**
- **Why use Performance Monitor**



HP Systems Insight Manager: The Basics





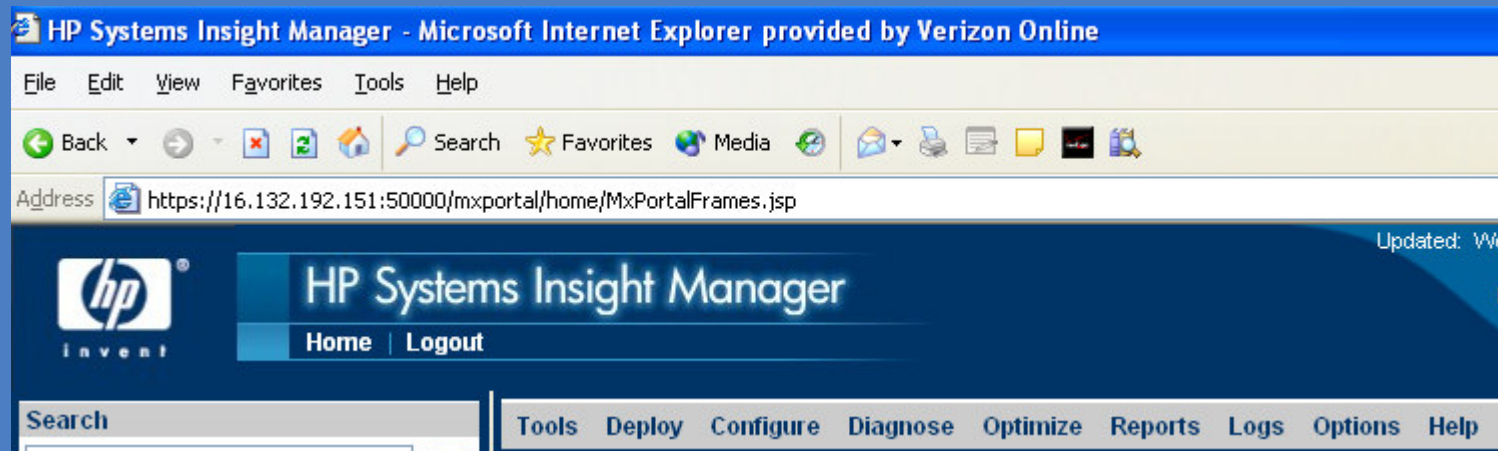
What's it called now?

- **Management Server is Central Management Server (CMS)**
- **Queries are either Systems Lists or Event Lists**
- **Tasks are still task but**
 - **Created using a step wise process under various menus**
 - **Resulted view in Logs menu**
- **Devices are System Lists**
- **Events are Events Lists**
- **Application Launch is Tools->Commands**
- **Event Notification is Automatic Event Handlers**
- **Reports are still Reports**
- **MIB loads use command line utilities**





The Basics



The diamond icons are replaced with dropdown menus

Menus can be customized and menu options added

Specific tools for specific platforms, actions will warn you about inappropriate usage

Uses the same ports for console access: http: 280 and https: 50000 and agent access: http: 2301 and https: 2381

Uses SSL for communication to the agents

Uses SSH for remote tools (e.g., ls, dir, cp) and for any custom commands

Lots of CLIs for managing the CMS










New Home Page

- **Customize to your favorite list as new Home Page**
- **Reminder for first things to do:**
 - **Discovery**
 - **Add Users**
 - **Setup email**
 - **Create Event Handlers**

Over all Status

- **Using ISO color and shape codes**
- **Customize view of status**
- **Special messages can be created for critical systems**
- **Still click on the number to view the system list**

Updated: Wednesday, July 14, 2004 1:46:08 PM EDT [Customize](#)

	System needs attention!				
Uncleared Event Status		<u>13</u>	<u>44</u>	<u>320</u>	<u>7</u>
System Status		<u>32</u>	<u>12</u>	<u>1</u>	<u>45</u>

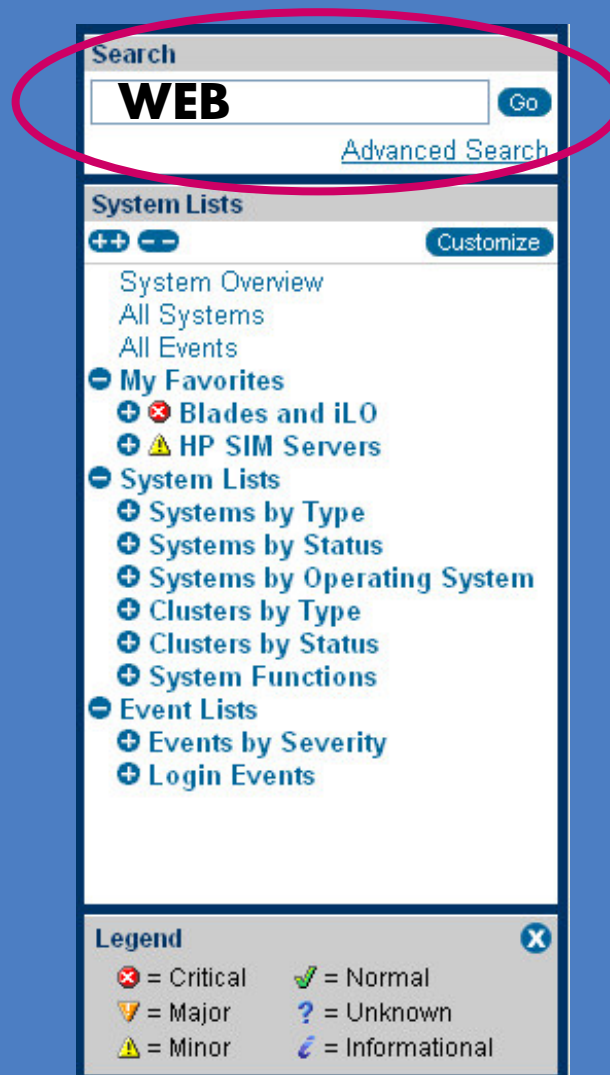
Working with System Lists

- **List of systems**
 - **Untrusted Servers**
 - **Server with agents older than 7.10**
 - **Blades and iLOs**
 - **HP SIM Servers**
- **Lists of events**
 - **Events older than 7 days**
- **My Favorites with status**
 - **Add any System or Events list to your favorites and see aggregate status**



Searching

- **Search improved to match across several common attributes**
- **Modify Server Role field of several agents to be "Web Server"**
- **Searching on "Web" will list anything containing that in common attributes fields.**
- **Best way to do some event handlers**
- **Good for finding systems with bad trusts, so you can fix them**



Tasks

- Located under Logs->View All Schedule Tasks
- The same status polling and identification tasks
- Displays how long it took to run
 - Determine best interval for status polling in large environments
 - Gauge how long a VCA updates might take (rule of thumb 30 minutes for older machines, 10-15 for newer machines)

All Scheduled Tasks
Description: View, maintain and control scheduled tasks

Click a row to select and view task results Total: 10

Name	Tool	Last Run	Schedule
<input type="radio"/> Bi Weekly Data Collection	Data Collection	7/14/04 - 10:32 AM	Periodic - Next Run
<input type="radio"/> Daily Device Identification	Identify Systems	Running: 98%	Periodic - Next Run
<input type="radio"/> Delete Events Older Than 7 Days	Delete Events	7/14/04 - 10:32 AM	Periodic - Next Run
<input type="radio"/> Hardware Status Polling 1	Hardware Status Polling	7/14/04 - 1:42 PM	Periodic - Next Run
<input type="radio"/> Hardware Status Polling for non Servers	Hardware Status Polling	Running: 80%	Periodic - Next Run
<input checked="" type="radio"/> Hardware Status Polling for Servers	Hardware Status Polling	7/14/04 - 1:42 PM	Periodic - Next Run
<input type="radio"/> Initial Data Collection	Data Collection	7/14/04 - 11:25 AM	Node/Event Driven
<input type="radio"/> Initial Hardware Status Polling	Hardware Status Polling	7/14/04 - 11:25 AM	Node/Event Driven
<input type="radio"/> Software Version Status Polling	Software Status Polling	7/14/04 - 10:32 AM	Periodic - Next Run

Run Now Edit Delete

Task Results

Task name: Hardware Status Polling for Servers Last modified: Wed, 7/14/2004, 1:42 PM EDT
 Tool: Hardware Status Polling Target: [Server Status Polling List](#)
 Owner: DCML570\mxadmin Schedule: Every 5 minutes
 Command: N/A Next run: Wed, 7/14/2004, 1:47 PM EDT

Click a row to select and view task instance results Total: 1

End Time	Status	ID
7/14/04 - 1:44 PM	Complete	15612

Stop Delete

Task Instance Results

Status: Complete Start time: 7/14/04 - 1:43 PM EDT
 ID: 15612 End time: 7/14/04 - 1:44 PM EDT
 Run by: DCML570\mxadmin Duration: 40 sec

Lists – selecting targets

- Imbedded in the tasks
- Simple check boxes in a list
- Tells if the items are OK with this tool
- Preserved for the next task

All Systems

View as: table Customize

Systems in Table: 35 Critical 12 Major 1 Minor 42 Normal 5 Unknown Total: 95

HW	MP	SW	System Name	System Type	System Address	Product Name	OS Name
<input checked="" type="checkbox"/>			bl20e1s7 in Encl. Enclosure	Server	16.132.194.124	ProLiant BL20p ...	Microsoft Windo...
<input checked="" type="checkbox"/>			bursale12	Switch	16.132.192.114	MCDATA SD-64 ...	
<input checked="" type="checkbox"/>			bwtkenn01	Desktop	16.132.194.114	Evo N610c	
<input checked="" type="checkbox"/>			coarmichael1	Desktop	16.132.194.61	Evo N610c	
<input checked="" type="checkbox"/>			colbwwendy	Desktop	16.132.194.183	Evo N610c	
<input checked="" type="checkbox"/>			dc-cl4600	Printer	16.132.192.97	HP Jetdirect	
<input checked="" type="checkbox"/>			dc-evpd510-sff	Printer	16.132.192.99	HP Jetdirect	
<input checked="" type="checkbox"/>			dc-evpd510-sff	Desktop	16.132.194.25	Evo D510 SFF	Microsoft Windo...
<input checked="" type="checkbox"/>			dc-evpd510-sff	Printer	16.132.192.98	HP Jetdirect	
<input checked="" type="checkbox"/>			dc-nsr	Unknown	16.132.192.170		
<input checked="" type="checkbox"/>			dcbl20-e1s8	Unknown	16.132.192.204		
<input checked="" type="checkbox"/>			dcbl20-e2s2 in Encl. enclos	Server	16.132.194.102	ProLiant BL20p ...	Microsoft Windo...
<input checked="" type="checkbox"/>			dccl380q2-1	Server	16.132.192.102	ProLiant DL380 ...	Microsoft Windo...
<input checked="" type="checkbox"/>			dccl380q3-2	Server	16.132.194.125	ProLiant DL380 ...	Microsoft Windo...
<input checked="" type="checkbox"/>			dccl580q2	Unmanaged	16.132.192.119		
<input checked="" type="checkbox"/>			dccl700q2	Server	16.132.192.116	ProLiant DL760 ...	Linux - Red Hat
<input checked="" type="checkbox"/>			dclex-bl10e1 in Encl. LEXD	Server	16.132.192.195	ProLiant BL10e ...	Microsoft Windo...
<input checked="" type="checkbox"/>			dclex-bl10e2 in Encl. LEXD	Server	16.132.192.196	ProLiant BL10e ...	Microsoft Windo...
<input checked="" type="checkbox"/>			dclex-bl10e7	Unknown	16.132.192.201		

Save Selection As... Delete Print

In this case for Configure -> Replicate Agent Settings

Replicate Agent Settings

Description: Copy configurations from one system to groups of systems.

Step 1: Verify Target Systems

System Name	OS	Type	Tool launch OK?	Keep?
bl20e1s7	Microsoft Windows 2000 Advance	Server	Yes	Remove
dcbl20-e2s2	Microsoft Windows 2000 Advance	Server	Yes	Remove
dclex-bl10e2	Microsoft Windows XP	Server	Yes	Remove

Change Targets

Next >

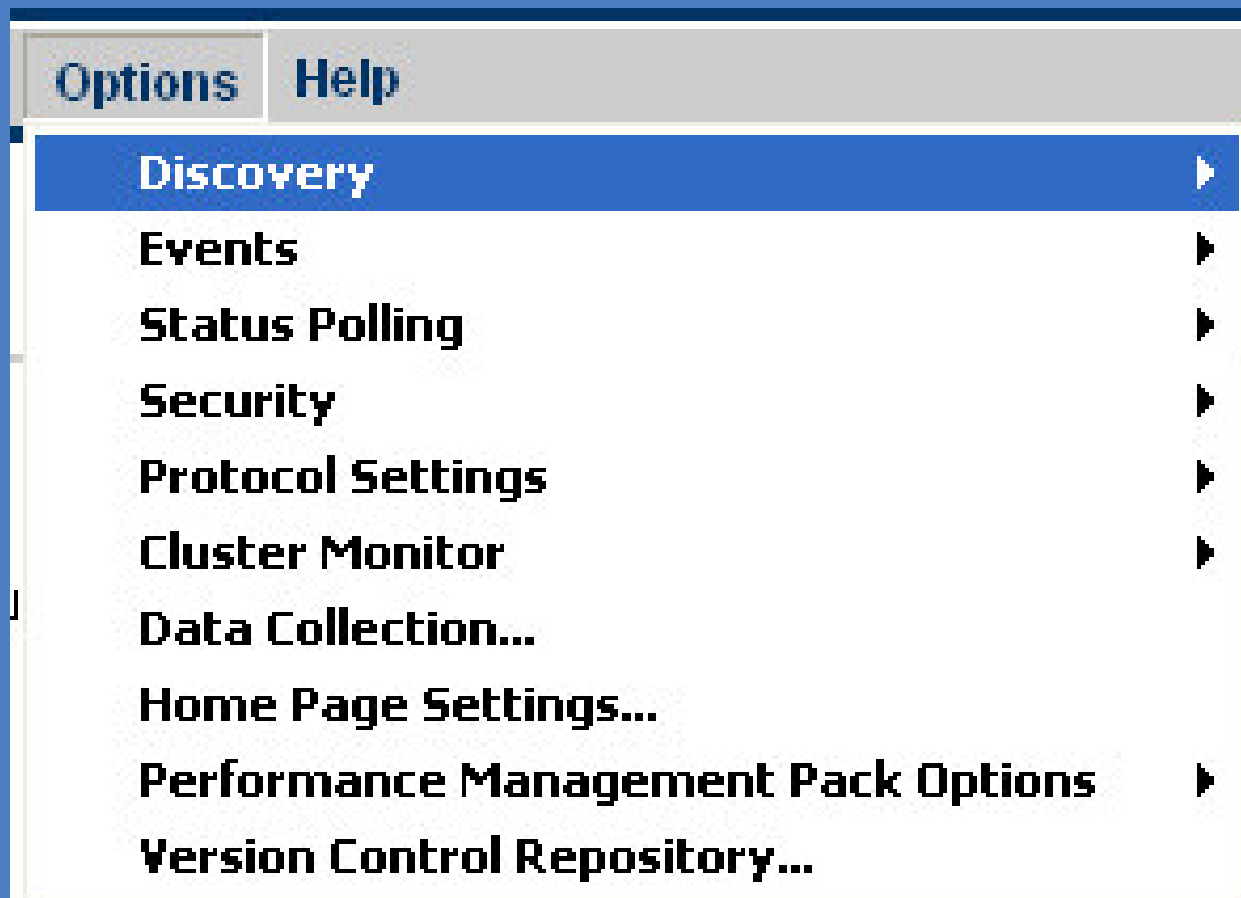


Options Menu



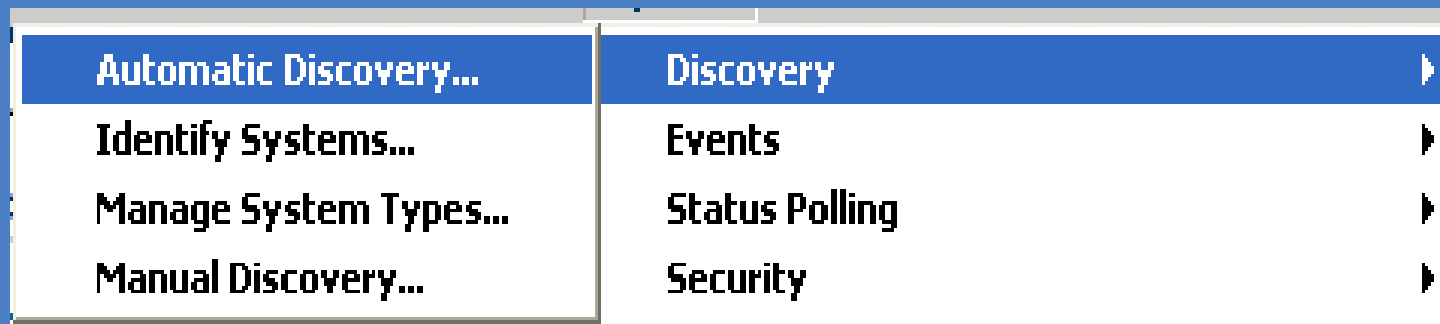


Options Menu



Discovery

- **Located under Options->Discovery**
- **Filters are the same**
- **Methods:**
 - **You can disable UDP PING discovery and use IP**
 - **WBEM and configuration added**
 - **More communities (you only need READ_ONLY)**
 - **Windows 2003 sets Accept SNMP Packets to localhost only; add your HP SIM servers**
- **Ranges: same – by segment, by hostfile (can be imported from IM7)**



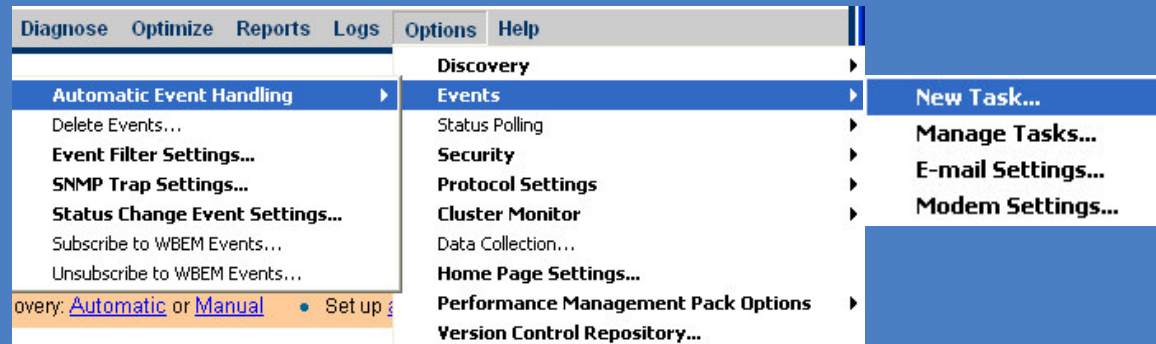


Discovery Notes

- It will take awhile – large populations may take 24 hours or more to complete
 - First the CMS sees if a system responds
 - Next the CMS collect data on the system type to see it passes the filter
 - Then the CMS collects inventory data
- It may use a lot of CPU, 80-90% not uncommon
- Dual processors help a lot
- Lots of memory (2GB)



Options-> Events



Event Handlers guide through the selection of events and devices as well as actions to perform

Using New Task or Manage Tasks

E-mail Settings are to set up the Send From Account

Modem Settings enable the use of a local modem for paging

Creating an Event Handler

Six easy steps:

Name it

Select Events

Select Systems

Select Actions

Select Time Filters

Review and Save

Automatic Event Handling - New Task

Description: Create a new task for automatic event handling

Step 1 of 6

Automatic Event Handling - New Task

Description: Create a new task for automatic event handling

- ☒ Select events
- ☒ Select systems
- ☒ Select actions
- ☐ Select time filter
- ☐ Review summary

- ☐ Send page
- ☒ Send e-mail

To: EventTracker@myhp.com

CC:

Subject: HP SIM Storage Events of Interest

Message format: Pager/SMS

- ☒ Run custom command

Name: Assign LUN

- ☒ Assign

Assignee: Lab rats

- ☒ Forward as SNMP trap

Name or IP:

Trap recipients

16.1.23.114
16.2.11.234

Delete




- ☐ Write to system log

- ☐ Clear event

< Prev

Next >

Legend

-  = Critical
-  = Major
-  = Minor

where event category is ZESA
name is ZHRM
and type name is HP OVSAM Events
OV SAM SAN Event

<< Add

Done

Local intranet

Event handling – Time filters

Automatic Event Handling - New Task

Description: Create a new task for automatic event handling

Step 5 of 6

- ✓ Select name
- ✓ Select events
- ✓ Select systems
- ✓ Select actions
- Select time filter**
- Review summary

Select time filter

Select the checkbox to use a time filter. If a time filter is selected, actions will be run only if the events matching the criteria occur during the times specified by the time filter.

☒ Use time filter:

Business Hours

Manage Filters

View Filter

< Prev

Next >

<https://16.132.192.151:50000/mxportal/taskandjob/timeFilterPopup.jsp> - Mic...

	AM											PM												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Sunday																								
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								

Close

Event Handlers – Review and Save

Automatic Event Handling - New Task

Description: Create a new task for automatic event handling

Step 6 of 6

- ✓ Select name
- ✓ Select events
- ✓ Select systems
- ✓ Select actions
- ✓ Select time filter
- Review summary**

Review summary

Review the configuration below and click on 'Finish' to save changes.

Task name: Claudias Event Handler

Time filter: Business Hours

Action(s): Send e-mail
To: EventTracker@myhp.com
CC:
Subject: HP SIM Storage Events of Interest
Message format: Pager/SMS

Run custom command Name: Assign LUN

Forward as SNMP trap To: 16.1.23.114

To: 16.2.11.234

Assign Assignee: Lab rats

E-mail settings: E-mail SMTP host: hp.com
Sender: claudia.peters@hp.com

Edit e-mail settings...

Make sure that the e-mail settings are correctly configured.

< Prev

Finish



Event Handlers – See How They Run

Automatic Event Handling - Manage Tasks
Description: Modify or delete automatic event handling tasks

Click a row to select and view task results. Total: 5

Name	Page	E-mail	Custom Command	Forward	Assign	Clear	Log	Last Run
<input type="radio"/> Blade Failover Event Handler		✓			✓			6/11/04 12:01 PM
<input checked="" type="radio"/> Blade LUN Reassignment Event Han...		✓	✓		✓			6/28/04 6:44 PM
<input type="radio"/> CAP test Event Handler		✓			✓			Never
<input type="radio"/> Claudias Event Handler		✓	✓	✓	✓			Never
<input type="radio"/> My event traps		✓			✓	✓		Never

New... Edit... Disable Delete

Task details: Blade Failover Event Handler

Owner: LEX-DC1\Administrator Last modified: 6/11/04 12:01 PM

Click a row to select and view task instance details. Total: 1

JobID	Status	Run By	Start Time	End Time
4409	✓ Complete	LEX-DC1\Administrator	6/11/04 12:01 PM	6/11/04 12:01 PM

Task instance details

Job status: ✓ Complete Start time: 6/11/04 12:01 PM
JobID: 4409_dcm1570.lex.cpqcorp.net End time: 6/11/04 12:01 PM
Run by: LEX-DC1\Administrator Duration: 2s

Summary status:

No additional details for this task instance.

Event Handlers – Inclusion and Exclusion



Very common to want all Critical Events

But not everything label Critical is necessarily Critical to you

Create a basic event for all Criticals and exclude the ones you don't want

Automatic Event Handling - Manage Tasks
Description: Modify or delete automatic event handling tasks

New... Edit... Disable Delete

Current task: Blade Failover Event Handler

Step 2 of 6

- ✓ Select name
- Select events
- Select systems
- Select actions
- Select time filter
- Review summary

Select events

where severity is Critical Delete

and event category name is not Proliant Threshold Events Delete

and type name is User Threshold - Falling Alarm

and event category name is not Proliant Threshold Events Delete

and type name is User Threshold - Falling Alarm

<< Add

Event Handlers – Tricks and Tips



- At this time you must group systems by some preset feature and custom List won't work

- System by Type
- System by Status

- What to do?

- Use the Server Role feature in the agent

- How?

- Create a custom list
- Create an Replicate Agent Settings task using that list
- Edit the Agent's Server Role, as "Web Server", "Email Server", "File and Print"
- Create Event Handlers specifying "Server Role"



Options Menu - Security

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.


Overview

Users

Toolboxes

System Groups

Authorizations

<input type="checkbox"/> User 	Configuration Rights	Pager Configured	IP Login Restrictions	Full Name
<input type="checkbox"/> DCML570\administrator	debug	No	No	
<input type="checkbox"/> LEX-DC1\Administrator	full	No	No	

New...

Edit...

Delete

Report

Options Menu – Adding a User

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

New User

Required field*

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

Copy all authorizations of this user or [template]: (none) ▼

Central management

☐ full, allowe

☒ limited, all

☐ none, no c

Pager Information

Phone number: 1-800-111-1111

PIN number: 1234567

Message length (characters): 240 ▼

Baud rate: 9600 ▼

Data format: 7 Data bits, Even parity, 1 stop bit ▼

Login IP Address

Enter an IP Range for management or browser. If both

Inclusion range

100.1.23.1-100.1.23.254

100.2.23.1-100.2.23.254

OK Cancel Apply



Options Menu – Review New User

HP Systems Insight Manager - Microsoft Internet Explorer provided by Verizon Online

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media

Address: https://16.132.192.151:50000/mxportal/home/MxPortalFrames.jsp

Updated: Sunday, August 8, 2004 5:08:54 PM EDT Customize

System needs attention!

Uncleared Event Status: 43 184 102 116
System Status: 15 12 1 42

HP Systems Insight Manager

Home Logout

Search

System Lists

System Overview
All Systems
All Events

My Favorites
System Lists
Event Lists

Legend

- Critical
- Major
- Minor

Tools Deploy Configure Diagnose Optimize Reports Logs Options Help

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

Overview Users Toolboxes System Groups Authorizations

<input type="checkbox"/>	User	Configuration Rights	Pager Configured	IP Login Restrictions	Full Name	
<input type="checkbox"/>	DCML570\administrator	debug	No	No		New...
<input type="checkbox"/>	Galaxy\MyGALSaI	limited	Yes	Yes	Report Creator Goddess	Edit...
<input type="checkbox"/>	LEX-DC1\Administrator	full	No	No		Delete
						Report

Applet com.hp.mx.portal.applet.folders.FoldersUIApplet started

Local intranet

Options -> Security Toolboxes

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

Overview **Users** **Toolboxes**

<input type="checkbox"/>	Toolbox	Enabled	Description
<input type="checkbox"/>	All Tools	Yes	Master ToolBox added automatically
<input type="checkbox"/>	Monitor Tools	Yes	Monitor ToolBox added automatically

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

New Toolbox

Required field:*

Name: *

Description:

☒ **Toolbox is enabled**

Show tools in category **Toolbox contents:**

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

Overview **Users** **Toolboxes** **System Groups** **Authorizations**

<input type="checkbox"/>	Toolbox	Enabled	Description
<input type="checkbox"/>	All Tools	Yes	Master ToolBox added automatically
<input type="checkbox"/>	Monitor Tools	Yes	Monitor ToolBox added automatically
<input type="checkbox"/>	Viewer Tools	Yes	This tool box is just for Viewing

Options -> Security Groups

Users and Authorizations

Description: Add, modify, and configure users and authorizations

Overview | **Users** | **Toolboxes**

<input type="checkbox"/> <u>Name</u> <u>↑</u>	<u>Description</u>
<input type="checkbox"/> All Managed Systems	All Managed Systems Group
<input type="checkbox"/> CMS	Central Management Server System Group

New System Group

Name: *

Description:

Systems to include:

System Groups Report

Date/Time: Sunday, August 8, 2004 5:22:45 PM EDT

<u>Name</u> <u>↑</u>	<u>Member Systems</u>	<u>Description</u>
All Managed Systems	...all managed systems...	All Managed Systems Group
CMS	dcml570	Central Management Server System Group
MyViewingGroup	dcbl20-e1s5 dcbl20-e1s8 dcbl20-e2s2 dcdl380g2-1 dcdl380g3-2 dcdl580g2 dcdl760g2 dclex-bl10e2	Systems to be Viewed

Options -> Security Authorizations

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

New Authorizations

Required field:*

Select User(s): *

1 selected

Users and Authorizations

Description: Add, modify, and configure users and authorizations enabling users to view and manage discovered systems.

Overview Users Toolboxes System Groups Authorizations

Enter authorization:

☐ Copy all a
☒ Manually

Select Toolbox:

1 selected

<input type="checkbox"/>	User	Toolbox	System/System Group
<input type="checkbox"/>	DCML570\administrator	All Tools	All Managed Systems
<input type="checkbox"/>	DCML570\administrator	All Tools	CMS
<input type="checkbox"/>	Galaxy\MyGALSa	Viewer Tools	MyViewingGroup
<input type="checkbox"/>	LEX-DC1\Administrator	All Tools	CMS
<input type="checkbox"/>	LEX-DC1\Administrator	All Tools	All Managed Systems

Select System Group(s): *

1 selected



Agent Configuration – We do it until we get it right!





Task to Configure Agent Settings, part 1 – selecting the source

- Offers a list of source systems
- Tells it capabilities
- If it is configurable
- Select the source

Replicate Agent Settings
Targets: bl20e1s7, dcb120-e2s2, dclex-bl10e2.lex.cpqcorp.net

Step 2: Choose Source System

☐ You know the name of the system:

☒ Pick the system from a list

Name	Status	Product Name	Trusted?	Web Agents
<input checked="" type="radio"/> 16.132.194.120	✓	Linux Server	no [configure]	HTTP Server, Insight Management Agents, Configuration History Reports (Survey L
<input type="radio"/> 16.132.194.83	✗	ProLiant BL10e	yes [configure]	HTTP Server, Insight Management Agents,

Last update: Thu, 7/15/2004, 9:49 AM EDT

Replicate Agent Settings
Targets: bl20e1s7, dcb120-e2s2, dclex-bl10e2.lex.cpqcorp.net

Step 2: Choose Source System

☐ You know the name of the system:

☒ Pick the system from a list

Name	Status	Product Name	Trusted?	Web Agents
<input type="radio"/> bl10e-slot4	▼	ProLiant BL10e	yes [configure]	HTTP Server, Insight Management Agents, Version Control Agent
<input checked="" type="radio"/> bl20e1s7	▼	ProLiant BL20p G2	yes [configure]	Configuration History Reports (Survey L HP Insight Diagnostics, HTTP Server, Insight Management Agents, Version Control Agent
<input type="radio"/> dcb120-e2s2	▼	ProLiant BL20p	no [configure]	Configuration History Reports (Survey L HTTP Server, Insight Management Agents, Version Control Agent

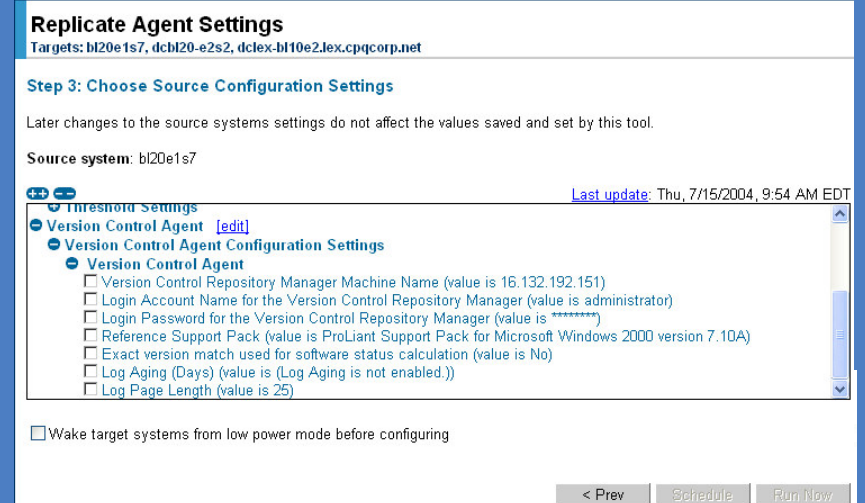
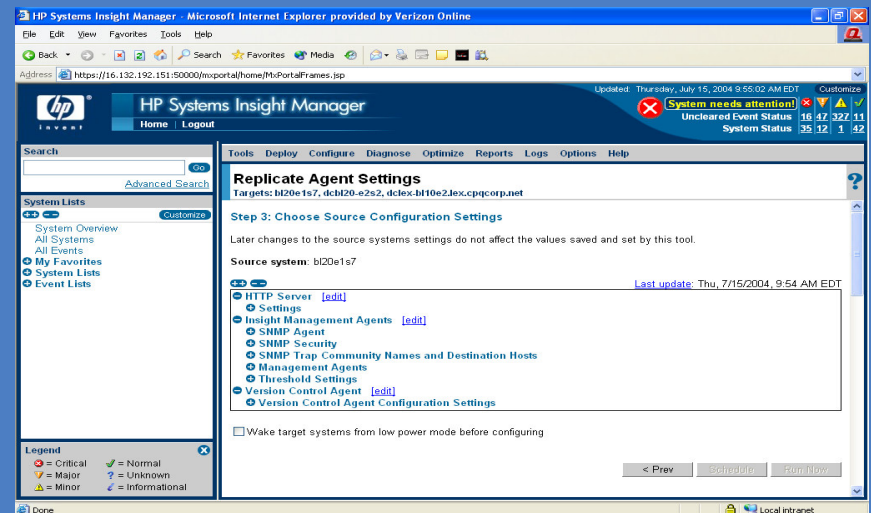
Last update: Thu, 7/15/2004, 9:49 AM EDT

< Prev Next >

Task to Replicate Agent Settings, part 2 – configure the source



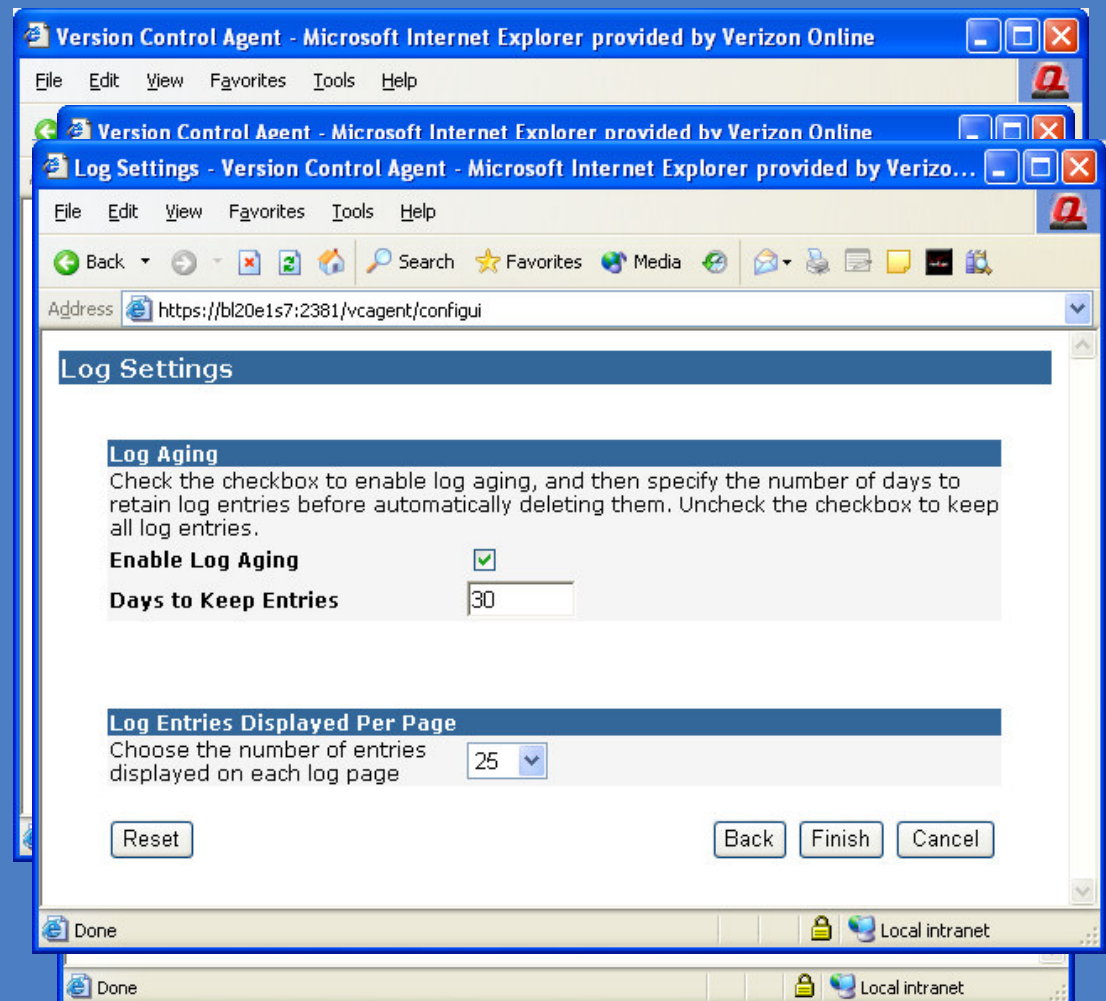
- Shows the configurable components list
- This options selects the version control attributes and shows the current defaults
- Select Edit to modify



Task to Replicate Agent Settings, part 3 – edit the source



- **Edit the items**
- **Press Finish**



Task to Replicate Agent Settings, part 4 – select the attributes to send



- Refresh the update
- Review the newly configured components, note the change in the log data
- Select Run Now
- Review the results, both successes and failures

Replicate Agent Settings
Targets: bl20e1s7, dcb120-e2s2, dcllex-bl10e2.lex.cpqcorp.net

Step 3: Choose Source Configuration Settings
Later changes to the source systems settings do not affect the values saved and set by this tool.

Source system: bl20e1s7 Last update: Thu, 7/15/2004, 10:04 AM EDT

Insight Management Agents [\[edit\]](#)

- Version Control Agent** [\[edit\]](#)
 - Version Control Agent Configuration Settings**
 - ☒ Version Control Agent
 - ☒ Version Control Repository Manager Machine Name (value is 16.132.192.151)
 - ☒ Login Account Name for the Version Control Repository Manager (value is administrator)
 - ☒ Login Password for the Version Control Repository Manager (value is *****)
 - ☒ Reference Support Pack (value is ProLiant Support Pack for Microsoft Windows 2000 version 7.10A)
 - ☒ Exact version match used for software status calculation (value is No)
 - ☒ Log Aging (Days) (value is 30)
 - ☒ Log Page Length (value is 25)

☐ Wake target systems from low power mode before configuring

[< Prev](#) [Schedule](#) [Run Now](#)

Task Results
Description: View status and results of task instances

Status:	✓ Complete	Target:	dcb120-e2s2, bl20e1s7...
ID:	16114	Run by:	LEX-DC1\Administrator
Task name:	Replicate Agent Settings	Start time:	7/15/04 - 10:06 AM EDT
Tool:	Replicate Agent Settings	End time:	7/15/04 - 10:06 AM EDT
Owner:	LEX-DC1\Administrator	Duration:	6 sec
Command:	N/A		

Successes: 1; Failures: 2

System	Result	Web Agent	Details
bl20e1s7	✓	Version Control Agent	Agent Configured Successfully.
dcb120-e2s2	✗	Version Control Agent	The agent does not trust the HP Systems Insight Manager server. Establish a trust relationship.
dcllex-bl10e2	⚠	Version Control Agent	Could not configure this agent - it does not exist on the system.
dcllex-bl10e2	✗	Version Control Agent	There were no configuration changes sent to this system.



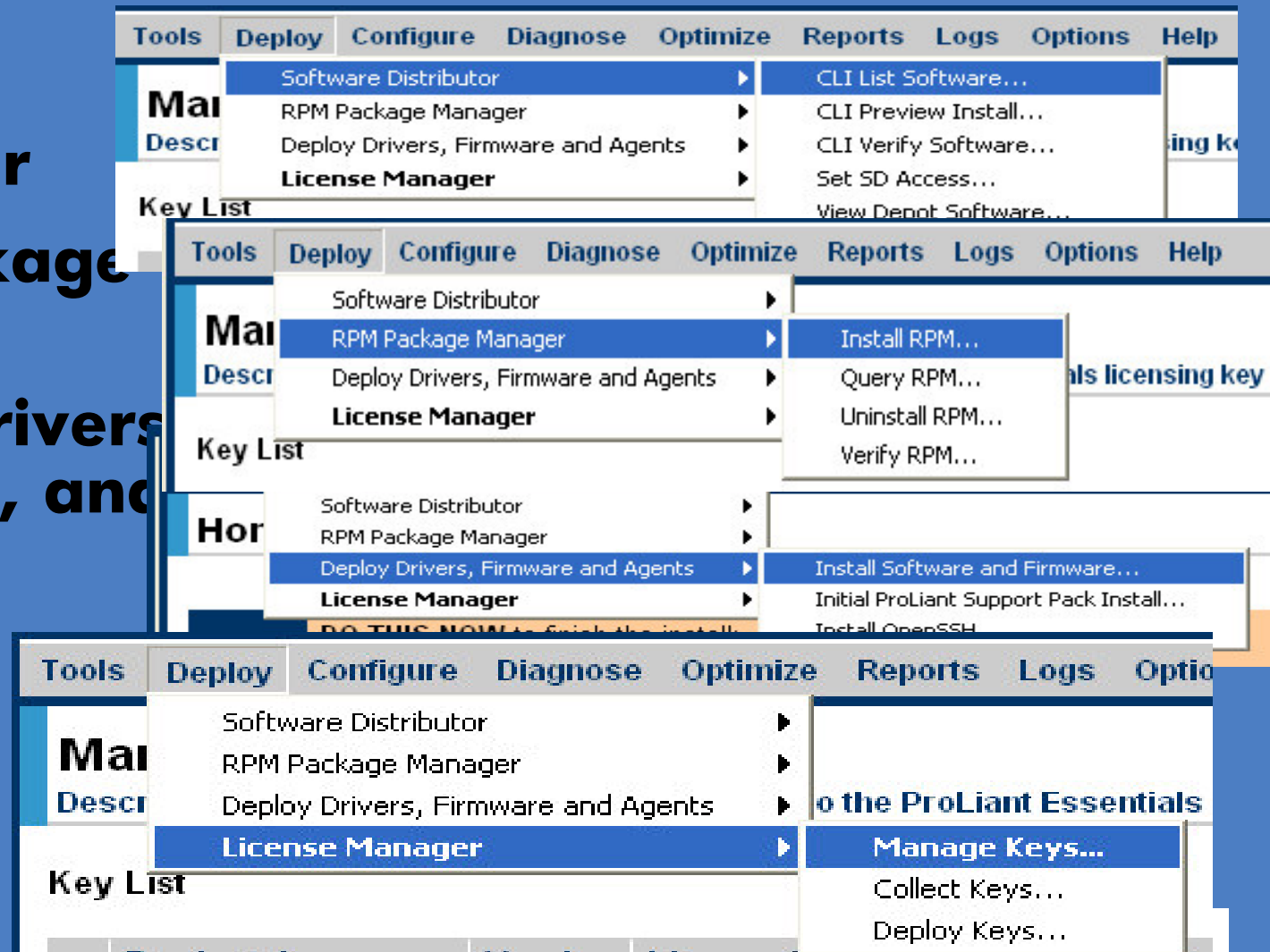
Agent Configuration

- **Linux and Windows agents need configuration**
- **Contained in the PSP by running setup on Windows or PSP install.sh on Linux**
- **If using the Rapid Deployment Pack with Altiris, synchronize the updates for the Version Control Repository Manager to the same locations**
- **Configure each new PSP**

Deploy Menu Options



- **Software Distributor**
- **RPM Package Manager**
- **Deploy Drivers, Firmware, and Agents**
- **License Manager**



Deployment Failures

- **Bad Trusts**
- **No VCRM set**
- **Fails because of SSH permissions**
- **Initial Deployment if not using a domain account, must specify "localhost"**

Task Results
 Description: View status and results of task instances

Command: /usr/sbin/swverify /usr/bin/swverify

Summary status: 24 Failed 0 Killed 0 Cancelled 0 Complete 0 Running 0 Copying 16 Pending

Click a row to select and view target details

Target Name ↑	Status	Exit Code	Stdout	Stderr
billgreenn610c.americas.cpqcorp.net	Failed	0	No	Yes
bl10e-slot4	Pending	0	No	No
bl20e1s7	Failed	0	No	Yes
bursale12.lex.cpqcorp.net	Failed	0	No	Yes
coarmichael1.americas.cpqcorp.net	Pending	0	No	No

Target Details

Target name: bl20e1s7
 Exit code: 0
 Status: Failed

Stdout **Stderr**

```
EXCEPTION CLASS: com.hp.mx.dtf.sshClient.MxSshFailedConnectionException
EXCEPTION: Unable to contact the SSH server on node "bl20e1s7".
```



Migration from Insight Manager 7 to HP Systems Insight Manager





Data Migration Tool for IM7 to HP SIM

- **HP SIM 4.1 has a Data Migration Tool (DMT)**
- **Requires Insight Manager 7 SP2.3**
- **DMT migration in-place or remote**
- **Performance Management Pack (PMP 2.1) has a DMT to move to HP PMP 3.0**
- **Activated during installation process**
 - Warns about versions
 - Creates DMT files in a special directory
- **Whitepaper:**
HPSIM_Transitioning_IM7.pdf





Data Migration Tool: What Does it Do

- **Migrates**
 - **Users**
 - **Tasks and Notification Tasks**
 - **Queries and Folders**
 - **Devices and Protocol Settings**
 - **All Reports**
 - **Server Settings**
 - **Certificates (in-place only)**
 - **Device Type Manager Rules**
- **Does not migrate**
 - **Events – archived to a CSV file**
 - **Historical or Single Instance Data**
 - **User enrolled MIBs**



To Use Data Migration Tool or Not?

- **Do you understand your current IM7 environment?**
- **Is the current Insight Manager 7 SP2.3?**
- **Is it OK to take Insight Manager 7 down to upgrade?**
- **Lots of custom**
 - **Queries**
 - **Control Tasks**
 - **Users**
 - **Event Notification Tasks?**
- **No = don't use the tool in place**





Migration Preparation

- **Take segment or hostfile lists**
 - @segmentfile
 - \$hostfile
- **Good time to clean house**
 - Remove old users, devices, events
 - Delete Orphans and other retired devices
- **Use existing IM7 group configuration to move:**
 - Trusts list – use FQDM name of HP SIM server
 - Accept IP packets list, community names
 - Trap destinations
 - Version Control Repository Manager location



Migration on a new HP SIM CMS

- **Install a configured agent on the HP SIM system, then install HP SIM**
- **Set up SNMP community strings for CMS agent services and within HP SIM Protocol Settings and WBEM user accounts**
- **Set discovery filters**
- **Import host or segment lists**
- **Run discovery and wait**
- **Run version control status tasks**





Migration HP SIM 4.0 to 4.1

- **Before you start, create a document or folder containing:**
 - Host list or segment files
 - A report of your user profiles
 - Save out the summary pages of Event Handlers
 - Include screen captures of important, hard to replicate procedures
 - Export reports of systems, perhaps Inventory
- **If on the same system, uninstall HP SIM 4.0, including old version the PMP (perhaps from an earlier IM7 version)**
- **Install and configure using your documents**

Good Things to Know about the Database



- **Using MS SQL for HP SIM on Windows assumes that the user account you are logged into has rights to create the MS SQL database for HP SIM**
- **Linux/HP UX uses PostgreSQL = ~ 250 devices**
- **Assumes that MS SQL has set defaults and uses them, typically:**
 - C:\Program Files\Microsoft SQL Server\MSSQL\Data**
- **Can be changed after the installation**
- **May not have ODBC DSN, may have registry key called HKLM:Software\ODBC\ODBC.INI\ODBC Data Sources**
- **Recommendations:**
 - **Split the log and the data drives**
 - **Use a cluster server for the database**





Database Growth with Events

- **Events collected over a log period of time degrade performance**
- **Purge events regularly: create a task to run weekly that deletes events older than 7 days – that keeps a weeks history**
- **Keep the event volume below 50000, I would even say way below**
- **There is a notification table you can extract events to a CSV for historical purposes**

– The DMT extracts event data





Security Challenges?





The Challenge

- **Excessive security challenges?**
- **Options->Security->System Link Configuration and select "Use the system's full DNS name"**
- **Fix Trust by Certificate or Name**
- **Making sure your DNS naming is well behaved, multiple names may not be in the order HP SIM resolves**
- **Bad time with good cookies – synchronize your clocks, enable cookies**





Users

- **Located under Options->Security**
- **Users have profiles:**
 - What rights – who can do what (toolboxes)
 - What systems – who can access which systems
- **Still domain accounts not group accounts**
- **Managed servers**
 - use the imbedded accounts (administrator, operator, user)
 - CMS trusts enable single sign on
 - Configurable prior to distribution or installation (how many times can I say this!)

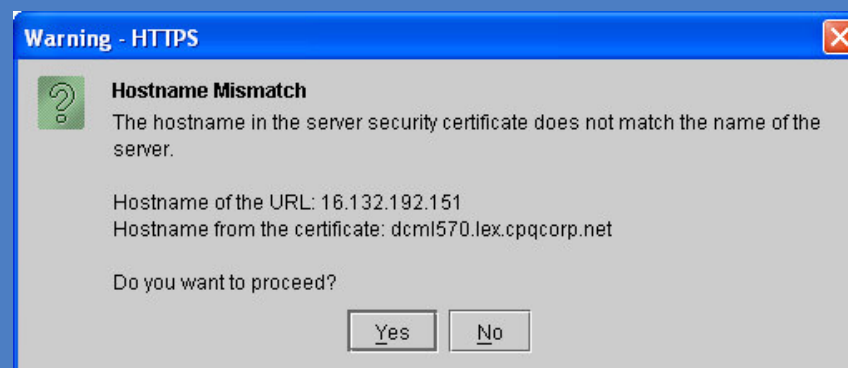


Logs

- **Located Agent's Logs tab**
 - **HTTP**
 - **Security – who has accessed the agent**
 - **Version Control – when and what software, firmware updates**
 - **Integrated Management Logs – what is happening to the device**

Naming

- **HP SIM really likes FQDN, IM7 did not**
- **Bad things happen if FQDN is not used:**
 - **Challenge pop-ups**
 - **Task failures, especially under deployment**
 - **Use NSLOOKUP to determine authoritative names**
- **Use FQDN for VCRM server names or IP address or create PTR records in the reverse lookup zone**
- **If DNS and reverse lookups are in flux create a host file on the HP SIM server, this helps discovery**





iLO Configuration



iLO & RiLOE II Configuration

- **Two methods: Local and remote**
- **Use the same XML scripts**
- **Local with Administrator or root access can be used to reset iLO/RiLO users accounts without rebooting the system**
- **Local – hponcfg for Linux and Windows, usage:**
 - When you do not know the iLO passwords
- **Remote – hplocfg and downloadable XML scripts, usage:**
 - Group configuration resets
 - Server failure and recovery scenarios
- **Combine multiple XML samples**

<http://h18023.www1.hp.com/support/files/lig-hts-out>





Performance Management



Performance Manager



- Views Hardware Performance by component
- Give textual recommendations
 - Needs more memory
 - Add a CPU
- Best used for:
 - Server Consolidation projects
 - “Prove in” or tune a platform for a project
 - Justify server replacement
- Licensed product with 1 free for the HP SIM server, 5 for any DL, ML, BL, or Storage Manager, unlimited on old ProLiant
- www.hp.com/servers/proliantessentials/pmp



Performance Manager -> Options Licensing



License distribution
using HP SIM

Licensed by SN

DMT will migrate
existing licenses

Once Licensed and
enabled, give the
process time to
collect samples

Options Help

Discovery

Performance Management Pack - Monitoring Administration - Microsoft Internet Explorer provided by Verizon Online

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address <https://dcm1570.lex.cpqcorp.net:2381/pmp/AdminHome.htm> Links

hp Performance Management Pack Monitoring Administration Version | Help Current User: Administrator

Server Network Storage Last Updated: Aug 8, 2004 5:46:31 PM

Update Server List

Page 1 of 1 Displaying 1-3 of 3 item(s)

	PF	Name	Model	IP Address	Monitor Status	Alert	Log	Sample Rate	Samples
<input type="checkbox"/>	✓	dcm1570	ProLiant ML530 G2	16.132.192.151	Started	✓	✓	120	5
<input type="checkbox"/>	✓	dm1srva	ProLiant DL380 G3	16.132.192.86	Started	✓	✓	120	5
<input type="checkbox"/>	✓	dm1srva	ProLiant DL380 G3	16.132.192.85	Started	✓	✓	120	5

Apply the following parameters on the selected servers

☒ Monitor ☒ Alert ☐ Log

Number of samples to determine status 5

Apply

Done Local intranet



Performance Manager -> Optimize

Viewing samples

Select Online Analysis

Select the Targets

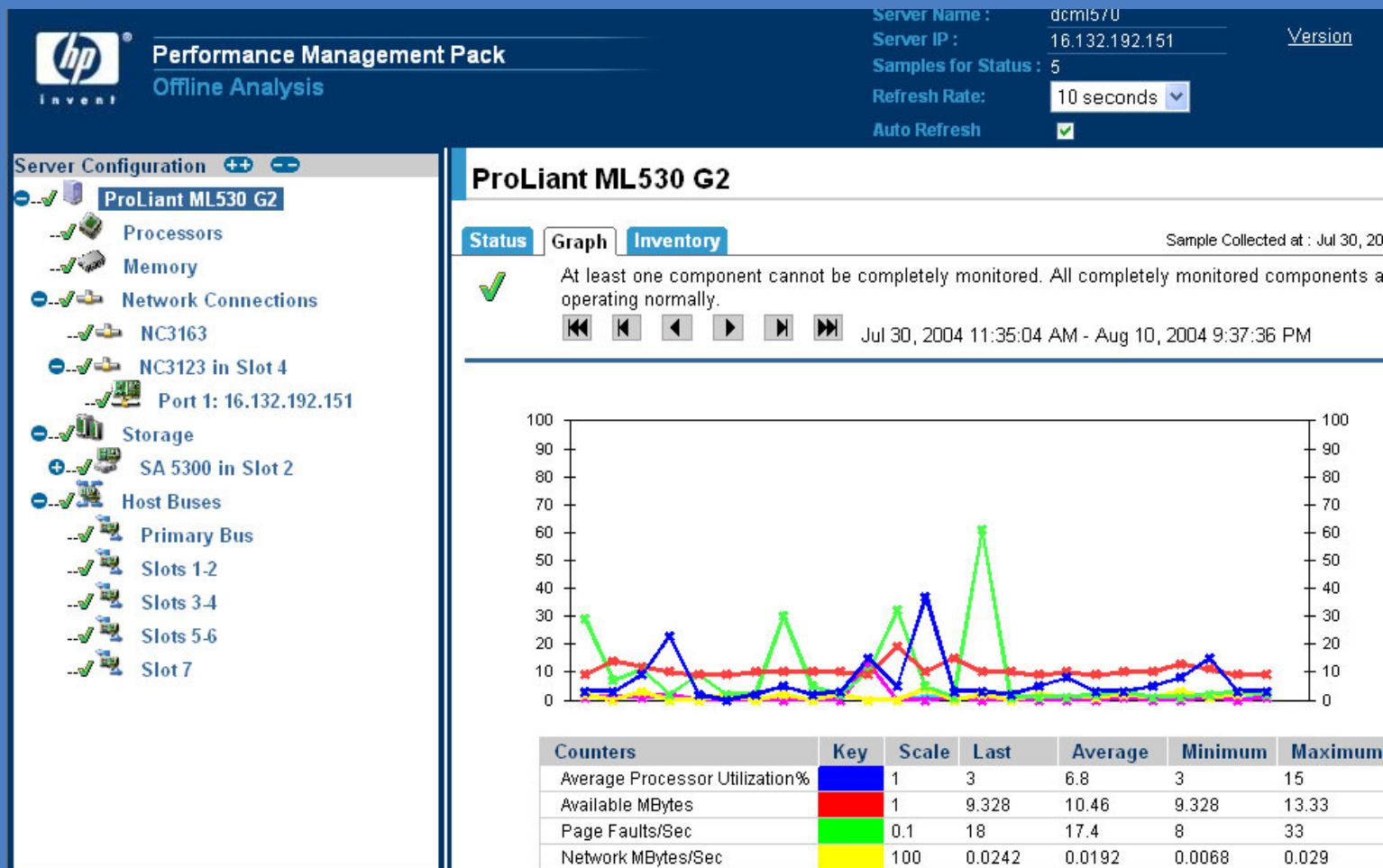
View the results

Now for Linux in addition
to Windows

The screenshot shows the HP Performance Manager Online Analysis interface. The top menu bar includes 'Optimize', 'Reports', 'Logs', 'Options', and 'Help'. The 'Optimize' menu is open, showing 'Process Resource Manager', 'Performance Management Pack', 'Online Analysis...', 'Offline Analysis...', and 'Documentation...'. The 'Performance Management Pack' menu is also open, showing 'Online Analysis...', 'Offline Analysis...', and 'Documentation...'. The main window displays the 'Performance Management Pack Online Analysis' page for a ProLiant ML530 G2 server. The left sidebar shows 'Server Configuration' with expandable sections for Processors, Memory, Network Connections, Storage, and Host Buses. The main content area shows the 'ProLiant ML530 G2' server details, including 'Status', 'Graph', and 'Inventory' tabs. The 'Status' tab is active, showing an 'Analysis Explanation' with a green checkmark and the text: 'At least one component cannot be completely monitored. All completely monitored components are operating normally.' Below this is an 'Analysis Data' table with columns for Counters, Last, Average, Minimum, and Maximum. The table lists various system metrics and their current values. At the bottom, there is a 'Configuration Issues' section with the text: 'Issues identified in Processor configuration. Issues identified in Storage configuration.'

Counters	Last	Average	Minimum	Maximum
Average Processor Utilization%	0	0	0	0
Available MBytes	12.59	17.8	12.59	22.2
Page Faults/Sec	13	177.8	13	344
Network MBytes/Sec	0.0238	0.0103	0.0036	0.0238
Storage MBytes/Sec	0	0	0	0
Host Bus MBytes/Sec	0.0238	0.0103	0.0036	0.0238

Performance Manager view Offline Analysis - Graphs





Clean up

Review

Migrate

Use the extensions

Be creative

Contribute to the forum

Q & A



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