



Integrated extensions for HP SIM White Paper

Introduction.....	2
What features are enabled?.....	2
OpenView GlancePlus.....	3
Ignite-UX.....	4
Software Distributor-UX (SD-UX).....	4
HP-UX Configuration Tools.....	4
HP-UX Workload Manager (WLM).....	4
Configuring Extension Tools from First Time Wizard.....	7
First Time Wizard—Summary.....	8
Troubleshooting.....	9
For more information.....	12

Introduction

Integrated Extensions includes HP-UX and some Linux management tool definitions (TDEF) that you can configure from the First Time Wizard in HP SIM on Windows®, Linux & HP-UX CMS. Previously, a separate installer, Extensions for HP SIM on Windows for Windows CMS, existed to add HP-UX management tool definitions. Integrated Extensions feature eliminated the need for a separate installer. These server management tools run on the HP-UX 11i and Linux managed systems and include OpenView, GlancePlus, and HP-UX 11i tools such as Ignite-UX, Software Distributor, HP-UX Workload Manager, and web-based system configuration tools. HP-UX 11i and Linux server management tools can be licensed separately (for example, as part of an HP-UX 11i Operating Environment).

What features are enabled?

After successful completion of First Time Wizard, you have new menu options to launch system management tools for HP-UX 11i and Linux management. You can continue to launch the System Management Homepage (SMH) from HP SIM and access various management tools from SMH, or use the direct launch capabilities provided through the new menu options.

The following tools are registered during HP SIM installation and are in HP SIM-supported operating systems.

Tools	New/Existing Tools
Disks and File Systems	New
Network Interfaces Configuration	New
Security Attributes Configuration	New
Accounts for Users and Groups	New
View System Logs	New
Consolidated Logging Wizard	New
Configuration Synchronization Wizard	New
Activate WLM Configuration	New
Disable WLM	New
Enable WLM	New
Restart WLM	New
Rotate Statistics Log Files	New
Rotate WLM Log Files	New
Start WLM	New
Stop WLM	New
Truncate Log Files	New
Truncate Statistics Log Files	New
Workload Manager Console	New
Workload Manager Log Files	New
Workload Manager Statistics Log Files	New
View SAM Log	Existing
System Security Policies	Existing

System Properties	Existing
Printers and Plotters	Existing
Kernel Configuration	Existing
Disks and File Systems	Existing
Cards	Existing
Authenticated Commands	Existing
Auditing	Existing
Accounts for Users and Groups	Existing
Cards and Devices	Existing
Kernel Configuration	Existing
CLI List Software	Existing
CLI Preview Install	Existing
Delete User	Existing
Deploy SSH Public Key	Existing
Display Resource Usage	Existing
Event Monitoring Service	Existing
Firmware Upgrade	Existing
ILO Control	Existing
LAN Access	Existing
LDAP Settings	Existing
List Resource Availability	Existing
Modify User	Existing
New User	Existing
Process Resource Manager Console	Existing
System Locator	Existing
System Power	Existing
CLI Verify Software	Existing
View Depot Software	Existing
View Installed Software	Existing
View Software Distributor Agent Log	Existing
View Software Distributor Daemon Log	Existing

Some tools enable their launch from HP SIM when installed to the CMS. For example, when Serviceguard Manager is installed on a Windows-based HP SIM CMS, it creates the appropriate links to enable a direct launch.

OpenView GlancePlus

HP OpenView GlancePlus provides a powerful system monitoring and diagnostic tool. GlancePlus provides immediate performance information about your system, enabling you to easily examine system activities, identify and resolve performance bottlenecks, and tune your system for more efficient operation. GlancePlus is optional for HP-UX 11i and Linux (and is included in the HP-UX 11i Enterprise and Mission Critical Operating Environments). For more information, see <http://h20229.www2.hp.com/products/gplus/index.html>.

Successful completion of First Time Wizard in HP SIM enables options in the HP SIM Optimize menu for launching GlancePlus on HP-UX 11i and Linux servers.

Ignite-UX

Ignite-UX is a feature designed for HP-UX 11i system administrators who perform fast deployment for one or many servers. With Ignite-UX, you can create and reuse standard system configurations, enable replication of systems, permit post-installation customization. Ignite-UX can also operate in both interactive and unattended modes. For more information, see <http://www.hp.com/go/ignite-ux>. On completing First Time Wizard in HP SIM, Ignite-UX options are available under the HP SIM Deploy menu. To utilize Ignite-UX, your server must be configured and accessible, and then the installer collects information for accessing the server.

Software Distributor-UX (SD-UX)

SD-UX is the HP-UX 11i administration toolset used to deliver and maintain the HP-UX 11i operating system and layered software applications. Delivered as part of HP-UX 11i, SD-UX can help manage the HP-UX 11i operating system, patches, and application software on HP servers. The HP SIM Deploy menu includes options for SD operations on HP-UX target nodes, and First Time Wizard in HP SIM includes additional Deploy menu options for SD operations executed from the Central Management Server. Since the Central Management Server in this case is Windows-based, the installer configures these SD tools to run from the same HP-UX server designated as the Ignite server.

HP-UX Configuration Tools

HP supplies a variety of tools for configuring, monitoring, and managing the HP-UX operating system. These tools run on the HP-UX managed node, providing monitoring and management of peripherals and devices, kernel configuration, file systems and LVM, users and groups, and other aspects of the HP-UX operating system. HP-UX servers running 11i v2 onward can use web-based versions of tools. These tools are integrated aspects of the System Management Homepage, and are also available for direct launch from HP-UX and from HP SIM. Older HP-UX servers have X-based versions of the configuration management tools, integrated with SMH or the System Administration Manager (SAM). Information on various HP-UX tools is available at <http://www.hp.com/go/integrityessentials>.

HP-UX Workload Manager (WLM)

HP-UX Workload Manager is an intelligent policy engine, providing automatic CPU resource allocation and application performance management based on prioritized service level objectives (SLOs). WLM improves response time for critical users, allows system consolidation, and helps manage user expectations for performance. WLM is included with the HP-UX 11i Mission Critical Operating Environment. WLM menu options are available under the HP SIM Optimize menu.

The following screenshots show the additional Ignite-UX and Software Distributor choices added to the HP SIM Deploy menu and various HP-UX tool choices under the Configure menu after successful completion of First Time Wizard in HP SIM.

Figure 1. Additional Ignite-UX choices added to the HP SIM Deploy menu after successful installation

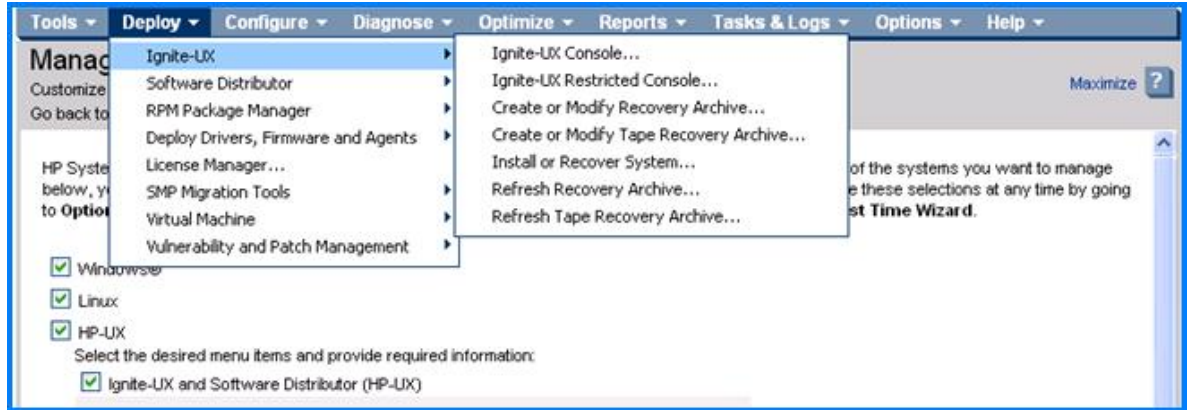


Figure 2. Additional Software Distributor choices added to the HP SIM Deploy menu after successful

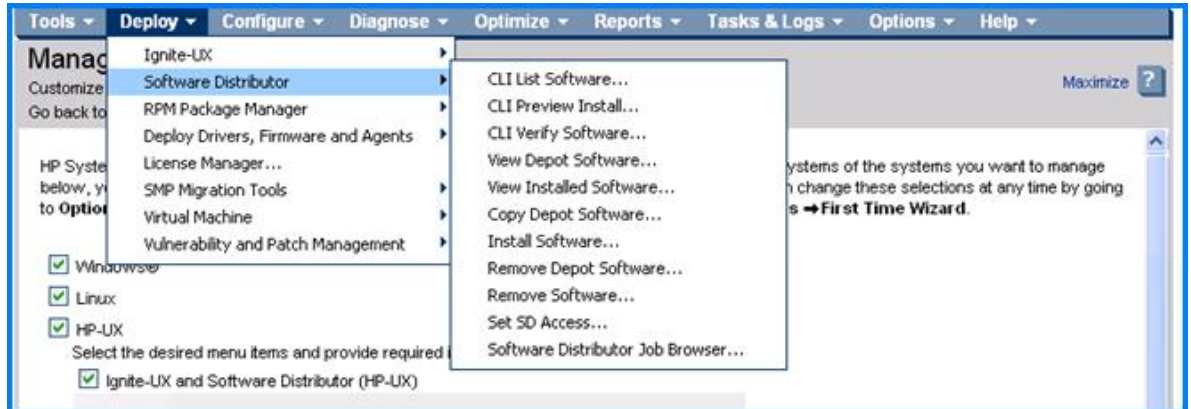
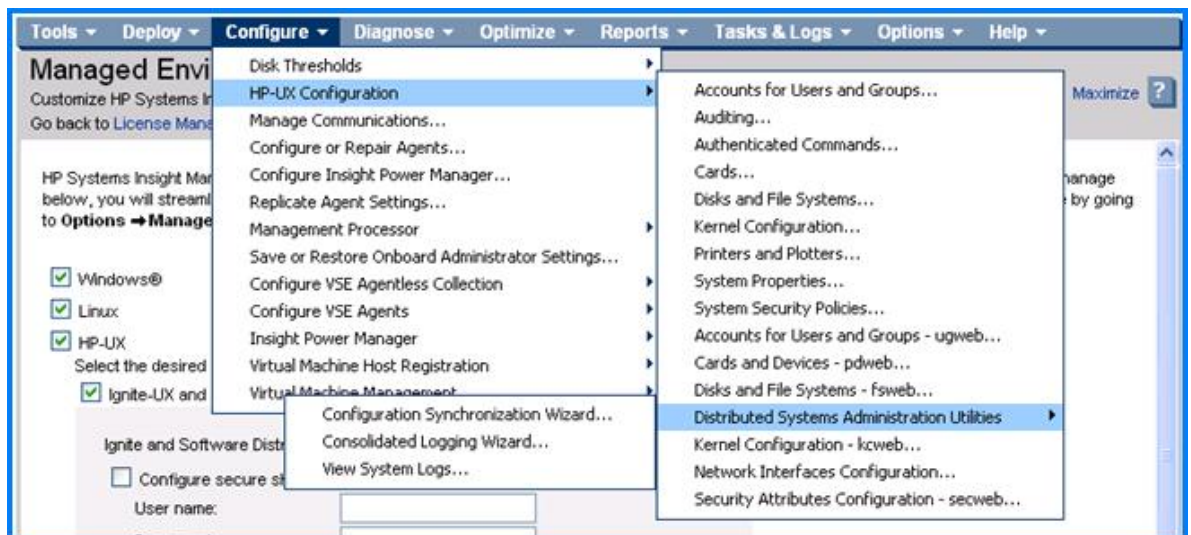


Figure 3. Various HP-UX Configuration choices under the HP SIM Configure menu after successful



Workload management products (such as PRM and WLM) and performance management products (such as OpenView and GlancePlus products) are under the HP SIM Optimize menu (not shown).

Figure 4. Workload Manager tools

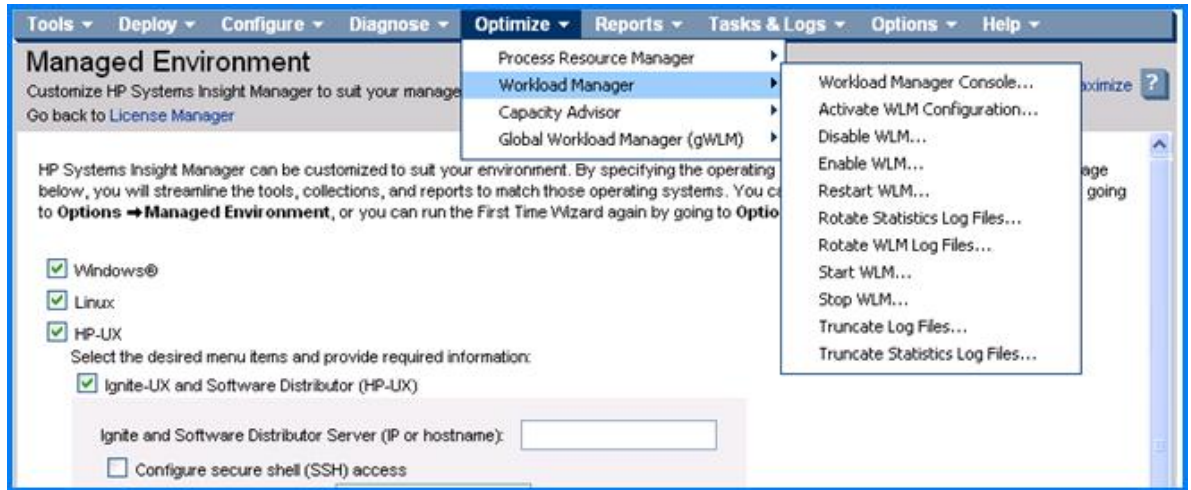


Figure 5. Glance plus Tools

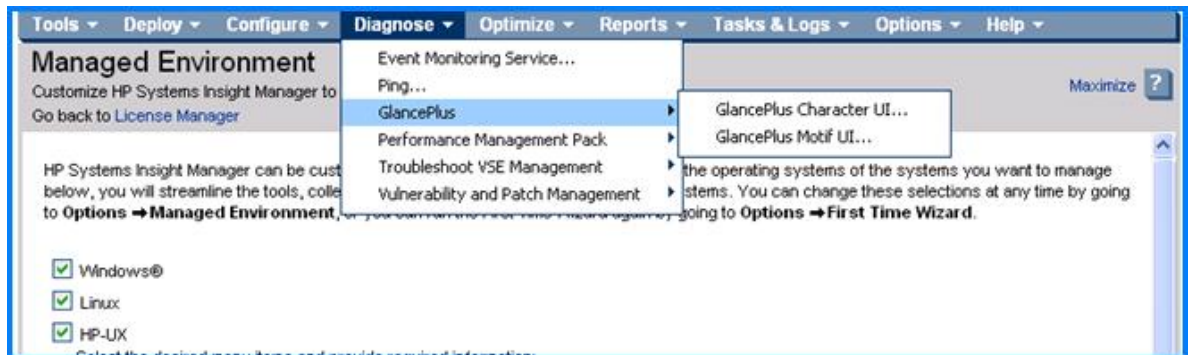


Figure 6. Workload Manager and Software Distributor tools under Tasks & Logs menu

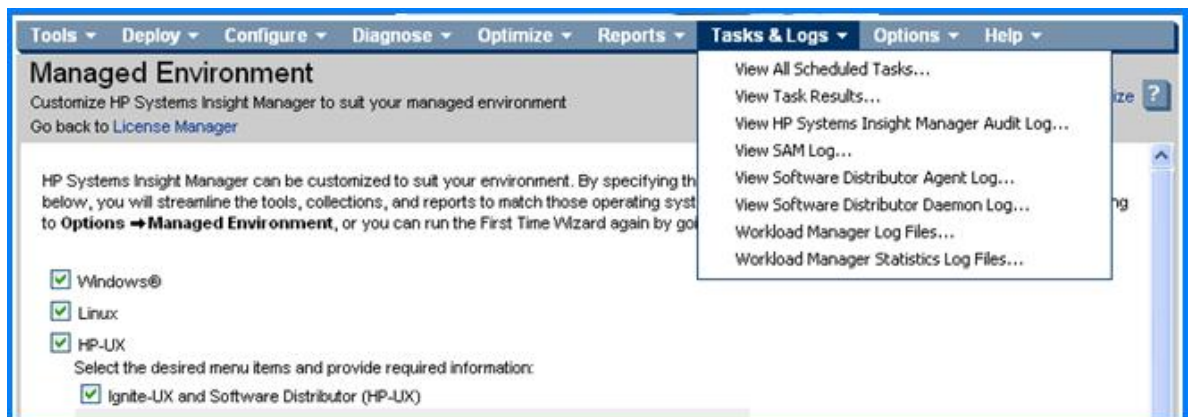
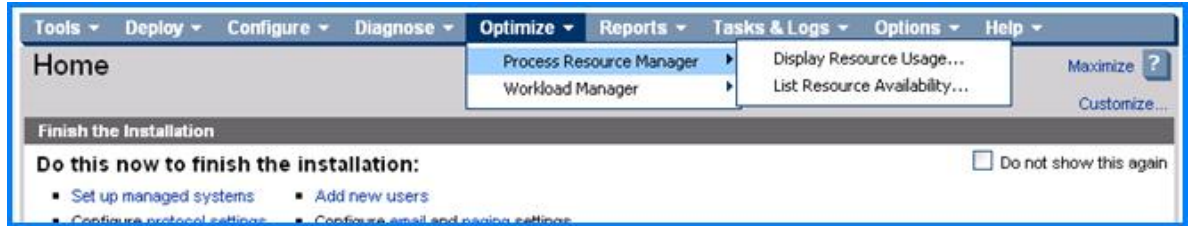


Figure 7. Process Resource Manager



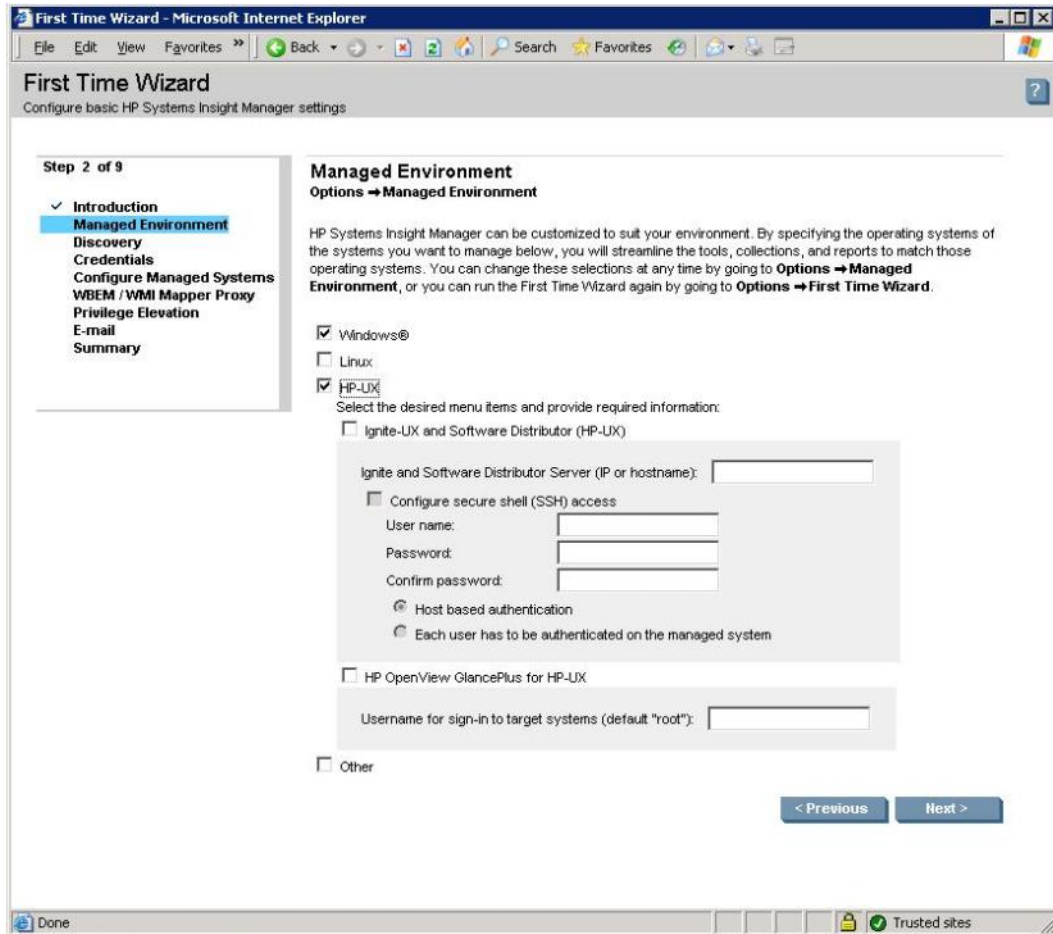
Workload management products (such as PRM and WLM) and performance management products (such as OpenView and GlancePlus products) are under the HP SIM Optimize menu .

Configuring Extension Tools from First Time Wizard

In Step 2 of First Time Wizard, when you select the HP-UX checkbox, more selection options appear. The First Time Wizard Step 2—Managed Environment screen enables you to select the tools to be set up. Ignite-UX and Software Distributor run on the specified HP-UX server, which must be configured for secure shell (SSH) access from the HP SIM Central Management Server (CMS). HP-UX configuration tools and the HP-UX Workload Manager run on the managed nodes, so no additional server specifications are necessary. Launching GlancePlus from the Windows CMS requires that HP SIM have a user name for the target managed system, which uses root by default.

You can also access the First Time Wizard Step 2—Managed Environment screen by selecting HP SIM menu **Options → Managed Environment**.

Figure 8. First Time Wizard Step 2—Managed Environment

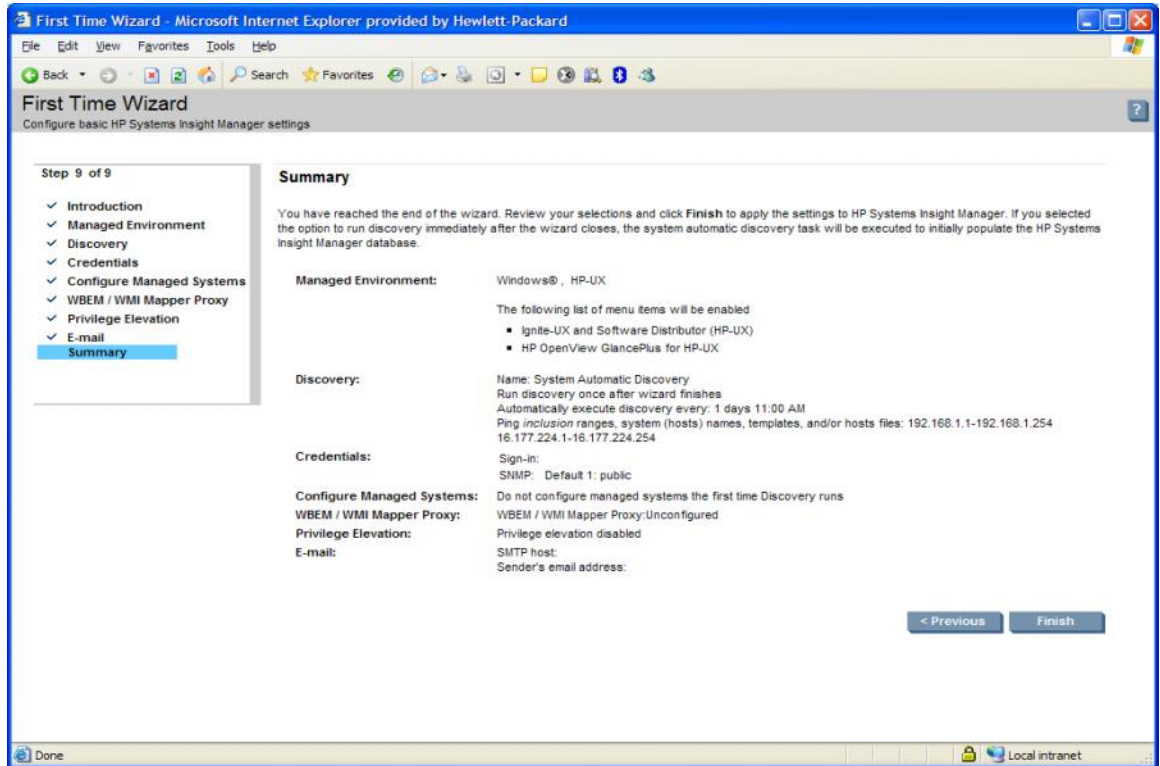


As this feature is for handling Extensions on Windows and Linux CMS, the subsequent selection items for HP-UX shown in Figure 8 are not available for HP SIM on HP-UX Operating System.

First Time Wizard—Summary

As shown in Figure 9, the integrated installer presents a summary of the various components selected for installation, reuse, or upgrade. To proceed with the installation, click **Install**.

Figure 9. First Time Wizard—Summary Page



Troubleshooting

Successful completion of First Time Wizard in HP SIM enables the various features previously discussed. However, you might have to supply configuration information. If the server specified for Ignite-UX and Software Distributor does not contain that software, the tools cannot be run.

The following section outlines some issues you might encounter.

Issue: Clicking a menu item does not launch a tool.

Cause 1: Some of the menu items launch X-based tools, which require an X Server to be installed and running on the browser system.

Action 1: Verify that you have the X Server software installed and running. If not, install the software, make sure it is actively running on your browser system, and then repeat the menu launch.

Cause 2: Some of the menu items require that the target system have a particular OS (HP-UX), a particular version of HP-UX (11i v2 or later), or a particular version of SSH (1.0 or later). If those are not present on the selected target node, the HP SIM Verify Target Systems step fails with a message similar to This tool cannot be run on <system> as it does not pass the conditions required for running it. SSH must be greater than or equal to : 1.0

Action 2: Select a target running the appropriate OS and version, and ensure it has the suitable version of SSH.

Issue: When trying to run one of the menu items, HP SIM task results indicate that SSH authentication is not working. If SSH is installed, but not properly configured, the error message is similar to the following message:

```
SSH public key authentication failed. Target system <system> might not be configured.
```

A message also appears if SSH is not installed.

Cause: SSH is either improperly configured or not installed.

Action: To resolve this issue, choose one of the following options:

- From an command line window, run the `mxagentconfig -a` command.
- Using the HP SIM GUI, select the target system with the issue, and then from the Configure menu, select **Configure or Repair Tool**. Check the **Configure secure shell (SSH) access** checkbox, and then press the **run now** button. Alternatively, you can do the same thing from the command line.

To configure SSH with "Host-based authentication", run:

```
mxagentconfig -a -n <target_hostname> -u<username> -o host -p<password>
```

If you prefer to use "Each user has to be authenticated on the server", run:

```
mxagentconfig -a -n <target_hostname> -u<username> -o user -p<password>
```

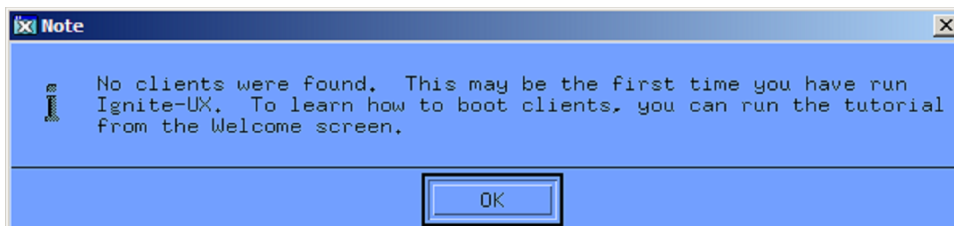
For the Ignite and SD tools, SSH must be installed/configured on the Ignite/SD server, which was specified during installation.

Issue: After completing First Time Wizard in HP SIM, some of the new HP-UX menu options do not appear (such as the fsweb HP-UX configuration option)

Cause: Tools that are specific to HP-UX require that the OS of the target system be HP-UX and may also require a particular version of SSH. HP SIM only displays menu options for valid targets. If HP SIM has not discovered any HP-UX systems or no HP-UX systems with a suitable version of SSH, then those HP-UX menu options do not appear.

Action: Discover an HP-UX system in HP SIM (using Discovery in the Options menu, and validate by clicking **HP-UX** under the Systems by Operating System option in the HP SIM left hand frame. At least one system (the one you discovered) appears. With at least one HP-UX system discovered, the HP-UX menu items are enabled. Some of the HP-UX tools also check the versions of HP-UX (for example, fsweb, pdweb, kcweb, and ugweb require HP-UX version 11i v2 or greater, and a version of System Management Homepage that is version 2.0 or greater).

Issue: Launching of Ignite Console with one or more targets results in the `No clients were found` message.



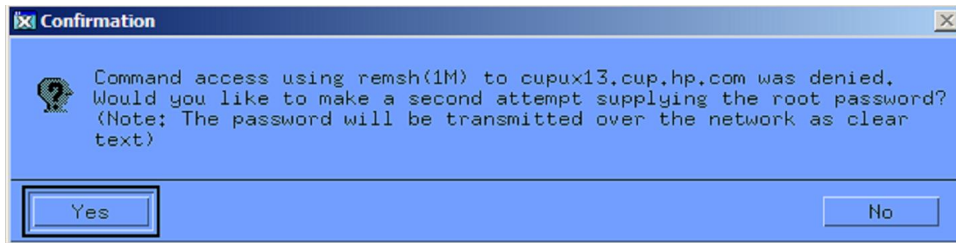
Cause: This message might indicate that SSH authentication is not configured between the HP SIM Central Management Server and the target systems and the access permissions (ACLs) are not set for the Ignite server to access the target systems.

Action: If the target systems were not originally installed from this Ignite server, set the access permissions to enable the Ignite server to add them as clients and push files to them. On each target system, execute:

```
swacl -l host -M user:root@<ignite_server_name>:crwit
```

```
swacl -l root -M user:root@<ignite_server_name>:crwit
```

Issue: I did everything specified above, but I get the following message when launching Ignite Console with a target system.



Cause: You do not have SSH configured between the Ignite server and the target system. Remsh is an alternate mechanism that Ignite can use to establish communication with the target system.

Action: Either press **Yes** to supply the root password as requested or **No** to stop the operation, and then set up SSH authentication between the Ignite server and the target system.

Note:

The operation might take a few minutes after you enter the root password. If it seems to hang or returns an error, it might be because the target system had initially been ignited from a newer version of Ignite than the one on the Ignite server you are currently trying to use, or that you are trying to use a C.6.x version of Ignite to update an 11iv3 system. (You must use a C.7.x version of Ignite to update an 11iv3 system.) For more information about Ignite operation, see the Ignite User Manual.

For more information

- Additional information regarding HP SIM is available at <http://www.hp.com/go/hpsim>.
- Additional information regarding Integrity Essentials is available at <http://www.hp.com/go/integrityessentials>.
- Integrity Essentials for HP-UX includes products such as Ignite-UX, SD, PRM, WLM, SMH and the various configuration tools, and OpenView GlancePlus. Additional information regarding Ignite-UX is available at <http://www.hp.com/go/ignite-ux>.
- Additional information regarding management of HP-UX 11i systems is available at <http://www.hp.com/go/managehpux11i>.
- Information regarding Linux on Integrity servers is available at <http://www.hp.com/go/integritylinux>.
- Additional information regarding OpenView GlancePlus is available at <http://h20229.www2.hp.com/products/gplus/index.html>.
- Information regarding configuring SSH authentication between the HP SIM server and the managed systems is available in the HP SIM HP-UX Installation and Configuration Guide, available at <http://h18013.www1.hp.com/products/servers/management/hpsim/infolibrary.html#b2> or <http://docs.hp.com/en/418810-004/ch07.html>. Refer to documentation regarding “Configure or Repair Agents” or the mxagentconfig CLI (Command Line Interface).
- Information regarding the CMS requirements of various management tools is available online at <http://h18013.www1.hp.com/products/servers/management/hpsim/plugin-apps.html>.

© Copyright 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. UNIX is a registered trademark of The Open Group.

537228-002, February 2010

