

# CHAPTER 7

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## System Management Homepage (SMH)

### SMH Overview

SMH is on the HP-UX media or you can download it from [www.hp.com/go/softwaredepot](http://www.hp.com/go/softwaredepot). In addition, there are great SMH documents on [www.docs.hp.com](http://www.docs.hp.com) (select your operating system version and *System Administration*.) After downloading and installing this depot you can start SMH with one of the two following commands:

```
https://hostname:2381/  
http://hostname:2301/
```

You use these commands based on how SMH has been set up. You start SMH with *https://hostname:2381/* by default. You may have to use *http://hostname:2301/* to start SMH depending on whether or not autostart is enabled for SMH on your system.

With autostart URL enabled there is a daemon listening on port 2301. When you connect to 2301 and Apache web server is started on 2381, that automatically redirects the page.

With automatic startup on boot you connect to 2381 with https.

The **smhstartconfig** (1M) command can be used to configure autostart. With **smhstartconfig** you can turn on or off autostart (with -a

on|off), start on boot (with `-b on|off`), and tomcat when SMH starts (with `-t on|off`).

Timeout of SMH is controlled in `/opt/hpsmh/conf/timeout.conf`.

After making any SMH-related changes you can run `/opt/hpsmh/sbin/hpsmh stop` and `start` to stop and restart the SMH daemon. For instance you can run `smhstartconfig -a off -b on` and then `stop` and `start` the SMH daemon.

You may also have edit `/etc/rc.config.d/hpws_apacheconf` to start apache by changing the variables in it to `1` and then issue the command `/sbin/init.d/hpws_apache start`. When you issue `ps` you'll see a lot of apache-related processes running.

Any time you're not sure about how to use an SMH command or you want more background there is extensive information under the *Help* menu in all sections.

SMH has the following menus:

- Home
- Settings
- Tasks
- Tools (focus of this chapter)
- Logs
- Help

I'll spend most of my time focusing on *Tools* in this chapter but the other sections also have a lot of useful information.

You'll notice that many of the commands that SMH issues are `/usr/sam/sbin/samx` commands revealing that SMH uses many commands from SAM. In addition, many SMH commands require X Windows and Motif to execute.

The upcoming sections show some examples of working with SMH after a short overview of SAM.

## System Administration Manager (SAM)

SMH is a fantastic tool but you can still run the traditional HP-UX system administration tool SAM. You can use SAM to automate and perform various system administration tasks. SAM has been refined over many releases of HP-UX and is a highly functional and reliable tool for performing most system administration tasks, even advanced tasks such as managing partitions.

SAM has many *functional areas* in which you can perform system administration tasks. There is a lot of “coverage” with SAM, meaning that most system administration tasks can be performed with SAM, so you can use it for the vast majority of your system administration tasks.

If you issue **sam** at the command line the SAM Character Line Interface (CLI) appears in the following figure:

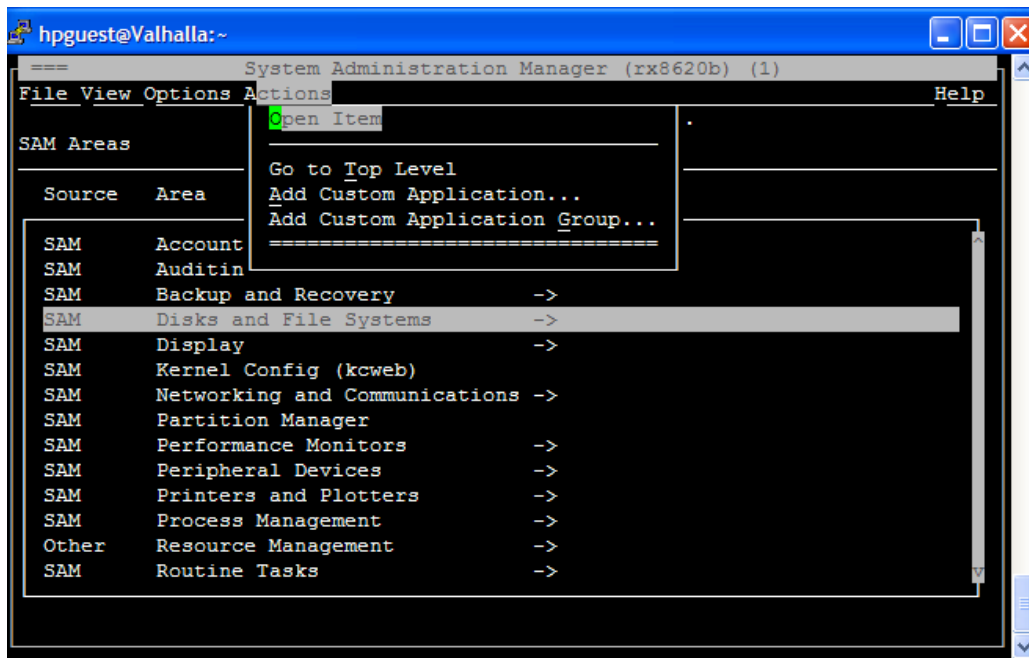


Figure 7-1 SAM Menu Selection for Text and Graphics Displays

When you see an item in reverse video on the text terminal (such as *Disks and File Systems* in the figure), you know that you have that item selected. After having selected *Disks and File Systems* as shown in the fig-

ure, you would then use the *tab* key (or *F4*) to get to the menu bar, use the *<->* (*arrow*) keys to select the desired menu, and use the *space bar* to display the menu.

You may notice that some functional areas of SAM are not present in SMH including *Backup and Recovery*, *Performance Monitors*, and *Process Management*.

Many organizations don't like Web servers running on systems for the purpose of system administration interfaces, so there is a CLI for all functional areas of SAM.

Four features of SAM that make it particularly useful are:

1. It provides a central point from which system administration tasks can be performed. This includes both the built-in tasks that come with SAM and those you can add into the SAM menu hierarchy. You can run SAM on a remote system and display it locally so that you truly have a central point of control.
2. It provides an easy way to perform tasks that are difficult, in that you have to perform many steps. SAM performs these steps for you.
3. It provides a summary of what your system currently looks like for any of the categories of administration tasks you want to perform. If you want to do something with the disks on your system, SAM first lists the disks you currently have connected. If you want to play with a printer, SAM first lists all of your printers and plotters for you. This capability cuts down on mistakes by putting your current configuration right in front of you.
4. You can assign non-root users to perform some of the system administration functions in SAM. If, for example, you feel comfortable assigning one of your associates to manage users, you can give them permission to perform user-related tasks and give another user permission to perform backups, and so on.

## **SMH Home**

The *Home* area top screen is shown in the following figure:

System Management Homepage ( hpvm4 )

User: root  
Home | Sign Out

Home Settings Tasks Tools Logs | Help

home

last refresh Thursday, June 29, 2006 7  
refresh this page

**System Status Summary**  
no failed/degraded items

**System**

- System Summary
- Cooling
- Physical Memory
- Power
- Processors
- ... 2 items not shown

**Operating System**

- Memory Utilization
- Network Information
- Process Information

**Software**

- Software Bundles
- Software Products

**System Configuration**

- Accounts for Users and Groups
- Disks and File Systems
- Kernel Configuration
- Peripheral Devices

**System Model**  
ia64 hp server Integrity  
Virtual Machine

**Integrated Agents**  
none

**Other Agents**  
none

**Management Processor**  
none

**Others Links**  
Support  
Forums

**Legend**

OK = Degraded =   
Failed = Unknown =

Figure 7-2 Top Level SMH *Home* Window

In this window you would select *System Summary* to see the components of which your system is comprised. I selected *Processors* to get more information about the processors in the system as shown in the following figure:

System Management Homepage ( hpvmtest.ct.pb.com )

User: root  
Home | Sign Out

Home Settings Tasks Tools Logs Help

home > system > processors

**Processors**  
Status: OK ✓

Properties

Search:

1 - 4 of 4 Items

Status	Location	Processor Type	Architecture Revision	Firmware ID	Processor Capability	Processor Speed
OK	Cabinet Number 0, Cell Slot Number 0, Slot Number 0.	Intel(R) Itanium(R) 2 Processor-Module	Itanium Arch.	03.17	64 Bits	1599
OK	Cabinet Number 0, Cell Slot Number 0, Slot Number 1.	Intel(R) Itanium(R) 2 Processor-Module	Itanium Arch.	03.17	64 Bits	1599
OK	Cabinet Number 0, Cell Slot Number 0, Slot Number 2.	Intel(R) Itanium(R) 2 Processor-Module	Itanium Arch.	03.17	64 Bits	1599
OK	Cabinet Number 0, Cell Slot Number 0, Slot Number 3.	Intel(R) Itanium(R) 2 Processor-Module	Itanium Arch.	03.17	64 Bits	1599

Printable View of Table

Display: 50 Rows

Done Internet

Figure 7-3 SMH Showing Processors

This figure shows there are four processors in this system. You can get additional information about any of the other components in your system as well.

The next section covers *Tools* which is the focus of this chapter.

## SMH Tools

SMH is invoked with `https://hostname_or_IP/2381` in your browser. You may also set up security such that https is required. After invoking SMH you see the window shown in Figure 7-1:

System Management Homepage ( hpvmtest.ct.pb.com ) User: root  
Home | Sign Out

Home Settings Tasks Tools Logs | Help

tools

- Accounts for Users and Groups**
  - Configure Groups
  - Configure Local Users
  - Configure User Templates
- Audit Configuration**
  - Audit Events
  - Audit System Calls
  - Audit Users
- Authenticated Commands(PAM)**
  - Configure Account Authentication
  - Configure Password Authentication
  - Configure Session Authentication
  - Configure User Authentication
- Disks and File Systems**
  - Disks
  - File Systems
  - Logical Volumes
  - Volume Groups
- Evweb**
  - Subscription Administration
- IPMI Event Viewer**
  - Event Viewer
- Kernel Configuration**
  - Alarms
  - Modules
  - Tunables
- Networking and Communications**
  - Bootable Devices
  - DHCPv6
  - DNS
  - Hosts
  - Name Service Switch
  - ... 9 items not shown
- nPartition Management**
  - View and Manage Complex
  - View and Manage Remote Complex
- Peripheral Devices**
  - Manage Peripheral Devices
- Printer Management**
  - Configure Printers or Plotters
  - Manage Print Requests
  - Save or Restore Print Spooler Configuration
- Resource Management**
  - Event Monitoring Service
- Software Management**
  - Copy Depot Software
  - Install Software
  - List Depot Software
  - List Installed Software
  - Remove Depot Software
  - Remove Installed Software
- Time**
  - NTP Broadcasting
  - NTP Network Time Sources
  - System Clock

HP System Management Homepage v2.2.2 ©2003-2005 Hewlett-Packard Development Company, L.P.

Figure 7-4 Top Level SMH *Tools* Window

As you can see in this figure most system administration functions can be performed in SMH.

## Accounts for Users and Groups in SMH

This section is a short summary of users and groups in general and a window showing SMH and user-related functionality.

When you select *Accounts for Users and Groups* in SMH you are provided a list of all the users on your system. The following figure shows a list of users provided by SMH with the user root selected:

The screenshot shows the System Management Homepage (SMH) interface. The browser address bar displays 'hp System Management Homepage ( hpvmtest.ct.pb.com )'. The navigation menu includes Home, Settings, Tasks, Tools, Logs, and Help. The breadcrumb trail indicates the current location: home -> system configuration -> accounts for users and groups.

User	UID	Group	Shell	Home Directory	Status
owwww	107	other			Disabled
root	0	sys		Tue May 30 14:31:34 2006	Enabled
sfmdb	102	users			Disabled
smbnull	101	smbnull	DO NOT USE OR DELETE - need...		Disabled
sshd	105	sshd	sshd privsep		Disabled
sys	3	sys			Disabled
uucp	5	sys			Disabled
www	30	other			Disabled

Below the table, there is a 'Printable View of Table' link and a 'Display: 50 Rows' dropdown menu. The 'Detail View of User : root' section is visible, showing tabs for Properties, Aging, Secondary Groups, and Security Attributes. The 'Properties' tab is active, displaying fields for Login Name (root), User ID (0), and Primary Group ID (0).

Figure 7-5 SMH Showing Users and Groups

You can see that all user-related functions such as adding, deleting, modifying, and other functionality can be selected from the menus in the right of the figure.

The following sub-sections provide a user and group overview independent of SMH.

## User and Group Background Information

The following are the basic steps and activities to add a user: