

SAVA Command-line Utilities APXs

Action: Configure and use the Command-line Utilities APXs for SAVA 10.0



Disclaimer	1
SAVA Overview.....	2
Command-line Utilities APXs for SAVA	2
Command-line Web Utilities	2
Command-line Logging Utility	4
How to Launch the APXs.....	5
Select the Command-line Web Utilities Launcher.....	6
Select the Command-line Logging Utility	7
How to Use the Command-line Utilities APXs.....	8
Config or Filter File Editor.....	9
Edit Filter.....	9
Results of Utility Commands	9
Log File Views.....	9
Utility Details	10
HP Live Network connector.....	10
Running the CBT	10
Reset Admin Password for the CBT and HPLN.....	10
Data Sharing	11

Disclaimer

Periodically, HP reviews, revises, and reissues existing audit-compliance policies. All reasonable attempts are made to ensure that updated audit rules return equivalent results, but this cannot be guaranteed in every case. Customers should be advised that use of the revised audit policies and rules may identify additional variances that were not identified with previous versions of the policies or rules. As always customers should fully review any changes and assess the impact of these changes prior to importing content into their environment.

SAVA Overview

HP Server Automation has two editions:

- Server Automation (SA) is the Enterprise Edition of Server Automation.
- Server Automation Virtual Appliance (SAVA) is the Standard Edition of Server Automation.

SAVA is a virtual appliance used to provision and manage servers. It is a single SA core, single-slice-component bundle version of enterprise-level SA running within a virtual appliance. SAVA supports a selected set of SA management capabilities, including OS deployment, using OS build plans, server patching, software management, application configuration, audit and compliance, virtualization management, and more.

Command-line Utilities APXs for SAVA

SAVA has two command-line utilities APXs for SAVA:

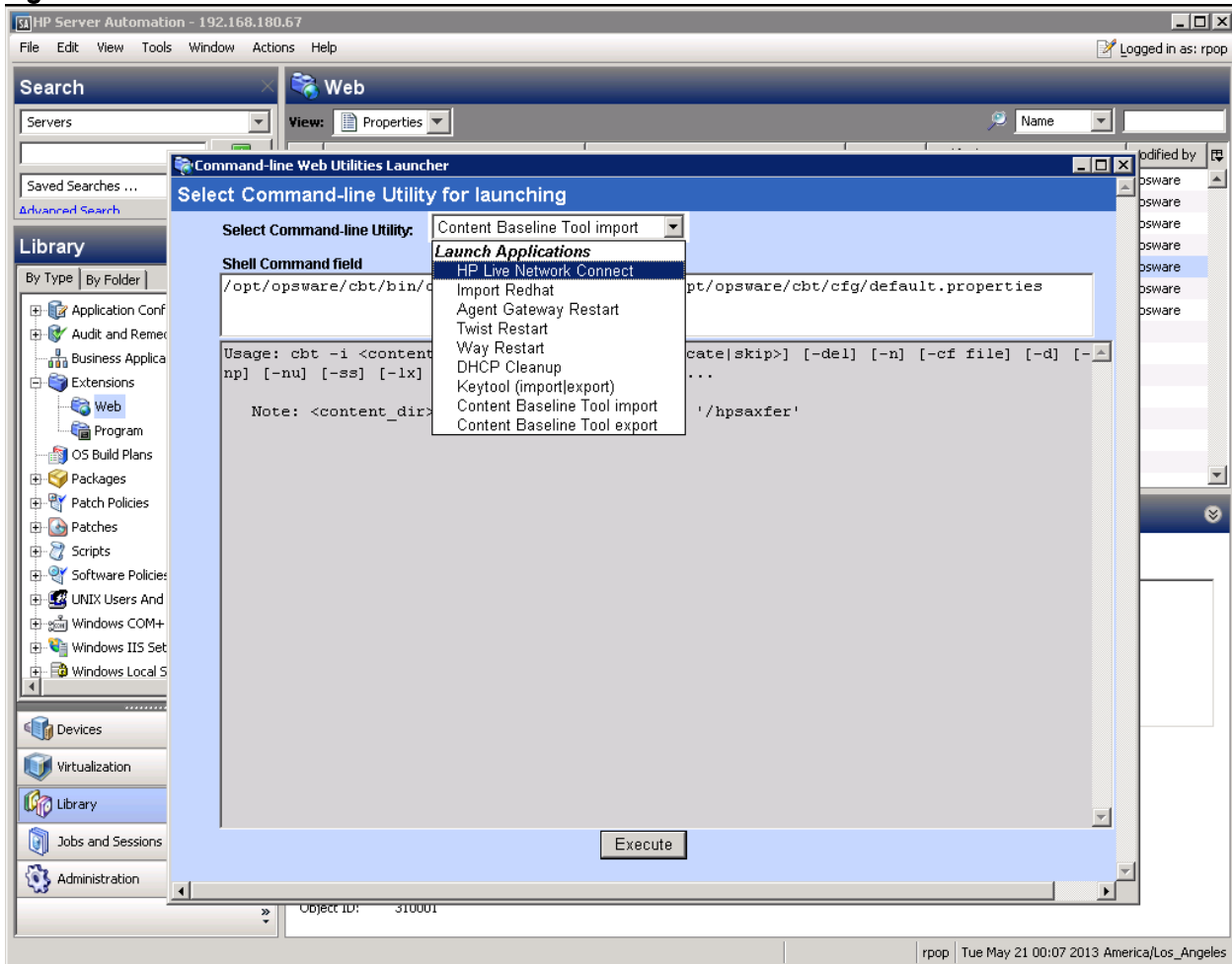
- Command-line Web Utilities
- Command-line Logging Utility

Note: The Command-line Web APXs are used for administrative and special back-end commands that generally require root access permissions. These APXs are meant to be run by Core administrators, and access to them should be controlled and given on an as-needed basis. To see and run these APXs, you must be a member of the 'Command-line Group' (see "How to Launch the APXs" section in this document).

Command-line Web Utilities

The Command-line Web APX is used instead of console command line access, which SAVA does not support. You can invoke this APX using the SA Client. The Command-line Web Utilities Launcher is shown in Figure 1.

Figure 1. Command-line Web Utilities Launcher



The Command-line Web Utilities APX provides the following command-line utilities:

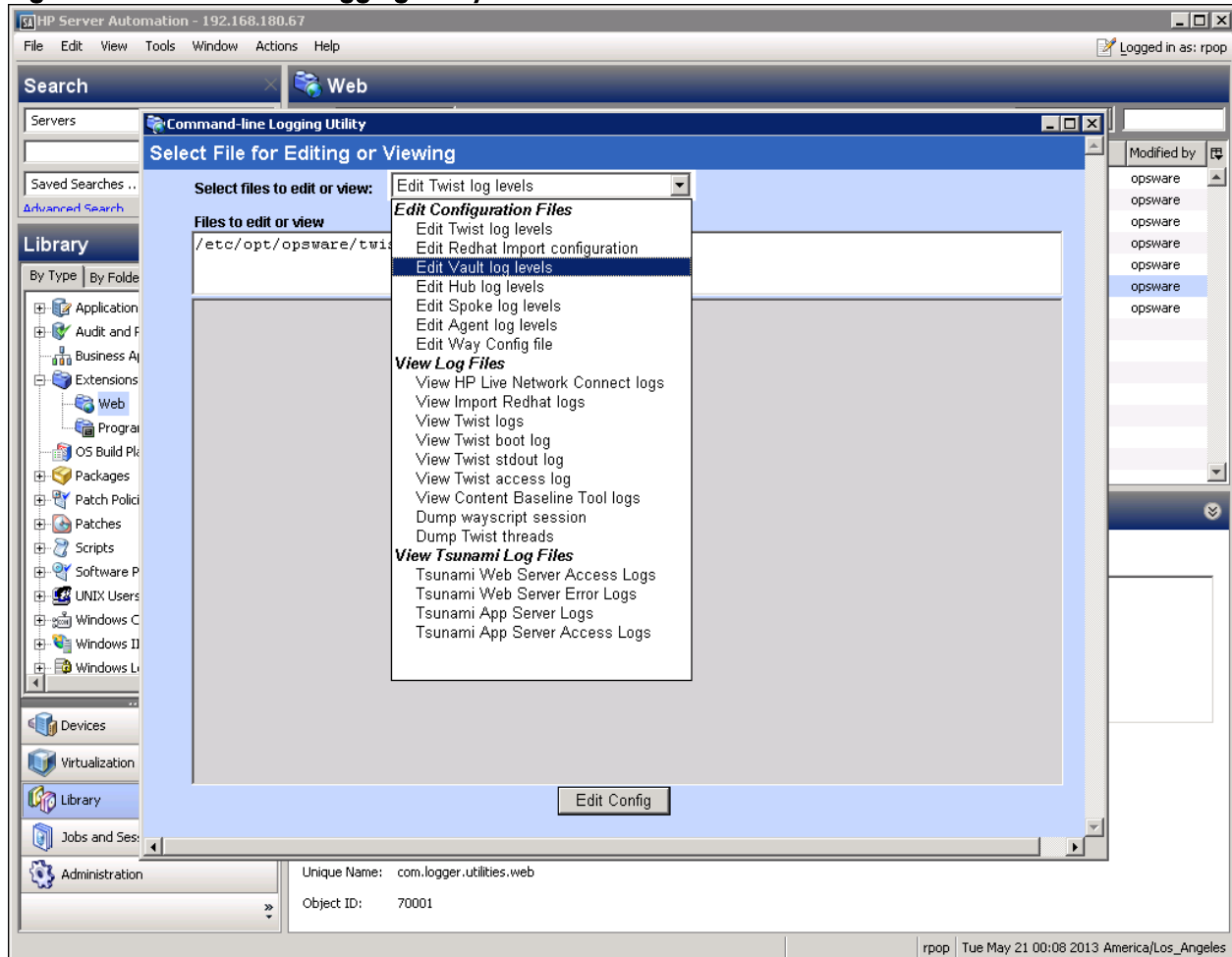
Launch Applications

- HP Live Network Connect - Execute with various options set as specified in the Usage field.
- Red Hat Import - Edit Config file `rhimport.conf`, and then Save and Run with configuration changes.
- Agent Gateway Restart - Edit Config file `opswgw.custom`, and then Save and Run with configuration changes.
- Web Services Engine (Twist) Restart - Execute the restart. The actual restart will be run in an 'at' wrapper and then run one minute later in order to avoid locking with the APX application.
- Way Restart - Execute the restart. The actual restart will be run in an 'at' wrapper and then run one minute later in order to avoid locking with the APX application.
- DHCP Cleanup - Edit Config file `dhcpd.leases`, and then Save and Run with configuration changes.
- Keytool (import/export) - Execute with various options set as specified in the Usage field.
- Content Baseline Tool Import - Execute with various options set as specified in the Usage field.
- Content Baseline Tool Export - Edit Filter file with the `-f` option (as specified in the command line), then Save and Run with Filter file changes.

Command-line Logging Utility

The Command-line Logging Utility APX is used for modifying configuration files and viewing log files that are associated with operations that run in the Command-line Web Utilities Launcher. The Command-line Logging Utility launcher is shown in Figure 2.

Figure 2. Command-line Logging Utility Launcher



The Command-line Logging Utility provides the following command-line utilities:

Edit Configuration Files

- Edit Web Services Engine (Twist) log levels
- Edit Red Hat Import configuration
- Edit Vault log levels
- Edit Hub log levels
- Edit Spoke log levels
- Edit Agent log levels
- Edit Waybot Config file

View Log Files

- View HP Live Network Connect logs
- View Red Hat Import logs
- View Web Services Engine (Twist) logs
- View Web Services Engine (Twist) boot log
- View Web Services Engine (Twist) stdout log
- View Web Services Engine (Twist) access logs
- View Content Baseline Tool logs
- Dump Wayscript session
- Dump Web Services Engine (Twist) threads

View Software Repository Accelerator Log Files

- Software Repository Accelerator Web Server access logs
- Software Repository Accelerator Web Server error logs
- Software Repository Accelerator App Server logs
- Software Repository Accelerator App Server access logs

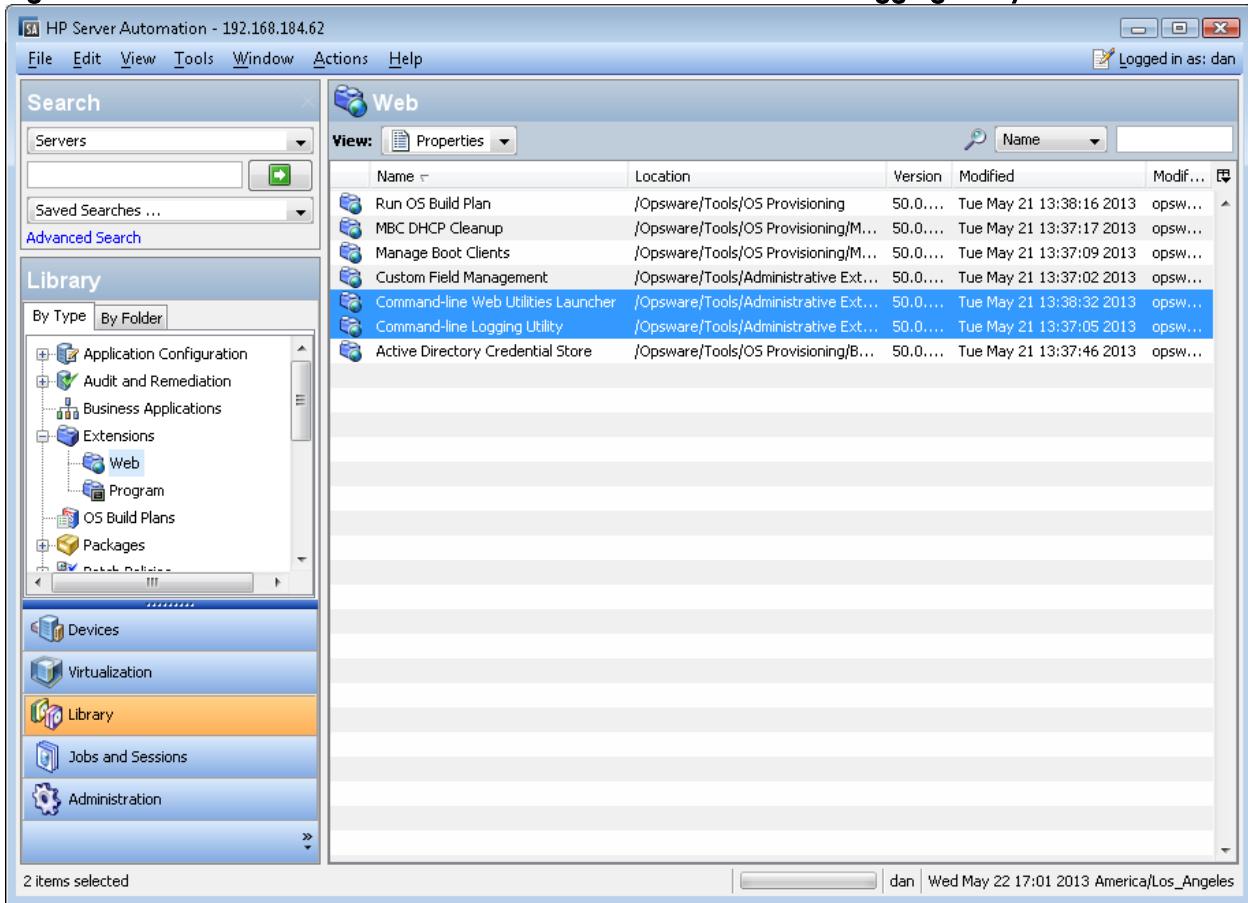
Note: For more information about APXs, see the *SA User Guide: Server Automation*.

How to Launch the APXs

To launch either of these APXs, perform the following steps:

1. To see and run the command-line APXs, you must be a member of the Command-line Group user group and have Read, Write, and Execute permissions in the Administrative Extensions folder where the APXs are stored. Contact your Super Administrator to add you to this user group if you are not a member.
2. From the SA Client main screen, select the Library tab, located at the lower left corner of the SA Client window.
3. A Library tree appears on the left. Expand the Extensions node in the Library tree.
4. Select the Web folder. A list of Web APXs appears in the main content pane.
5. Right-click or double-click the Command-line Web Utilities Launcher, and select Run.
or
Right-click or double-click the Command-line Logging Utility launcher, and select Run.

Figure 3. Command-line Web Utilities Launcher and Command-line Logging Utility in Web Table



Select the Command-line Web Utilities Launcher

The Command-line Web Utilities Launcher form presents an option list of the commands shown in Table 1:

Table 1. Commands in the Command-line Web Utilities Launcher Form

Command	Executable or File and Location on Core	Explanation of Command
HP Live Network Connect execute	/opt/opsware/hpln/lnc/bin/live-network-connect	This command is executed directly.
Import Red Hat	/opt/opsware/rhn_import/bin/rhn_import	This command is directed to an Edit Config step before executing.
Agent Gateway Restart	/etc/init.d/altair-sas restart opswgw-agws	This command is directed to an Edit Config step before executing.
Twist Restart	/etc/init.d/altair-sas restart twist	This command is executed directly.
Way Restart	/etc/init.d/altair-sas restart waybot	This command is executed directly.
DHCP Cleanup	/etc/init.d/altair-sas restart dhcpd	This command is directed to an Edit

		Config step before executing.
Keytool (import export)	/opt/opsware/jdk1.6/jre/keytool	This command is executed directly.
Content Baseline Tool import	/opt/opsware/cbt/bin/cbt -i <.> -cf <.>	
Content Baseline Tool export	/opt/opsware/cbt/bin/cbt -e <.> -f <.> -cf <.>	This command is directed to an Edit Filter step before executing.

Select the Command-line Logging Utility

The Command-line Logging Utility form presents an option list of the commands shown in Table 2:

Table 2. Commands in the Command-line Logging Utility Form

Command	Executable or File and Location on Core
Edit Configuration Files	
Edit Web Services Engine (Twist) log levels	/etc/opt/opsware/twist/twist.conf
Edit Red Hat Import configuration	/opt/opsware/rhn_import/etc/rhn_import.conf
Edit Vault log levels	/etc/opt/opsware/vault/logging.properties
Edit Hub log levels	/etc/opt/opsware/hub/hub.conf
Edit Spoke log levels	/etc/opt/opsware/spoke/spoke.conf
Edit Agent log levels	/etc/opt/opsware/agent/agent.args
Edit Waybot Config File	/etc/opt/opsware/waybot/waybot.args
View Log Files	
View Live Network Connect logs	/var/opt/opsware/log/hpln/hpln.log
View Red Hat Import logs	/var/opt/opsware/log/rhn_import.log
View Web Services Engine (Twist) logs	/var/opt/opsware/log/twist/twist.log
View Web Services Engine (Twist) boot log	/var/opt/opsware/log/twist/boot.log
View Web Services Engine (Twist) stdout log	/var/opt/opsware/log/twist/stdout.log

View Web Services Engine (Twist) access log	/var/opt/opsware/log/twist/access.log
View Content Baseline Tool (CBT) logs	<Content Directory>/var/cbtexport0.log
Dump Wayscript session	--dump-session <job_id>
Dump Twist threads	--dump-twist-threads <count> <sleep-in-seconds>
View Software Repository Accelerator Log Files	
Software Repository Accelerator Web Server Access logs	/var/log/opsware/tsunami/nginx-access.log
Software Repository Accelerator Web Server Error logs	/var/log/opsware/tsunami/nginx-error.log
Software Repository Accelerator App Server logs	/var/log/opsware/tsunami/uwsgi.log
Software Repository Accelerator App Server Access logs	/var/log/opsware/tsunami/uwsgi.log

How to Use the Command-line Utilities APXs

The Command-line Utilities APXs' core commands consist of four forms connected into a dialog flow. The user is allowed to return to the first form (Select SAVA Utility) through a link labeled "Launch New Command Line," located at the lower left of the screen.

- Config or Filter File Editor
- Edit filter
- Results of Utility Commands
- Log File Views

When you select the top option command name, the executable or config file and its absolute path and syntax appear in the Shell Command field below it. Below that is a Usage: Description field to help you enter arguments. The command button at the bottom of the form displays a different action, depending on the command you choose.

Users enter information into the Shell Command field and press the related Command button to send the command to the core to be executed as root or in the form specified by the configuration files.

Config or Filter File Editor

Some commands bring up the Config File editor form before executing commands. The Config File editor appears after you press Edit Config. Users can then edit the Config File and press Save and Run.

The Config Editor displays the information in an Attribute=Value tabular format in which the user can change the Value field, and then press Save and Run. The Filter file and some Config files are also displayed in a textual (rather than tabular) format that allows the user to enter or remove any text.

Edit Filter

You have the option to edit filters under the Content Baseline Tool Export utility. Just as some command-line utilities have the Edit Config command for editing configuration parameters, the cbt export command includes an extra step for editing filter files that are in rdf format. Use the -f command to locate these files.

Results of Utility Commands

The Results form, which returns information about Utility commands executed on the core, appears with Shell Command results, if any. The Results form has the View Logs button for users to view the pertinent log file for the utility that just ran.

A Job ID number appears at the top of the Results of Utility Commands form. This ID can be used to index the specific APX job, which is a 'Run Program Extension' type and is in the Jobs and Sessions pleat under the Job Logs node.

Note: In SAVA, the Shell Command field contains only the pre-specified command to execute. These commands are the executables that appear with their complete paths in the Shell Command field.

Note: Utility commands that take longer than five minutes to run return an empty Results form. To see the actual results, users can go to the Jobs and Sessions/Job Logs table to view finished job results.

Log File Views

The Log File form displays log file results for the command that was just executed. The Log File form has a Refresh button that you can press to get the latest version of the log file. HP Live Network Connect, the Content Baseline Tool, Web Services Engine, and Red Hat Import have viewable log files.

Utility Details

HP Live Network connector

HP Live Network (HPLN) connector (LNC) is installed with SA. The following example shows commands you can use to configure HPLN after invoking SAVA:

1. Set the username and password:
`./live-network-connector write-config --username=<> --password=<>`
2. Set the proxy (optional), as well as the proxy username and password:
`./live-network-connector write-config --http-proxy=<> --http-proxy-user=<> --http-proxy-pass=<>`
3. View available streams:
`./live-network-connector list-streams`
4. Enable streams:
`./live-network-connector write-config --stream=content.platform_linux --enable`
5. Download and import the stream:
`./live-network-connector download-import.`

You can download the HP Live Network Connector User Guide from the Live Network Connector community on the HP Live Network at:

<https://hpln.hp.com/group/hp-live-network-connector>

Running the CBT

If the admin password is unchanged after SAVA installation, the CBT will work if you:

- Enter the `/opt/opsware/cbt/bin/cbt --adminpassword <password>` command before running any Content Baseline Tool export or Content Baseline Tool import command
Or
- Run the Content Baseline Tool export or Content Baseline Tool import command with the `--spike.username=<admin_password>` option.

Reset Admin Password for the CBT and HPLN

Whenever the Admin password changes in the SA Client, the `spike.password` for the files `/opt/opsware/cbt/cfg/default.properties` and `/etc/opt/opsware/hpln/cbt.conf` will get out of synchronization. This prevents you from being able to run CBT and HPLN for content that relies on CBT, such as Security and Compliance. It is recommended that you change the Admin password during initial SAVA installation.

To reset this password, enter the Content Baseline Tool Import command and enter the `--adminpassword <password>` option. Your new `<password>` argument resets and resynchronizes the `spike.password` that resides in the `default.properties` and `cbt.conf` files. The `spike.password` should match the new Admin password as set by the Administrator.

Example:

```
/opt/opsware/cbt/bin/cbt --adminpassword <password>
```

Resynchronization allows the cbt command to run along with the hpln command that calls CBT.

Data Sharing

The /hpsaxfer partition resides on a SAVA core and is used for data sharing between the SAVA core and other machines. It is the only channel that you can use to get data from or put data on the SAVA appliance, and it is used for Content Baseline Tool import and export.

To mount the /hpsaxfer partition that resides on a SAVA core, do the following:

- For Windows SMB:
 - `HYPERLINK "file:///\\&appliance_ip\\hpsaxfer"`
 - or
 - `\\&appliance_ip\hpsaxfer`
- For Unix NFS:
 - `mount &appliance_ip:/hpsaxfer local_dir_name_on_remote_machine`