Uyuni 2026.11

Reference Guide



UYUNI

Chapter 1. Preface

Reference
Uyuni 2026.11

This document is divided into several sections:

- **Web UI Reference:** Organized to mirror the structure of the Uyuni Web UI, this section allows you to quickly find relevant information while navigating the interface.
- **spacecmd Reference:** A comprehensive guide to the spacecmd command-line interface. It includes an **alphabetized list** of all available commands along with their correct usage.
- **Command Line Tools:** An overview of the various **command-line utilities** available in Uyuni, helping you streamline administrative tasks.

Publication Date: 2026-11-25

Table of Contents

1. Preface 1
2. WebUI Reference 6
2.1. Home Menu 6
2.1.1. Home Overview 6
2.1.2. Notification Messages 6
2.1.3. User Account Menu 6
2.1.4. My Preferences 8
2.1.5. My Organization 8
2.2. Systems Menu 10
2.2.1. Systems List 11
2.2.2. System Groups 13
2.2.3. System Set Manager 14
2.2.4. Bootstrapping 17
2.2.5. Proxy Configuration 19
2.2.6. Advanced Search 19
2.2.7. Activation Keys 19
2.2.8. Stored Profiles 19
2.2.9. Custom System Information 20
2.2.10. Autoinstallation Menu 20
2.2.11. Virtual Host Managers 22
2.3. System Details 22
2.3.1. Overview 23
2.3.2. Btrfs Snapshots 28
2.3.3. Software 28
2.3.4. Configuration 31
2.3.5. Provisioning 33
2.3.6. Groups 33
2.3.7. Audit 34
2.3.8. States 38
2.3.9. Formulas 40
2.3.10. Ansible 40
2.3.11. Events 42
2.3.12. Proxy 42
2.4. Salt Menu 42
2.4.1. Keys 42
2.4.2. Remote Commands 43
2.4.3. Formula Catalog 43
2.5. Images Menu 43
2.5.1. Image List 44
2.5.2. Images Build 44
2.5.3. Images Profiles 45
2.5.4. Images Stores 45
2.6. Patches Menu 45
2.6.1. Patch Details 45
2.6.2. Patch List 47
2.6.3. Advanced Search for Patches 48

2.6.4. Manage Patches 48
2.6.5. Clone Patches 49
2.7. Software Menu 49
2.7.1. Channel Details 49
2.7.2. Channel List Menu 51
2.7.3. Package Search 52
2.7.4. Manage Menu 53
2.7.5. Distribution Channel Mapping 54
2.8. Content Lifecycle Management Menu 54
2.8.1. Projects 55
2.8.2. Filters 55
2.9. Audit Menu 55
2.9.1. CVE Audit 55
2.9.2. Subscription Matching 56
2.9.3. OpenSCAP Menu 59
2.10. Configuration Menu 66
2.10.1. Configuration Overview 67
2.10.2. Channels 68
2.10.3. Files 70
2.10.4. Systems Menu 71
2.11. Schedule Menu 72
2.11.1. Pending Actions 72
2.11.2. Recurring Actions 73
2.11.3. Completed Actions 73
2.11.4. Failed Actions 74
2.11.5. Archived Actions 75
2.11.6. Action Chains 75
2.11.7. Maintenance Windows 75
2.12. Users Menu 75
2.12.1. User Details 76
2.12.2. User List 77
2.12.3. System Group Configuration 78
2.13. Admin Menu 78
2.13.1. Setup Wizard 79
2.13.2. Organizations 80
2.13.3. Access Group Management 81
2.13.4. Users 84
2.13.5. Manager Configuration 84
2.13.6. Task Schedules 87
2.13.7. Task Engine Status 88
2.13.8. Show Tomcat Logs 88
2.14. Help Menu 88
2.14.1. Documentation 88
2.14.2. Release Notes 88
2.14.3. API Menu 89
3. spacecmd Reference 90
3.1. Configuring spacecmd 90
3.1.1. Setup spacecmd credentials 90
3.1.2. spacecmd quiet mode 91

3.1.3. spacecmd help 91
3.2. help 92
3.3. history 95
3.4. Troubleshooting spacecmd 95
3.4.1. Creating a distribution where spacecmd sets localhost instead of FQDN 95
3.4.2. spacecmd not accepting commands or options 96
3.4.3. spacecmd caching problems 96
3.5. spacecmd Functions 96
3.5.1. activationkey 96
3.5.2. api 102
3.5.3. clear 103
3.5.4. clear_caches 103
3.5.5. configchannel 103
3.5.6. cryptokey 107
3.5.7. custominfo 108
3.5.8. distribution 108
3.5.9. errata 110
3.5.10. filepreservation 111
3.5.11. get 112
3.5.12. group 113
3.5.13. kickstart 114
3.5.14. list_proxies 123
3.5.15. login 123
3.5.16. logout 123
3.5.17. org 123
3.5.18. package 125
3.5.19. proxy_container_config 127
3.5.20. repo 128
3.5.21. report 130
3.5.22. scap 132
3.5.23. schedule 132
3.5.24. snippet 135
3.5.25. softwarechannel 136
3.5.26. ssm 142
3.5.27. system 144
3.5.28. toggle 158
3.5.29. user 158
3.5.30. whoami 161
3.5.31. whoamitalkingto 162
3.5.32. Miscellaneous Help Topics 162
4. Command Line Tools 164
4.1. Synchronization CLI Tools 164
4.1.1. Synchronize SCC Repositories With mgr-sync 165
4.1.2. Synchronize Repositories with spacewalk-repo-sync 166
4.1.3. Troubleshooting Synchronization 167
4.2. Channel Management CLI Tools 168
4.2.1. Manage Channels with spacewalk-remove-channel 168
4.3. Bootstrapping Command Line Tools 169
5. GNU Free Documentation License 171

Chapter 2. WebUI Reference

2.1. Home Menu

The Home section is a dashboard that contains a summary of your current Uyuni status, including tasks, client information, and critical security updates.

2.1.1. Home Overview

The **Home › Overview** section is a dashboard that contains a summary of your current Uyuni status, including tasks, client information, and critical security updates.

2.1.2. Notification Messages

The **Home › Notification Messages** section shows all current messages produced by Uyuni. By default, messages will remain current for thirty days. After this period, messages are deleted whether or not they are marked as read.

To see unread messages, navigate to the Unread Messages tab. To see all messages, navigate to the All Messages tab.

Click **[Refresh]** to update the list.

Perform bulk actions by checking messages in the list. Click **[Delete selected messages]** to bulk delete messages. Click **[Mark selected as read]** to bulk read messages.

Table 1. Notification Message Severity Statuses

Icon	Description	Example
ⓘ	Information	Client onboarding has failed.
⚠	Warning	Channel synchronization has completed.
⊗	Error	Channel synchronization has failed.

2.1.3. User Account Menu

The **Home › User Account** section allows you to change user account preferences.

2.1.3.1. My Account

The **Home › User Account › My Account** section allows you to change user account preferences.

Modify your personal information, such as name, password, and title from the **Home › User Account › My Account** page. To modify this information, make the changes in the appropriate text fields and click the **[Update]** button at the bottom.

If you forget your password or username, navigate to Web UI sign in page, click **[About]**, and click **[Lookup Login/Password]**. Enter the username or email address, and click **[Send Password]** or **[Send Login]** to have the missing information sent to you.

2.1.3.2. Addresses

The **Home › User Account › Addresses** section allows you set your mailing, billing, and shipping addresses, and associated phone numbers.

Click **[Fill in this address]** or **[Edit this address]** below the address to be modified or added, make your changes, and click **[Update]**.

2.1.3.3. Change Email

The **Home › User Account › Change Email** section allows you to set the email Uyuni sends notifications to.

Enter your new email address and click the **[Update]** button. Invalid email addresses, including those ending in @localhost are filtered and rejected.

If you would like to receive email notifications about patch alerts or daily summaries for your systems, ensure you have checked the Receive email notifications option in **Home › My Preferences** section.

2.1.3.4. Account Deactivation

The **Home › User Account › Account Deactivation** section allows you to cancel your Uyuni user account.

When you click **[Deactivate Account]** your user account will be deleted, you will be signed out, and you will not be able to sign back in.

If you do this by accident, you will need to contact your Uyuni Administrator to reactivate your user account.



If you are the only Uyuni Administrator for your organization, you can not deactivate your account.

2.1.4. My Preferences

The **Home › My Preferences** section allows you to configure Uyuni Web UI options.

Table 2. Home Preferences

Option	Description	Default
Email Notification	Receive email for client and Taskomatic notifications, including a daily summary email.	Checked
Beta Features	Beta features are experimental and may not be fully tested. Enable this option to access new functionality that is still under development. Use with caution in production environments.	Unchecked
Uyuni List Page Size	Maximum number of items that can appear in a list on a single page.	25 entries
"Overview" Start Page	Select the information panes to display on the **Home › Overview** page.	All checked
Time Zone	Set your local timezone.	System timezone
Interface Language	Set the language to use in the Web UI.	Default language
Style Theme	Set the style theme to use in the Web UI.	susemanager-light
CSV Files	Select whether to use comma or semi-colon delimiters when producing downloadable CSV files.	Comma

For information about changing the default preferences, see **Administration Guide › Users**.

2.1.5. My Organization

The **Home › My Organization** section allows you to configure your current organization.

For more information about organizations, see **Administration Guide › Organizations**.

2.1.5.1. Organization Configuration

The **Home › My Organization › Configuration** section allows you to configure your current organization.

Table 3. Organization Configuration Options

Option	Description	Default
Enable staging contents	For clients in this organization, allow content staging by default.	Unchecked
Enable Errata E-mail Notifications	For users in this organization, send email notifications when errata (patches) are available.	Checked
Enable Upload of Detailed SCAP Files	Allow detailed SCAP content files to be uploaded for auditing.	Unchecked
Allow Deletion of SCAP Results	Allow SCAP results to be deleted after the audit is complete.	Checked
Allow Deletion After	The number of days after an SCAP audit is complete, that results can be deleted.	90 days
Synchronize patches on Content Lifecycle Management build	Controls whether the patch attributes and affected packages should be synchronized to cloned patches when building a content Project	Checked

- For more information about content staging, see **Administration Guide › Content Staging**.
- For more information about OpenSCAP, see **Administration Guide › Openscap**.
- For more information about deleting SCAP scan results, see **Administration Guide › Openscap › Removing Scap Scan Results**.
- For more information about organizations, see **Administration Guide › Organizations**.
- For more information about Content Lifecycle Management, see **Administration Guide › Content Lifecycle**.

2.1.5.2. Organization Trusts

The **Home › My Organization › Organization Trusts** section shows the trusts that you have established within your organization. This section also shows the channels that are available to other users through trusts.

For more information about organization trusts, see **Administration Guide › Organizations**.

2.1.5.3. Organization Configuration Channels

The **Home › My Organization › Configuration Channels** section shows the configuration channels available within your organization. Configuration channels can be created in the Uyuni Web UI by navigating to **Configuration › Channels**. Apply configuration channels to your organization using the Uyuni Web UI.

For more information about organizations, see **Administration Guide › Organizations**.

2.2. Systems Menu

The Systems section allows you to manage your client systems.

The **Systems** menu contains submenu entries in the left navigation bar and as its overview page displays the **Systems › System List › All** listing with all client systems registered to the Uyuni Server.

This listing contains information about the clients, including available software updates, extra packages (otherwise often referenced as non-compliant packages), and the base channel they are subscribed to.

All the submenu entries:

- System List - **Reference Guide › Systems › Systems List**
- System Groups - **Reference Guide › Systems › System Groups**
- System Set Manager - **Reference Guide › Systems › Ssm Menu**
- Bootstrapping - **Reference Guide › Systems › Bootstrapping**
- Proxy Configuration - **Reference Guide › Systems › Proxy Configuration**
- Advanced Search - **Reference Guide › Systems › Advanced Search**
- Activation Keys - **Reference Guide › Systems › Activation Keys**
- Stored Profiles - **Reference Guide › Systems › Stored Profiles**
- Custom System Info - **Reference Guide › Systems › Custom System Info**
- Autoinstallation - **Reference Guide › Systems › Autoinst Menu**
- Virtual Host Managers - **Reference Guide › Systems › Virtual Host Managers**

Click the name of a client to go to that client system's Details overview page and all its tabs and subtabs. For more information about the System Details overview page in the Web UI, see **Reference Guide › Systems › Sd Details**.

Check a client to add it to the system set manager. For more information about the system set manager, see **Client Configuration Guide › System Set Manager**.

Click **[Add Systems]** to go to **Systems › Bootstrapping**. For more about bootstrapping new clients, see **Reference Guide › Systems › Bootstrapping**.

For more information about managing clients, see **Client Configuration Guide › Uyuni Client Config Overview**.

2.2.1. Systems List

The **Systems › System List** section lists all clients available in your Uyuni environment.

For more information about managing clients, see **Client Configuration Guide › Uyuni Client Config Overview**.

The **Systems › System List** section is split into submenus:

2.2.1.1. All

The **Systems › System List › All** section lists every client that you have permission to manage.

2.2.1.2. Physical Systems

The **Systems › System List › Physical Systems** section lists every client that is installed on physical hardware.

2.2.1.3. Unprovisioned Systems

The **Systems › System List › Unprovisioned Systems** section lists every bare metal client that the Uyuni Server is aware of, but has not yet been registered.

For more information about bare metal clients, see **Client Configuration Guide › Autoinst Intro**.

2.2.1.4. Out of Date

The **Systems › System List › Out of Date** section lists every client that has available updates.

For more information about managing client updates, see **Client Configuration Guide › Package Management**.

2.2.1.5. Requiring Reboot

The **Systems › System List › Requiring Reboot** section lists every client that requires rebooting.

2.2.1.6. Non Compliant

The **Systems › System List › Non Compliant** section lists every client that has non-compliant packages installed. Packages are considered non-compliant if they have been installed from a source other than Uyuni. In the list, the Extra Packages column shows the number of non-compliant packages on the client. If there is at least one non-compliant package, you can click the number to display listings of those non-compliant packages per system.

2.2.1.7. Without System Type

The **Systems › System List › Without System Type** section lists every client that does not have a base system type recorded.

For more information about system types, see **Client Configuration Guide › System Types**.

2.2.1.8. Ungrouped

The **Systems › System List › Ungroups** section lists every client that is not assigned to a system group.

For more information about system groups, see **Client Configuration Guide › System Groups**.

2.2.1.9. Inactive

The **Systems › System List › Inactive** section lists every client that has not checked in with the Uyuni Server in 24 hours or more.

For more information about client connections to the server, see **Client Configuration Guide › Contact Methods Intro**.

For more information on troubleshooting inactive clients, see **Administration Guide › Troubleshooting › Tshoot Inactiveclients**.

2.2.1.10. Recently Registered

The **Systems › System List › Recently Registered** section lists every client that has registered within a given period. Select the period to view from the View systems registered field.

2.2.1.11. Proxy

The **Systems › System List › Proxy** section lists every client that is registered as a proxy.

2.2.1.12. Duplicate Systems

The **Systems › System List › Duplicate Systems** section lists clients that share IP addresses, host names, or MAC addresses. Use the tabs to compare clients.

2.2.1.13. System Currency

The **Systems › System List › System Currency** section lists all clients with information about available updates, and provides a currency score for each. You can use the currency score to determine in which order clients should be updated. A score with a larger number indicates that a client is not current, and might require critical updates.

2.2.1.14. System Types

The **Systems › System List › System Types** section lists every client, their base system type, add-on system type, and base channel. It also gives a count of clients of each system type.

For more information about system types, see **Client Configuration Guide › System Types**.

2.2.2. System Groups

The **Systems › System Groups** section displays the list of system groups in your organization.

Click the name of a group to work with it, or to add or delete clients in the group.

The list shows an icon if there are updates available for any of the clients in the group. Click the icon to see more information about the updates available.

Table 4. Update Status Icons

Icon	Description	Action Required
✓	No applicable updates	All clients in this group are up to date
⚠	Updates available	One or more clients have updates ready to install
!	Security updates needed	One or more clients have security updates that must be installed
?	Status unknown	Displaying status of available updates is disabled

For more information about system groups, see **Client Configuration Guide › System Groups**.

2.2.3. System Set Manager

The **Systems › System Set Manager** section allows you to manage clients that you have added to the system set manager.

For more information about the system set manager, see **Client Configuration Guide › System Set Manager**.

2.2.3.1. System Set Manager Overview

The **Systems › System Set Manager › Overview** section allows you to manage clients that you have added to the system set manager (SSM). You can also access this page by clicking the systems selected icon in the top menu bar.

For more information about SSM, see **Client Configuration Guide › System Set Manager**.

The **Systems › Systems Set Manager** menu is split into tabs:

2.2.3.1.1. Overview

This section provides quick access to all the of the SSM tabs.

2.2.3.1.2. Systems

This section lists all clients currently in the SSM. It provides information about the updates available, when thew client last checked in, the registered base channel, and system type. Click the client name to see more information.

2.2.3.1.3. Patches

This section lists all patches available for upgrade on clients currently in the SSM. Click the number in the Affected column to see which clients a patch applies to. To perform upgrades, check the patches to apply and click **[Apply Patches]**.

For more information about patch management, see **Client Configuration Guide › Patch Management**.

2.2.3.1.4. Packages

This section is split into subtabs.

The **Packages › Upgrade** subtab lists all packages available for upgrade on clients currently in the SSM. To perform upgrades, check the packages to upgrade and click **[Upgrade Selected Packages]**.

The **Packages › Install** subtab allows you to install new packages on all clients currently in the SSM. To install packages, click the base channel that contains the package, check the packages to install, and click **[Install Selected Packages]**.

The **Packages › Remove** subtab allows you to remove packages from all clients currently in the SSM. If clients in the SSM have different versions of a package installed, multiple versions are available in the list. To remove packages, select the packages to remove, and click **[Remove Selected Packages]**.

For more information about package management, see **Client Configuration Guide › Package Management**.

2.2.3.1.5. Groups

This section lists all system groups clients currently available in your organization. Click **[Create Group]** to create a new system group. For each group in the list, check Add to add all clients in the SSM to the group, check Remove to remove all clients in the SSM from the group, or check No Change to leave group assignments as they are. Click **[Alter Membership]** to change group assignments.

For more information about system groups, see **Client Configuration Guide › System Groups**.

2.2.3.1.6. Channels

This section lists all base channels clients currently subscribed to by clients currently in the SSM. You can change all clients subscribed to a current base channel to a new base channel, by selecting the new base channel and following the prompts.

For more information about software channels, see **Client Configuration Guide › Channels**.

For more information about using the SSM to change base channels, see **Client Configuration Guide › System Set Manager**.

2.2.3.1.7. Configuration

This section is split into subtabs.

The **Configuration › Deploy Files** subtab lists all configuration files available for deployment. Click the number in the Systems column to see which clients are currently subscribed to the configuration file. To assign a configuration file to the clients currently in the SSM, check the configuration file, and click **[Schedule File Deploy]**.

The **Configuration › Compare Files** subtab lists all configuration files available for comparison. This compares the configuration file deployed on a client with the configuration file stored on the Uyuni Server. Click the number in the Systems column to see which clients are currently subscribed to the configuration file. To compare configuration files, check the configuration files to compare, and click **[Schedule File Comparison]**.

The **Configuration › Subscribe to Channels** subtab lists all configuration channels available for subscription. To subscribe the clients in the SSM to a new configuration channel, check the configuration channel, click **[Continue]**, and follow the prompts.

The **Configuration › Unsubscribe from Channels** subtab lists all configuration channels clients in the SSM are currently subscribed to. To unsubscribe the clients in the SSM from a configuration channel, check the configuration channel and click **[Unsubscribe Systems]**.

The **Configuration › Enable Configuration** subtab lists clients in the SSM that are capable of using configuration management, but have not yet been enabled. To enable clients in the SSM to use configuration management, check the client and click **[Enable Configuration Management]**.

For more information about configuration management, see **Client Configuration Guide › Configuration Management**.

2.2.3.1.8. Provisioning

This section is split into subtabs.

The **Provisioning › Autoinstallation** subtab lists all clients in the SSM available for autoinstallation, with their base channel. To schedule autoinstallation, select an autoinstallable type, click **[Continue]** and follow the prompts.

The **Provisioning › Power Management Configuration** subtab allows you to configure power management for the clients in the SSM. For more information about power management, see **Client Configuration Guide › Power Management**.

The **Provisioning › Power Operations** subtab allows you to power on, power off, or reboot the clients in the SSM. For more information about power management, see **Client Configuration Guide › Power Management**.

For more information about autoinstallation, see **Client Configuration Guide › Autoinst Intro**.

2.2.3.1.9. States

For Salt clients, the **States › Highstate** subtab allows you to apply the highstate to all clients in the SSM.

2.2.3.1.10. Audit

For more information about auditing, see **Administration Guide › Auditing**.

2.2.3.1.11. Misc

This section is split into subtabs.

The **Misc › Preferences** subtab allows you to configure the custom information, system types, and system preferences for the clients in the SSM.

The **Misc › Hardware** subtab allows you to schedule a hardware profile refresh for the clients in the SSM.

The **Misc › Software** subtab allows you to schedule a package profile refresh for the clients in the SSM.

The **Misc › Remote Command** subtab allows you to schedule a remote command to be executed on the clients in the SSM.

The **Misc › Custom Values** subtab allows you to set or remove custom key values for the clients in the SSM.

The **Misc › Reboot** subtab allows you to schedule a reboot for the clients in the SSM.

The **Misc › Transfer** subtab allows you to move clients in the SSM to a new organization.

The **Misc › Delete** subtab allows you to delete the system profiles of clients in the SSM.

2.2.3.2. System Set Manager Task Log

The **Systems › System Set Manager › Task Log** section shows all actions applied to clients that you have added to the system set manager (SSM). The SSM Task Log lists all actions performed against clients currently in SSM. Click an entry to see more information about the action.

This section is divided into tabs:

The All tab lists all actions that have been performed. The In Progress tab lists all actions that are currently in progress. The Completed tab lists all actions that have been completed.

For more information about SSM, see **Client Configuration Guide › System Set Manager**.

2.2.4. Bootstrapping

The **Systems › Bootstrapping** section allows you to register a single Salt client.

Table 5. Bootstrap Options

Option	Description	Default
Host	The hostname of the client to be registered	-
SSH port	The port on the client that allows SSH access	22
User	The user name to use to log in to the client	root
Authentication Method	Choose Password for simple authentication, or SSH Private Key to use SSH authentication.	Password
Password	The password to use to log in to the client	-
SSH Private Key	Upload the SSH Private Key to use to log in to the client	-
SSH Private Key Passphrase	The passphrase for the SSH Private Key, or leave blank for no password.	-
Activation Key	The activation key to use to register the client. Leave blank to use the universal default activation key, or select None for no activation key.	None
Proxy	The proxy to which the client should be registered. Leave blank if you are not using a proxy.	None
Disable SSH strict host key checking	Automatically adds the host key to the known hosts file	Checked
Manage system completely via SSH	Uses only the SSH contact method	Unchecked



SSH private keys are stored only for the duration of the bootstrapping process. They are deleted from the Uyuni Server as soon as bootstrapping is complete.

When you have completed the details of the client you want to register, click **[Bootstrap]**. When the client has completed registering, navigate to **Systems › System List** to see details.

For more information about bootstrapping, see **Client Configuration Guide › Registration Webui**.

2.2.5. Proxy Configuration

The **Systems › Proxy Configuration** section allows you to configure proxy clients.

2.2.6. Advanced Search

The **Systems › Advanced Search** section allows you to perform global searches within your Uyuni environment. Searches can include network information, hardware devices, location, activity, packages, details, DMI information, and hardware.

Type your search term in the Search For field. Select the criterion to search by, use the radio buttons to specify whether you want to query all systems or only those in the System Set Manager, and click the **[Search]** button. Check Invert Result to list only results that do not match the specified criteria.

When you add a distribution, synchronize channels, or register a client, it can take several minutes for it to be indexed and appear in search results. To force a rebuild of the search index, use this command at the command prompt:

```
rhn-search cleanindex
```

2.2.7. Activation Keys

The **Systems › Activation Keys** section lists the current activation keys for your organization.

The universal default activation key, if set, is automatically used for all clients registered to your organization, unless you specify a different activation key.

The list of activation keys shows the name and description for each key, and how many times the key has been used. It also shows if the key is currently enabled for your organization. Click the key description to see more information about the activation key.

Click **[Update Activation Keys]** to refresh the list with recent changes.

Click **[Create Key]** to create a new activation key.

For more information about activation keys, see **Client Configuration Guide › Activation Keys**.

2.2.8. Stored Profiles

The **Systems › Stored Profiles** section lists the stored profiles for your organization. Profiles can be used to compare packages installed on clients.

Click the name of a profile to see more information about the packages in the profile, or to edit the name or description.

For more information about using profiles to compare packages, see **Client Configuration Guide › Package Management**.

2.2.9. Custom System Information

The **Systems › Custom System Info** section lists the custom system information available to clients in your organization.

Click **[Create Key]** to create a new custom system key. Click the key label to see more information, and to edit the value.

For more information about custom system information, see **Client Configuration Guide › Custom Info**.

2.2.10. Autoinstallation Menu

The **Systems › Autoinstallation** section allows you to manage clients for autoinstallation.

For more information about autoinstallation, see **Client Configuration Guide › Autoinst Intro**.

2.2.10.1. Autoinstallation Overview

The **Systems › Autoinstallation › Overview** section displays an overview of your autoinstallation settings, including clients that are autoinstalling, or scheduled to be autoinstalled.

The **Systems › Details › Overview** subtab is split into sections:

Autoinstallation Summary

This section lists the AutoYaST and Kickstart profiles currently available, and the number of clients installed with each profile.

Autoinstallation Actions

This section provides links to actions related to autoinstallation. You can also access these using the **Systems › Autoinstallation** menu.

Systems Currently Autoinstalling

This section lists all clients that are currently autoinstalling, along with their status.

Systems Scheduled to be Autoinstalled

This section lists all clients that are scheduled for autoinstallation, along with their status.

Click **[Create Kickstart Profile]** to create a new Kickstart profile. Click **[Upload Kickstart/AutoYaST File]** to upload a new autoinstallation file.

For more information about autoinstallation, see **Client Configuration Guide › Autoinst Intro**.

2.2.10.2. Autoinstallation Profiles

The **Systems › Autoinstallation › Profiles** section lists all profiles currently available. The list includes information about if the profile is active, the distribution it is based on, and if it being managed with Uyuni.

Click the name of a profile to see more information.

Click **[Create Kickstart Profile]** to create a new Kickstart profile. Click **[Upload Kickstart/AutoYaST File]** to upload a new autoinstallation file.

For more information about autoinstallation profiles, see **Client Configuration Guide › Autoinst Profiles**.

2.2.10.3. GPG and SSL Keys

The **Systems › Autoinstallation › GPG and SSL Keys** section lists all GPG public keys and SSL certificates currently available. Click the name of a key to see more information.

Click **[Create Stored Key/Cert]** to store a new GPG key or SSL certificate.

For more information about GPG keys and SSL certificates, see **Client Configuration Guide › Gpg Keys**.

2.2.10.4. Distributions

The **Systems › Autoinstallation › Distributions** section lists the available autoinstallable distributions.

Click the distribution name to see more information. Click **[Create Distribution]** to create a new autoinstallable distribution.

For more information about autoinstallable distributions, see **Client Configuration Guide › Autoinst Distributions**.

2.2.10.5. File Preservation

The **Systems › Autoinstallation › File Preservation** section allows you to store lists of files, to use them in Kickstart profiles later on.

Click **[Create File Preservation List]** to create a new list.

For more information about Kickstart file preservation, see **Client Configuration Guide › Autoinst Profiles**.

2.2.10.6. Autoinstallation Snippets

The **Systems › Autoinstallation › Autoinstallation Snippets** section allows you to store code snippets, to use them in autoinstallation profiles later on.

Click **[Create Snippet]** to create a new code snippet.

For more information about autoinstallation profiles using these code snippets, see **Client Configuration Guide › Autoinst Profiles**.

2.2.11. Virtual Host Managers

The **Systems › Virtual Host Managers** section lists the active virtual host managers (VHMs).

VHMs can be used to collect private or public cloud instances and organize them into virtualization groups.

For more information about VHMs, see **Client Configuration Guide › Vhm**.

2.3. System Details

The System Details section allows you to manage the details for a chosen client. To get to this section, click the name of a client anywhere throughout the Web UI to see the relevant System Details page for the client.

The System Details section is divided into tabs and subtabs. Each tab and some subtabs have own sections in this document.

The **Systems › Details › Overview** subtab is displayed by default. Which tabs are available is dependent on the system type of the client you have selected. Most often, the flollowing are available:

- Details - **Reference Guide › Systems › Sd Overview**
- Software - **Reference Guide › Systems › Sd Software**
- Btrfs Snapshots - **Reference Guide › Systems › Sd Snapshots** (transactional systems only)
- Configuration - **Reference Guide › Systems › Sd Configuration**
- Provisioning - **Reference Guide › Systems › Sd Provisioning**
- Groups - **Reference Guide › Systems › Sd Groups**
- Audit - **Reference Guide › Systems › Sd Audit**

- States - **Reference Guide › Systems › Sd States**
- Formulas - **Reference Guide › Systems › Sd Formulas**
- Recurring Actions - **Reference Guide › Systems › Sd Recurring Actions**
- Events - **Reference Guide › Systems › Sd Events**

For more information about managing clients, see **Client Configuration Guide › Uyuni Client Config Overview**.

2.3.1. Overview

The **Systems › Details › Overview** section shows a summary of information about the selected client, including the current system status. This subtab is displayed by default when you click the name of a client anywhere throughout the Web UI.

Click **[Delete System]** to delete the system profile. Deleting a system profile will not destroy or remove the client, but you will no longer be able to manage it with Uyuni. If you delete a system profile by mistake, you can re-register the client using bootstrap.

The **Systems › Details › Overview** subtab is split into sections:

2.3.1.1. System Status

The section shows the current status of the client. If no action is required for this client, the status is System is up to date.

If the client has new software ready for installation, the status is Software Updates Available, along with details of updates. Apply updates by navigating to **System Details › Packages**.

2.3.1.2. System Info

This section shows general information about the client.

Table 6. System Info Columns

Column Name	Description	Conditions
Hostname	The hostname used by the client with the Uyuni Server.	-
FQDN	The fully qualified domain name of the client.	Shown only if it differs from the host name.
IP address	The IPv4 IP address of the client.	-

Column Name	Description	Conditions
IPv6 address	The IPv6 IP address of the client.	-
Minion ID	The minion ID of the client.	Salt clients only.
Virtualization	The type of virtualization used by the client.	Virtualized clients only.
UUID	The universally unique identifier.	-
Kernel	The kernel currently in use on the client.	-
Uyuni System ID	A unique identifier generated by Uyuni when the client is registered.	-
Activation key	The activation key used to register the client.	Remains blank if the client has not been activated.
Installed products	Software products currently installed on the client.	-

For more information about system locks, see **Client Configuration Guide › System Locking**.

2.3.1.3. Subscribed Channels

This section shows the base and child software channels this client is subscribed to.

Click **[Alter Channel Subscriptions]** to change the channel subscriptions for this client. Click a channel name to go to the Channel Details tab.

For more information about channels, see **Client Configuration Guide › Channels**.

2.3.1.4. System Events

This section shows the most recent system events for this client.

Table 7. System Events Columns

Column Name	Description
Checked in	The time that the client last successfully checked in with the Uyuni Server.
Registered	The time that the client registered with Uyuni.

Column Name	Description
Last booted	The time that the client was most recently started or rebooted.

Click **[Schedule system reboot]** to set a time for the client to reboot. The reboot will occur when the client next checks in with the Uyuni Server after the scheduled time. For more on task scheduling, see **Administration Guide › Task Schedules**.

2.3.1.5. System Properties

This section shows further information about the client.

Table 8. System Properties Columns

Column Name	Description
System types	Lists the system type applied to the client. Client type is Salt
Notifications	Lists the current notification options for this client.
Contact method	The method used by this client to communicate with the Uyuni Server.
Auto patch update	Indicates if the client is receiving patches automatically.
Maintenance Schedule	Specifies which maintenance schedule is assigned to this client.
System name	The system name of the client. By default, this is the host name, but it can be changed.
Description	General information about the client. By default, this is automatically gathered when the client is registered, but it can be changed.
Location	The physical location of the client. By default, this is not set, but it can be added.

For more information about contact methods, see **Client Configuration Guide › Contact Methods Intro**.

Click **[Edit These Properties]** to go to **System Details › Details › Properties** subtab.

2.3.1.6. Properties

The **Systems › Details › Properties** section allows you to edit details about the selected client, including the system name and details.

Table 9. Edit System Details Settings

Setting Name	Description	Default Setting
System Name	The name of the system to use within the Uyuni Web UI.	The hostname of the client.
Base System Type	The type of base system used by the client.	Shown for information only, you cannot edit this.
Add-on System Types	Check additional system types to add features such as build hosts, or monitoring.	Only available system types for this client are shown.
Notifications	Check to receive notifications of updates or patches, and to include this client in the daily summary.	Checked.
Auto Patch Update	Check to have available patches automatically applied.	Unchecked.
Description	This field can contain any text you want.	The operating system, release, and architecture of the system when it first registered to Uyuni.
Facility Address	The physical location of the client.	Blank

2.3.1.7. Remote Command

The **Systems › Details › Remote Command** section allows you to run commands remotely on the selected client.

Before doing so, you must first configure the system to accept such commands. For more information about using remote commands, see **Administration Guide › Actions**.

On transactional systems, select Use transactional update to run a command transactionally. Leave the option unselected to run the command on the live system. For more information, see **Client Configuration Guide › Transactional Systems**.

2.3.1.8. Connection

The **Systems › Details › Connection** section allows configure proxy connections for this system.

These connections are used to reach the primary server.

2.3.1.9. Reactivation

The **Systems › Details › Reactivation** section allows you to generate reactivation keys for the selected client. Reactivation keys can be used once only to re-register the client and regain all Uyuni settings.

For more information about reactivation keys, see **Client Configuration Guide › Activation Keys**.

2.3.1.10. Hardware

The **Systems › Details › Hardware** section shows detailed hardware information about the selected client, including architecture, networking, and memory.

Click **[Schedule Hardware Refresh]** to update this page with the latest hardware information. To change the primary network interface on the client, select the correct interface in the Primary Network Interface field in the Networking section. For clients with multiple fully qualified domain names (FQDNs) configured, change the primary FQDN by selecting it in the Primary FQDN field in the Networking section. Click **[Update Properties]** to save your changes.



Refreshing hardware information happens once a month automatically when the system-profile-refresh taskomatic job runs.

2.3.1.11. Transfer

The **Systems › Details › Transfer** section allows you to move clients between organizations. Clients can only belong to one organization at any time.



You will need to establish trust between organizations when you want to move clients. For more information, see **Administration Guide › Organizations**.

To move a client to a different organization, select the name of the organization in the Organization Name field, and click **[Migrate System]**.



When you move a client to a different organization, channel assignments, system group membership, custom data values, configuration channels, reactivation keys, and snapshots are deleted from the system configuration. You will need to set these values again when the move is complete.

2.3.1.12. Notes

The **Systems › Details › Notes** section lists notes about the selected client.

Click **[Create Note]** to create a new note. Give your note a subject, and add any details you require. Click **[Create]** to save the note.

Notes are listed in the table with a time stamp of when they were last edited. Click the subject of a note to edit or delete it.

2.3.1.13. Custom Info

The **Systems › Details › Custom Info** section lists the custom system information that has been applied to the selected client.

Click **[Create Value]** to apply a new custom system key to the client. Click the key label to see more information, and to edit the value.

For more information about custom system information, see **Client Configuration Guide › Custom Info**.

2.3.2. Btrfs Snapshots

The **Systems › Btrfs Snapshots** tab is available for transactional systems. It lists the most recent snapshots reported by snapper and identifies the active and default snapshots.

Click **[Refresh Snapshots]** to schedule an update of the snapshot information. The refresh action appears in the system events. Uyuni also automatically refreshes snapshot information after a transactional action reports changes. For when transactional changes become active, see **Client Configuration Guide › Transactional Systems**.

2.3.3. Software

The **Systems › Software** section allows you to manage software on the selected client.

2.3.3.1. Patches

The **Systems › Software › Patches** section displays a list of all patches currently available to the selected client.

To apply a patch, check it in the list and click **[Apply Patches]** to schedule the installation. The Status column in the list shows whether an update has been scheduled. Click the status for more information about the action.

For more information about patching, see **Client Configuration Guide › Patch Management**.

2.3.3.2. Packages

The **Systems › Software › Packages** section allows you to manage packages on the selected client.

Click **[Update Package List]** to refresh the list of available packages.

The **Systems › Software › Packages** tab is split into subtabs:

List/Remove

Lists all packages currently installed on the selected client. Click the name of a package to see more information. To uninstall packages, check the package in the list and click **[Remove Packages]**.

Upgrade

Lists packages that have newer versions available. Click the name of a package to see more information. To upgrade packages, check the package in the list and click **[Upgrade Packages]**. Any EULAs will be accepted automatically.

Install

Lists packages that are available for installation on the selected client. Click the name of a package to see more information. To install packages, check the package in the list and click **[Install Selected Packages]**. Any EULAs will be accepted automatically.

Profiles

Compare packages installed on the selected client with a stored profile, or with packages installed on another client. When the comparison is made, you can choose to modify the selected client to match. To compare with a stored profile, select the profile and click **[Compare]**. To compare with another client, select the client name and click **[Compare]**.

Non Compliant

Lists packages that are installed on the selected client, but are not available in any of the subscribed software channels.

For more information about packages, see **Client Configuration Guide › Package Management**.

2.3.3.3. AppStreams

The **Systems › Software › AppStreams** section allows you to manage the list of enabled AppStream modules on the selected client.



The **Systems › Software › AppStreams** tab is only available if the client has any AppStream channels assigned.

The page lists all the AppStream modules that are currently available to the client. After modifying the selection of enabled modules, click **[Apply Changes]** to schedule an action to update the selection on the client.

For more information about managing AppStreams on a client, see **Client Configuration Guide › Appstreams**.

2.3.3.4. Software Channels

The **Systems › Software › Software Channels** section allows you to manage the software channels on the current client. For more information about software channels, see **Client Configuration Guide › Channels**.

The **Systems › Software › Software Channels** subtab is split into sections:

2.3.3.4.1. Base Channel

This section shows the base channel the current client is subscribed to, as well as any other available base channels.

Click the chain icon next to a base channel to see more information about the channel. Change the base channel subscription by selecting the new base channel, and click **[Next]** to schedule the change.

The child channels associated with the base channel are populated in the Child Channels section. Mandatory child channels are pre-selected. Toggle the include recommended switch to also select recommended child channels.



By default, cloned vendor channels match the original vendor channel and automatically select the dependencies. You can disable the automatic selection for cloned channels by adding the following option in /etc/rhn/rhn.conf:

```
java.cloned_channel_auto_selection = false
```

In general, channel pre-selection is necessary to avoid problems with missing dependencies for a given channel but it only works flawlessly for vendor channels. For cloned channels, Uyuni relies on the channel label to define dependencies and use it in auto selection. This heuristic sometimes lead to either selecting unnecessary child channels or overlooking some essential ones. Users should exercise caution and pay attention in such case that correct channels are selected.

For Salt clients, apply the highstate after changing software channels.

2.3.3.4.2. Child Channels

This section shows the software product and child channels associated with the currently selected base

channel.

Hover over the information icon next to the channel name to see channel requirements. Click the chain icon next to a base channel to see more information about the channel.

Child channels are can be either recommended or mandatory. Mandatory child channels must be installed for the selected client to use the associated base channel. Recommended child channels should be installed to provide additional packages. All other child channels are optional.

Check the child channels you want to install, and click **[Next]** to schedule the change.

2.3.3.5. Product Migration

The **Systems › Software › Product Migration** section allows you to upgrade clients to the latest service pack of their underlying operating system. Product migration also allows you to migrate openSUSE Leap to the corresponding SLE SP level or clients such as Red Hat Enterprise Linux, or CentOS to SUSE Liberty Linux. Check the product version you want to upgrade the client to, and click **[Select Channels]**.

For more information about service pack upgrades, see **Client Configuration Guide › Client Upgrades Product Migration**.

2.3.4. Configuration

The **Systems › Configuration** section allows you to manage the configuration files for the selected client. Configuration files are distributed with a configuration channel.

For more information about configuration channels, see **Client Configuration Guide › Configuration Management**.

The **Systems › Configuration** tab is split into subtabs:

2.3.4.1. Overview

The **Systems › Configuration › Overview** subtab is split into sections:

Configuration Overview

This section contained the total number of available configuration files, and channel subscriptions. Click the name of a configuration file or channel to see more information. Click **[Subscribe to channels]** to subscribe to additional configuration channels.

Recent Events

This section shows when the configuration channels was most recently deployed on the selected client. It

also shows the most recent time that a comparison was performed.

Configuration Actions

This section allows you to deploy or to compare configuration channels on the selected client.

2.3.4.2. View Files

The **Systems › Configuration › View Files** subtab shows the configuration files available through the system's subscribed configuration channels.

The page shows a list of all available configuration files. Click **[View]** to see details about the configuration file. Click **[Compare]** to compare the configuration file to other files, or to various revisions of itself. Click the configuration channel name to see more information about the channel that contains this configuration file. Click the revision number to see additional details about the configuration file.

2.3.4.3. Deploy Files

The **Systems › Configuration › Deploy Files** shows a list of available configuration files that can be deployed on the selected client.

2.3.4.4. Compare Files

The **Systems › Configuration › Compare Files** shows a list of available configuration files that can be compared to Uyuni managed configuration files. Check the configuration file to compare and click **[Compare Files]** to schedule a comparison. Click the revision number to see additional details about the configuration file. Click the configuration channel name to see more information about the channel that contains this configuration file.

2.3.4.5. Manage Configuration Channels

The **Systems › Configuration › Manage Configuration** subtab is split into subtabs:

List/Unsubscribe from Channels

This section shows the list of currently subscribed channels. To unsubscribe the selected client from a configuration channel, check the channel, and click **[Unsubscribe]**. Click the configuration channel name to see more information about the channel that contains this configuration file.

Subscribe to Channels

This section shows the list of configuration channels that are available for the selected client to subscribe to. To subscribe the selected client to a configuration channel, check the channel, and click **[Continue]**.

View/Modify Rankings

This section shows the currently subscribed configuration channels, in ranked order. Where settings conflicts occur between configuration channels, channels closer to the top of the list take precedence. To complete subscription to a configuration channel, review the rankings, adjust as necessary using the up and down arrows, and click **[Update Channel Rankings]**.

2.3.5. Provisioning

The **Systems › Provisioning** section allows you to manage provisioning for the selected client. This includes managing and scheduling autoinstallation and booting the selected client.

The **Systems › Provisioning** tab is split into subtabs:

2.3.5.1. Autoinstallation

This section displays a list of the available autoinstallation profiles for the selected client. Select a time and date for autoinstallation to re-install the client.

For more information about autoinstallation, see **Client Configuration Guide › Autoinst Intro**.

2.3.5.2. Power Management

This section allows you to power on, power off, and reboot the selected client.

This feature uses either the IPMI or Redfish protocol and is managed using a Cobbler profile. The selected client must have a power management controller supporting one of these protocols. For Redfish, ensure you can establish a valid SSL connection between the client and the Uyuni Server.

Complete the details for the power management server, and click the appropriate button for the action to take. Click **[Get status]** to determine if the client is currently running. Click **[Save only]** to save the details without taking any action.

Click **[Remove Cobbler System Profile]** to remove the current client's system profile from Cobbler. For more information about unattended provisioning with Cobbler, see **Client Configuration Guide › Autoinst Unattended**.

For more information about power management, see **Client Configuration Guide › Power Management**.

2.3.6. Groups

The **Systems › Groups** section shows the system groups the selected client is assigned to.

The **Systems › Groups** subtab is split into sections:

For more information about system groups, see **Client Configuration Guide › System Groups**.

2.3.6.1. List/Leave

This section lists all groups that the selected client belongs to.

Click the group name to see more information about the system group. To remove the selected client from a system group, check the group, and click **[Leave Selected Groups]**.

2.3.6.2. Join

This section lists all groups that are available for the selected client to subscribe to.

Click the group name to see more information about the system group. To join a system group, check the group, and click **[Join Selected Groups]**.

2.3.7. Audit

The **Systems › Audit** section displays the results of OpenSCAP scans that you have performed on the selected client.

The Security Certification and Authorization Package (SCAP) is a standardized compliance checking solution for enterprise-level Linux infrastructures. Uyuni uses OpenSCAP to implement the SCAP specifications.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

The **Systems › Audit** subtab is split into sections:

2.3.7.1. List scans

This section displays ther results of openSCAP scans that have been performed on the selected client.

The table columns on this page are:

Table 10. OpenSCAP Scan Results

Name	Description
Xccdf Test Result	The name of the test result
Diff	FIXME

Name	Description
Completed	The time that the scan was completed
Compliance	The unweighted pass/fail ratio
P	The number of checks that passed
F	The number of checks that failed
E	The number of errors that occurred
U	The number of checks with an unknown status
N	The number of checks that were not applicable to the selected client
K	The number of checks not run
S	The number of checks that were not selected
I	The number of checks that have information available for review
X	The number of checks that reported a status of fixed
Total	The total number of checks run

Click the name of a scan test result to see details about the result.

2.3.7.2. Rule result detail

The Details of Rule Result page displays detailed information about a specific XCCDF rule evaluation result and provides remediation capabilities. This page is accessed by clicking a rule in the XCCDF scan results.

2.3.7.2.1. Rule information

The top of the page displays the following details about the rule result:

Table 11. Rule Result Details

Field	Description
Reference within Document	The unique identifier of the rule within the SCAP document.
Evaluation Result	The outcome of the rule evaluation (for example: pass, fail, notselected).

Field	Description
Parent Scan	A link back to the parent XCCDF scan result that contains this rule.

2.3.7.2.2. Remediation

The remediation panel provides two tabs for managing remediation scripts:

Original tab

Displays the original remediation script from the SCAP datastream in a read-only code editor. This is the remediation provided by the benchmark author and cannot be modified.

Custom tab

Allows you to write and save custom remediation scripts for this rule. Custom remediations can be written in two script types:

Table 12. Script Types

Script Type	Description
Bash Script	A shell script to remediate the rule.
Salt State	A Salt state in YAML format to remediate the rule.

You can maintain separate Bash and Salt remediations for the same rule by switching between script types using the **[Script Type]** dropdown.

The following actions are available in the Custom tab:

- Click **[Save Custom Remediation]** to save the custom remediation script.
- Click **[Delete Custom Remediation]** to remove the saved custom remediation for the current script type. A confirmation dialog is displayed before deletion.

2.3.7.2.3. Applying remediation

To apply a remediation:

1. Select the appropriate tab (Original or Custom).
2. Use the Schedule section to select the date and time for the remediation action.
3. Click **[Apply Remediation]** to schedule the remediation. A confirmation dialog is displayed before the

action is scheduled.

After scheduling, a link to the scheduled action is displayed at the top of the page.

2.3.7.3. Schedule

The Schedule New XCCDF Scan panel allows you to schedule a compliance scan on one or more systems. You can either select a predefined SCAP policy or manually configure the scan parameters.

This form is available from:

- A single system: **Systems › System Details › Audit › Schedule**
- Multiple systems via SSM: **Systems › System Set Manager › Audit › Schedule**

2.3.7.3.1. Using a SCAP policy

Select a policy from the **[SCAP Policy]** dropdown to automatically populate the scan configuration from the policy definition. When a policy is selected, the SCAP Content, XCCDF Profile, Tailoring File, Tailoring Profile, and Fetch Remote Content fields are disabled and pre-filled with the policy values.

To clear the policy selection and configure the scan manually, clear the **[SCAP Policy]** dropdown.

2.3.7.3.2. Manual configuration

If no policy is selected, you can manually configure the scan using the fields below.

Table 13. Schedule SCAP Scan Fields

Field	Required	Description
SCAP Policy	No	Optionally select a predefined compliance policy to auto-populate the scan configuration.
SCAP Content	Yes	Select a SCAP content file containing the security benchmarks.
XCCDF Profile	Yes	Select an XCCDF profile from the chosen SCAP content.
Tailoring File	No	Optionally select a tailoring file to customize the profile.

Field	Required	Description
Profile from Tailoring File	No	Select a profile from the chosen tailoring file.
Advanced Arguments	No	Additional command-line arguments, for example: --rule <rule_id> --remediate.
OVAL Files	No	Paths to local OVAL definitions on the target system, comma separated.
Fetch Remote Content	No	Enable fetching of remote resources during the scan. This requires internet access and significant memory on the target system.



Enabling **[Fetch Remote Content]** requires internet access and a large amount of available memory on the target minion. Ensure the target system has sufficient resources before enabling this option.

Use the Schedule section to select the date and time for the scan.

Click **[Schedule]** to schedule the scan.

2.3.7.3.3. Single system scheduling

When scheduling a scan from a single system's audit page, a **[Create Recurring]** button is also available. Click **[Create Recurring]** to navigate to the recurring actions page for the system, where you can set up a recurring schedule for SCAP scans.

2.3.7.3.4. SSM bulk scheduling

When scheduling from the System Set Manager (SSM), the scan is applied to all systems currently in the system set. The **[Create Recurring]** option is not available in SSM mode.

2.3.8. States

The **Systems › States** section allows you to manage Salt states on the selected client. States provide configuration templates for Salt clients. Applying the highstate applies all outstanding Salt states. This is only available for Salt clients.

For more information about Salt states, see **Specialized Guides › Salt › Salt States and Pillars**.

The **Systems › States** subtab is split into sections:

2.3.8.1. Highstate

This section provides details of the highstate for the selected client. It includes a state summary for the selected client, showing a list of states, formulas, and configuration channels. On transactional systems, highstate applies transactional changes first, followed by any required live work. When a reboot is needed, live work runs after the operating system starts from the snapshot; otherwise, it runs immediately. To schedule a time to apply the highstate, select the date and time and click **[Apply Hightstate]**. Toggle the **[Test mode]** switch to test the highstate before you apply it.

2.3.8.2. Packages

This section allows you to manage package states for the selected client. Package states determine which packages and versions should be installed on the selected client.

Use the search tool to search for the package you want to change. To set the package state to install the package, select Installed as the new state. To always upgrade the package to the latest version, select latest. Click **[Save]** to save the changes to the state. Click **[Apply changes]** to apply the new package state to the selected client.

Use the Changes subtab to see what changes will occur on the selected client when this state is applied.

2.3.8.3. Configuration Channels

This section allows you to manage configuration channels for the selected client.

Use the search tool to search for the configuration channel you want to manage. This section shows the list of configuration channels that are available for the selected client to subscribe to. To subscribe the selected client to a configuration channel, check the channel, and click **[Apply]**. To apply the saved configuration-channel states to the selected client, click **[Execute States]**. On transactional systems, select Use transactional update to stage these states in a snapshot, or leave it unselected to apply them live.

Use the Changes subtab to see what changes will occur on the selected client when this state is applied.

For more information about configuration channels, see **Client Configuration Guide › Configuration Management**. For more information about transactional operations, see **Client Configuration Guide › Transactional Systems**.

2.3.9. Formulas

The **Systems › Formulas** section allows you to manage Salt formulas on the selected client. This is only available for Salt clients.

This section lists all currently installed formulas. Check the formulas you want to apply, and click **[Save]**. When a formula is applied, it will create a new subtab. Navigate to the subtab to configure the formula on the selected client. After most formula actions, you will need to apply the highstate to pick up the changes.

On transactional systems, formulas follow their own execution policies. For built-in formula policies, see **Specialized Guides › Salt › Salt Formulas by Product › Transactional Formula Policies**. For custom formula policies, see **Specialized Guides › Salt › Salt Formulas Custom › Transactional Formulas**.

For more information about formulas, see **Specialized Guides › Salt › Salt Formulas Intro**.

2.3.10. Ansible

The **System Details › Ansible** tab allows you to use the Ansible features on the Control Node system.

The tab is split into the following subtabs:

Control Node

Fields for defining playbook directories and paths to inventory files on your Ansible Control Node.

Playbooks

Lists all playbooks in the defined paths. You can click a playbook to display its details or to schedule its execution.

Inventories

Lists all inventory files in the defined paths. Clicking an inventory file in the list introspects its contents.

For more information, see **Administration Guide › Ansible Integration**.

2.3.10.1. Recurring Actions

The **Systems › Recurring Actions** section allows you to manage recurring actions on the selected client. You can schedule an arbitrary set of Salt states or the highstate to be executed at desired intervals. This is only available for Salt clients.

For more information about Salt states, see **Specialized Guides › Salt › Salt States and Pillars**.

Currently, Uyuni supports the following action types as recurring actions:

- Highstate: Execute the highstate.
- Custom state: Execute a set of custom states. A custom state can be either an internal state provided by Uyuni, or a configuration channel created by a user.

For more information about configuration channels, see **Client Configuration Guide › Configuration Management**.

2.3.10.1.1. Creating Recurring Actions

To create new schedules, click the **[Create]** icon on the top right corner. Choose a supported action type, give your recurring schedule a name, select a time and day for it to recur, and click **[Create Schedule]**. Toggle the **[Test mode]** switch to test the highstate before you apply it. For a recurring custom-state action on transactional systems, select Use transactional update to apply its explicit states transactionally. Leave the option unselected to apply those states live. For more information about transactional operations, see **Client Configuration Guide › Transactional Systems**.

2.3.10.1.2. Recurring Action Details

View the details about an action from the action list. In the Actions column, click the **[Details]** icon for the action you are interested in.

2.3.10.1.3. Disabling Recurring Actions

Disabling an action stops the action recurring, but does not delete it. To disable a recurring action toggle the Active switch off. Enable them again by toggling the Active switch on. Disabled recurring actions remain in the list, but are not executed.

2.3.10.1.4. Editing Recurring Actions

In the Actions column, click the **[Edit]** icon for the action you want to change. On the Schedule Recurring Action page, the existing properties are pre-filled. Make your changes, and click **[Update Schedule]**.

2.3.10.1.5. Deleting Recurring Actions

Deleting an action permanently removes it. To start using the action again, you will need to create a new action. In the Actions column, click the **[Delete]** icon for the action you want to delete, and confirm the deletion.

For more information about recurring actions, see **Administration Guide › Actions**.

2.3.11. Events

The **Systems › Events** section shows past, current, and scheduled actions for the selected client.

For more information about actions, see **Administration Guide › Actions**.

The **Systems › Event** tab is split into subtabs:

2.3.11.1. Pending

This section shows actions that are scheduled, but have not yet started.

Click the name of an action to see more information. To cancel an action, check the action and click **[Cancel Selected Events]**. If a comment was added when the action was scheduled, it is shown in the Comment / Reason column.

2.3.11.2. History

This section shows actions that have been completed on the selected client.

Click the summary of an action to see more information. If a comment was added when the action was scheduled, it is shown in the Comment / Reason column and on the action details page. Transactional action details show the progress of each phase. For the meaning of a pending reboot and when transactional changes become active, see **Client Configuration Guide › Transactional Systems**.

2.3.12. Proxy

The **Systems › System List › Proxy** section shows all clients connected to the selected client as a proxy. This is only available when the selected client is registered to Uyuni as a proxy.

For more information about setting up a proxy, see **Installation and Upgrade Guide › Install Proxy**.

2.4. Salt Menu

The Salt section displays details of your Salt clients. You can use this menu to perform remote commands or define a state catalog for your Salt clients.

For more information about using Salt with Uyuni, see **Specialized Guides › Salt › Salt Overview**.

2.4.1. Keys

The **Salt › Keys** section displays the key fingerprints of your current Salt clients.

Key fingerprints are exchanged between the Uyuni Server and Salt clients to verify the identity of the server and the client. This prevents Salt clients from connecting to the wrong server.

Click **[Refresh]** to update the list. Click the name of a client to go to **Systems › Details** for that client.

Table 14. Salt Keys List Columns

Column	Description
Name	Name of the Salt client.
Fingerprint	Key fingerprint of the Salt client.
State	The status of the key exchange: accepted indicates that the client key has been verified by the Uyuni Server.
Actions	Click the Delete icon to delete the client key from the server. Clients that have had their key deleted will need to be onboarded again.

2.4.2. Remote Commands

The **Salt › Remote Commands** section allows you to perform remote commands on one or more of your Salt clients. Remote commands allows you to issue commands to individual Salt clients, or to all clients that match a search term.

For more information about remote commands, see **Administration Guide › Actions**.

2.4.3. Formula Catalog

The **Salt › Formula Catalog** section allows you to see which formulas are currently installed on your Uyuni Server, and are available to be used on your Salt clients. Install and configure formulas by navigating to **Systems › Details** for the client you want to configure, and navigate to the guimenu` Formulas` tab.

For more information about Uyuni formulas, see **Specialized Guides › Salt › Salt Formulas Intro**.

2.5. Images Menu

The **Images › Image List** section displays your current operating system images.

For more information about images, see **Administration Guide › Image Management**.

2.5.1. Image List

The **Images › Image List** section displays your current operating system images.

Click **[Import]** to import a new Docker image. You can only import new images created from a Docker image using this mechanism. To import images based on Kiwi instead, see **Administration Guide › Image Management**.

Click **[Refresh]** to update the list.

Perform bulk actions by checking images in the list. Click **[Delete]** to bulk delete images.

Table 15. Image List Columns

Column	Description
Name	Name of the image.
Version and Revision	Version and revision of the image.
Updates	Any updates that are currently available for the image.
Patches and Packages	Any patches or packages that are currently available for the image.
Build	The current status of the build: Built, Scheduled, Building or Failed.
Last Modified	The time and date the image was last modified.

For more information about images, see **Administration Guide › Image Management**.

2.5.2. Images Build

The **Images › Build** section allows you to build operating system images for installing on clients.

Table 16. Image Build Options

Option	Description	Default
Image Profile	Select the image profile to use. Manage image profiles at **Images › Profiles**.	Blank.
Build Host	Select the build host for the new image.	Blank.

Option	Description	Default
Earliest	Schedule the time and date for the build to begin.	Current system time and date.
Add to	Select which action chain to add the build task to.	New action chain.

Built images are listed in **Images › Image List**.

For more information about images, see **Administration Guide › Image Management**.

2.5.3. Images Profiles

The **Images › Profiles** section displays your current image profiles.

Click **[Create]** to create a new image profile. Click **[Refresh]** to update the list.

Perform bulk actions by checking profiles in the list. Click **[Delete]** to bulk delete profiles.

For more information about images, see **Administration Guide › Image Management**.

2.5.4. Images Stores

The **Images › Stores** section displays your current image stores.

Click **[Create]** to create a new image store. Click **[Refresh]** to update the list.

Perform bulk actions by checking images in the list. Click **[Delete]** to bulk delete image stores.

For more information about images, see **Administration Guide › Image Management**.

2.6. Patches Menu

The Patches menu helps you find and manage available patches for your clients.

For more information about patching, see **Client Configuration Guide › Patch Management**.

2.6.1. Patch Details

The **Patches › Patch List › Patch Details** section displays the details of a selected patch. Click the advisory number of a patch in the Patch List to see more information about the patch.

This section is divided into tabs.

2.6.1.1. Details

The Details tab shows the patch report provided by SUSE.

In the Affected Channels section, all channels that contain the affected package are listed. Click the channel name to go to **Software › Channel Details**.

For security patches, additional information is shown about the vulnerability, including the CVE and OVAL details.

If available, the original advisory provided by the vendor of the patch is shown in the section Vendor Advisory.

For more information about SUSE Update Advisories, see https://www.suse.com/support/update/.

2.6.1.2. Packages

The Packages tab provides links to each of the updated packages by channel. Click the name of a package to go to **Software › Channel Details**.

2.6.1.3. Affected Systems

The Affected Systems tab provides a list of installed clients that the patch affects. You can install updates from this tab.

Click the name of a client to go to **Systems › System Details**.

Each client in the list shows the current status of the patch on that client. This column identifies only the most recent action. Click the name of a status in the list to go to the Action Details page.

Table 17. Client Update Status Icons

Description	Action Required	N/A
Check the status manually.	Pending	The client will be updated at the next synchronization.
Picked Up	The client is in the progress of updating.	Completed
The client successfully installed the patch.	Failed	The client attempted to install the patch, but encountered an error.

2.6.2. Patch List

2.6.2.1. Relevant Patches

The **Patches › Patch List › Relevant** section displays a list of all patches released by SUSE that apply to your installed clients.

Each patch in the list shows a patch type, an advisory number, a short description, the number of clients in your network affected, and the date the patch was last updated. Click the advisory number to see more information about the patch. For more information about the **Patches › Patch List › Patch Details** section, see **Reference Guide › Patches › Patch Details**

Table 18. Patch Status Icons

Icon	Description	Action Required
	Bug fix	Recommended
	Product enhancement advisory	Optional
	Security update	Essential
	Affects package management stack	Recommended



To receive email when new patches are available, navigate to **Home › My Preferences** and check Receive email notifications.

2.6.2.2. All Patches

The **Patches › Patch List › All** section displays a list of all patches released by SUSE. Not all of the patches will apply to your clients.

Each patch in the list shows a patch type, an advisory number, a short description, the number of clients in your network affected, and the date the patch was last updated. Click the advisory number to see more information about the patch.

Table 19. Patch Status Icons

Icon	Description	Action Required
	Bug fix	Recommended

Icon	Description	Action Required
	Product enhancement advisory	Optional
	Security update	Essential
	Affects package management stack	Recommended

For more information about patching, see **Client Configuration Guide › Patch Management**.

2.6.3. Advanced Search for Patches

The **Patches › Advanced Search** section allows you to use advanced criteria to search for patches.

You can search for patches by looking for your search term in different fields:

Table 20. Patch Advanced Search Options

Option	Description	Example
All Fields	Search in all fields	glibc
Patch Advisory	Search within the name or label fields	slesspl-glibc
Package Name	Search within the package name field only	kernel
CVE	Search within the CVE name or number field only	CVE-2006-4535

You can also search within different types of patches, or within a range of issue dates.

For more information about patching, see **Client Configuration Guide › Patch Management**.

2.6.4. Manage Patches

The **Patches › Manage Patches** section shows you all custom patches.

Each patch in the list shows a patch type, an advisory name, a short description, and the date the patch was last updated. Click the advisory name to go to **Patches › Patch List › Patch Details** for the patch.

To create a new patch, click **[Create Patch]**. To delete a patch, select it in the list, and click **[Delete Patches]**.



If you use Uyuni with a proxy, manage patches only on the Uyuni Server. The Uyuni Proxy will receive updates from the server directly. If you manage patches on a proxy, the servers will be unable to synchronize correctly.

For more information about patching, see **Client Configuration Guide › Patch Management**.

2.6.5. Clone Patches

The **Patches › Clone Patches** section allows you to create copies of existing patches to distribute to your clients.

To clone a patch, the patch must apply to one of your existing software channels. If the patch was part of a software channel that was cloned, then you can clone the patch from the cloned channel.

See all patches that are available for cloning by selecting the channel name in the View patches potentially applicable to: field, and click **[View]**. From the list, check the patch to clone, and click **[Clone Patch]**. You need to confirm the details to perform the clone.

2.7. Software Menu

The Software section allows you to view and manage software channels, repositories, and packages.

For more information about software channels, see **Client Configuration Guide › Channels**.

2.7.1. Channel Details

The **Software › Channel List › Channel Details** section displays the details of a selected channel. Click the name of a channel in the Channel List to see more information about the channel.

This section is divided into tabs.

2.7.1.1. Details

The Details tab shows the basic channel details, including a description of the channel, and the dates it was last modified and built. This tab also provides contact information for the maintainer of the product and the GPG key details, where available.

2.7.1.2. Managers

The Managers tab shows which users are authorized to manage the selected channel. The list shows the username, real name, and email address of the channel manager, as well as the current status of the user.

Organization and Channel administrators can manage any channel. Uyuni Administrators can change roles for specific users by clicking the username.

For more information about user management, see **Administration Guide › Users**.

2.7.1.3. Patches

The Patches tab shows all available patches for packages in the selected channel. The list displays the advisory type, names, synopsis, and the date the patch was last updated. Click the advisory name to go to the Patch Details page.

For more information about managing patches and packages, see **Client Configuration Guide › Patch Management**.

2.7.1.4. Packages

The Packages tab shows all packages in the selected channel. The list shows the package name, summary, and the provider of the package. Click the package name to go to the Package Details page.

For more information about managing patches and packages, see **Client Configuration Guide › Patch Management**.

2.7.1.5. Subscribed Systems

The Subscribed Systems tab shows the clients currently subscribed to the selected channel. The list shows the client name and type. Check a client in the list to add it to the system set manager. Click the client name to go to the System Details page.

For more information about the system set manager, see **Client Configuration Guide › System Set Manager**.

2.7.1.6. Target Systems

The Target Systems tab shows the clients eligible for subscription to the selected channel. This tab is only available if the selected channel is a child channel. The list shows the client name and type, and the associated base channel.

To subscribe a client to the selected channel, check the client in the list, and click **[Confirm]**.

For more information about software channels, see **Client Configuration Guide › Channels**.

2.7.1.7. AppStreams

The AppStreams tab is only visible for modular channels and it shows all the available modules in the channel. The list shows the module name and the streams available for the module. The default stream for each module is indicated with a highlighted color.

For more information about AppStreams and how to use them, see **Administration Guide › Content Lifecycle Examples › Appstream Filters**.

2.7.2. Channel List Menu

The **Software › Channel List** section allows you to view and manage software channels and packages on your clients.

For more information about software channels, see **Client Configuration Guide › Channels**.

The **Software › Channel List › All** section displays a list of all software channels that are available to your organization.

Each software channel in the list shows a channel name, a provider, the number of packages and patches in the channel, and the number of clients currently subscribed to the channel. Click the plus sign next to the name of a parent channel to expand the entry and see all the related child channels. Click the channel name to see more information about the channel.

Within the **Software › Channel List** section you can select which subset of channels you would like to see by navigating to tabs, or the sub-menu items.

Table 21. Channel List Filters

Filter	Description
All	All channels available to your organization.
SUSE	Channels provided by SUSE.
Popular	Channels most subscribed to by clients in your organization.
My Channels	Software channels that belong to your organization, including custom channels.
Shared	Channels shared with others in the organizational trust.

Filter	Description
Retired	Channels that have reached end-of-life and no longer receive updates.

For more information about software channels, see **Client Configuration Guide › Channels**.

2.7.3. Package Search

The **Software › Package Search** section allows you to search all packages.

Enter your search term in the Search For field.

Table 22. What to Search Options

Option	Description
Free form	Performs a general search. Use keywords with this option to perform more specific searches.
Name only	Searches only in the names of packages.
Name and Summary	Searches within the name and one-line summary of packages.
Name and Description	Searches within names and long descriptions of packages.

Check the Channels relevant to your systems option to search only channels available for your existing clients. Check the Specific channel you have access to option to search within a specific channel. Check the Packages of a specific architecture to search only for a particular hardware architecture.

You can perform more specific searches by using keywords in the Search For field and selecting the Free Form option.

Table 23. Keyword Search Options

Keyword	Description	Example
name	Search package names	name:SUSE
version	Search for a package version	version:15
filename	Search within package file names	filename:sles
description	Search within the long description	description:java

Keyword	Description	Example
summary	Search within the one-line summary	summary:java
arch	Search for a package architecture	arch:x86_64

For example, if you want to search all SUSE Linux Enterprise packages that include java in the description and the summary, use this search:

```
summary:java and description:java
```

For more information about software channels, see **Client Configuration Guide › Channels**.

2.7.4. Manage Menu

The **Software › Manage** section allows you to manage custom channels, packages, and repositories.

For more information about custom channels, see **Administration Guide › Custom Channels**.

2.7.4.1. Manage Channels

The **Software › Manage › Channels** section allows you to manage custom channels.

Click **[Create Channel]** to create a new custom channel.

To clone an existing channel, click **[Clone Channel]** and select the channel to clone. You can choose to clone channel with or without all current patches, or select specific patches for inclusion.

For more information about custom channels, see **Administration Guide › Custom Channels**.

2.7.4.2. Manage Packages

The **Software › Manage › Packages** section allows you to manage packages that are owned by your organization.

Select a channel from the drop-down box to see all packages related to that channel. If you have administration privileges within your organization, you can also delete packages.

- Orphaned packages are packages that are synchronized by Uyuni, but not associated with a software channel. For handling those packages, see **Client Configuration Guide › Package Management › Package Management Orphaned Packages**.

- For more information about custom channels, see **Administration Guide › Custom Channels**.

2.7.4.3. Manage Repositories

The **Software › Manage › Repositories** section allows you to manage custom or third-party package repositories and link the repositories to an existing channel.

Click **[Create Repository]** to create a new repository.

For more information about custom repositories and channels, see **Administration Guide › Custom Channels**.

2.7.5. Distribution Channel Mapping

The **Software › Distribution Channel Mapping** section lists your defined default base channels. When you register a client for the first time, they will automatically be assigned to these software channels, in accordance with their architecture and operating system. Default channel mappings can be edited, but not deleted.

Click **[Create Distribution Channel Mapping]** to create a new channel map.

Table 24. Distribution Channel Mapping Columns

Column	Description
Operating System	The client operating system this mapping applies to.
Release	The operating system release this mapping applies to.
Architecture	The client system architecture this mapping applies to.
Channel Label	The label of the channel.
Organization Specific	Checked if this mapping applies only to the current organization.

For more information about software channels, see **Client Configuration Guide › Channels**.

2.8. Content Lifecycle Management Menu

In the Content Lifecycle section, you can customize and test packages before updating production clients.

Content lifecycle management allows you to select software channels as sources, adjust them as required for your environment, and thoroughly test them before installing onto your production clients.

For more information about content lifecycle management, see **Administration Guide › Content Lifecycle**.

2.8.1. Projects

In the **Content Lifecycle › Projects** section, you can create new content lifecycle management projects, and edit existing projects.

For more information about content lifecycle management, see **Administration Guide › Content Lifecycle**.

2.8.2. Filters

In the **Content Lifecycle › Filters** section, you can create various types of filters. With the filters you control the content that is used when a content lifecycle project is built.

For more information about content lifecycle management, see **Administration Guide › Content Lifecycle**.

2.9. Audit Menu

The Audit menu provides access to features for managing security updates on your clients. Audit tasks include finding and updating clients with the latest CVE patches, subscription matching, and managing OpenSCAP scans.

2.9.1. CVE Audit

The **Audit › CVE Audit** section shows you which CVEs have been applied to your clients. A CVE (common vulnerabilities and exposures) is a fix for a publicly known security vulnerability. It is important that you apply CVEs to your clients as soon as they become available.

Each CVE contains an identification number, a description of the vulnerability, and links to further information. CVE identification numbers use the form CVE-YEAR-XXXX.

Clients are listed with a patch status icon.

Table 25. Patch Status Icons

Icon	Description	Action Required
❗	Affected, patches are not released for the CVE.	The client is affected by a vulnerability for which a patch has not yet been released.
❗	Affected, patches were released for the CVE but Uyuni can't find them in any of the relevant channels.	The client is affected by a vulnerability that received a patch, but Uyuni is unable to locate any of the patches in relevant channels.

Icon	Description	Action Required
◐	Affected, only partial patches are available for the CVE.	The client is affected by a vulnerability and Uyuni has patches for it, but applying the patches will only fix some of the vulnerable packages.
⚠	Affected, patches are available in channels that are not assigned	The client is affected by a vulnerability and Uyuni has patches for it, but the channels offering the patches are not assigned to the client.
⚠	Affected, patches are available in a product migration target	The client is affected by a vulnerability and Uyuni has patches for it, but applying the patch requires migrating the product to a newer version.
◐	Affected, at least one patch is available in an assigned channel	The client is affected by the vulnerability and Uyuni has patches available in a channel that is directly assigned to the client.
○	Not affected	The client is not affected because none of the CVE vulnerable packages are installed.
⊘	Patched	A patch has been successfully installed on the client.
⊖	Unknown, CVE metadata not available	The patch status cannot be determined because the CVE metadata required for OVAL-based auditing is missing or has not yet been synchronized.

For more information about CVE auditing, see **Administration Guide › Auditing**.

2.9.2. Subscription Matching

The **Audit › Subscription Matching** section provides reports that match your currently installed clients to your existing product subscriptions. Subscription matching reports provide information about clients that do not have a subscription, and subscription start and end dates.

Table 26. Subscription Matching Options

Column	Description
Part Number	Identifier of the matched product
Description	Description of the matched product
Policy	The type of subscription matched to the product
Matched/Total	The number of clients currently using the subscription, of the total available. If the subscription is fully matched, the quantity column value is highlighted.
Start Date	Start date of the subscription
End Date	End date of the subscription

Table entries are highlighted if they are due to expire within three months. Table entries that have already expired are shown in grayscale.

For messages relating to subscription matching, navigate to the Messages tab.

Table 27. Subscription Matching Messages

Message	Type	Description	Action
Unsupported part number detected	Debug	The detected part number is unknown or unsupported.	Call SUSE support and open a Service Request ticket to have the part number added to the product.
Physical system is reported as virtual guest, please check hardware data	Debug	A client is reporting as virtual, but could be a physical client.	Check the client hardware data.

Message	Type	Description	Action
Virtual guest has unknown host, assuming it is a physical system	Warning	A virtual client has an unknown host. During the matching process, it was treated as a physical system. This might translate into a wrong subscription assignment.	Check the virtual host manager (VHM) configuration to ensure it is reporting correctly. For Linux-based hosts using libvirt, check that the host is registered, and that the virtual host system type is set correctly.
System has an unknown number of sockets, assuming 16	Warning	Unable to determine how many CPUs a client has. Uyuni used the default value of 16 CPUs every time the number was relevant for matching a subscription. This might translate into a wrong subscription assignment.	Schedule a hardware refresh on this client.
Two subscriptions with the same part number are in a bundle	Informational	Two subscriptions were identified to be part of a bundle and, as result, they were merged together during the computation process.	No actions needed.
Two subscriptions with the same part number (and other properties) have been merged together	Informational	Two subscription shared multiple common properties and they were merged together during the computation process.	No actions needed.
Pinned match adjusted due to merged subscriptions	Informational	A user defined pin was updated since the chosen subscription was merged with another one.	No actions needed.

Message	Type	Description	Action
Subscription with unsupported part number and no associated product has been ignored.	Informational	An unknown subscription without any associated product has been detected and it was ignored during the matching process.	No actions needed.

To pin clients to a particular subscription, navigate to the Pins tab.

Table 28. Pin Statuses

Status	Description
Satisfied	The client and subscription were matched correctly.
Not satisfied	The client was not successfully matched with a subscription.
Pending next run	Waiting for the next matcher run.

For more information about subscription matching, see **Administration Guide › Subscription Matching**.

2.9.3. OpenSCAP Menu

The **Audit › OpenSCAP** section displays the results of OpenSCAP scans that you have performed on your clients.

The Security Content Automation Protocol (SCAP) is a synthesis of interoperable specifications derived from community ideas. Uyuni uses OpenSCAP to implement the SCAP specifications.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

2.9.3.1. OpenSCAP

The **Audit › OpenSCAP** section displays the results of OpenSCAP scans that you have performed on your clients.

The Security Certification and Authorization Package (SCAP) is a standardized compliance checking solution for enterprise-level Linux infrastructures. Uyuni uses OpenSCAP to implement the SCAP specifications.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

2.9.3.2. All Scans

The **Audit › OpenSCAP** section displays the results of OpenSCAP scans that you have performed on your clients.

The Security Content Automation Protocol (SCAP) is a synthesis of interoperable specifications derived from community ideas.

Table 29. OpenSCAP Scan Details

Name	Description	Evaluation Results
System	The name of the scanned client.	
XCCDF Profile	The evaluated profile.	
Completed	The time that the scan was completed.	
Satisfied	The total number of rules that have been satisfied.	A rule is satisfied if the result of the evaluation is Pass or Fixed.
Dissatisfied	The total number of rules that are not satisfied.	A rule is dissatisfied if the result of the evaluation is Fail.
Unknown	The total number of rules that were not able to be evaluated.	A rule is unknown if the result of the evaluation is Error, Unknown or Not checked.

Rules can also return other results, including Informational, Not Applicable, or Not Selected. Rules that return these results are not shown in the scan results.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

2.9.3.3. XCCDF Diff

The **Audit › OpenSCAP › XCCDF Diff** section allows you to compare two OpenSCAP XCCDF scans.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

2.9.3.4. Advanced Search

The **Audit › OpenSCAP › Advanced Search** section allows you to search through OpenSCAP scans and results.

For more information about OpenSCAP, see **Administration Guide › Openscap**.

2.9.3.5. SCAP Content

The **Audit › SCAP Content** section displays the SCAP content files available in your organization. SCAP content files contain the security benchmarks and profiles used to evaluate system compliance.

Click **[Upload]** to upload a new SCAP content file. For more information about uploading SCAP content, see Upload SCAP content.

Each row in the list provides **[Edit]** and **[Delete]** action buttons. Use **[Edit]** to modify the name, description, or replace the uploaded files for an existing SCAP content entry. Use **[Delete]** to remove the SCAP content entry. A confirmation dialog is displayed before deletion.

You can filter the list using the search bar, which searches across the name, file name, and description fields.

Table 30. SCAP Content List Columns

Column	Description
Name	The display name of the SCAP content.
Description	A brief description of the SCAP content.
File Name	The file name of the uploaded DataStream file.
Actions	Available actions: Edit and Delete.

2.9.3.5.1. Upload SCAP content

The **Audit › SCAP Content › Upload** page allows you to upload new SCAP content to your organization.

Table 31. Upload SCAP Content Fields

Field	Required	Description
Name	Yes	A display name for the SCAP content.
Description	No	A brief description of the SCAP content.
SCAP Datastream File	Yes	The DataStream file (*-ds.xml) to upload.
XCCDF File	Yes	The XCCDF file (*-xccdf.xml) to upload.

Click **[Upload]** to save the new SCAP content.

2.9.3.5.2. Edit SCAP content

The **Audit › SCAP Content › Edit** page allows you to update an existing SCAP content entry. You can change the name, description, or replace the uploaded DataStream and XCCDF files. If you do not upload a new file, the existing file is retained.

Click **[Update]** to save the changes.

2.9.3.6. SCAP Policies

The **Audit › SCAP Policies** section displays the compliance policies defined in your organization. Each policy ties together a SCAP content file, an XCCDF profile, and optional tailoring to define a compliance standard.

Click **[Create]** to create a new compliance policy. For more information about creating policies, see Create compliance policy.

Each row in the list provides **[Details]**, **[Edit]**, and **[Delete]** action buttons. Use **[Details]** to view the policy summary, configuration, and scan history. Use **[Edit]** to modify the policy. Use **[Delete]** to remove the policy. A confirmation dialog is displayed before deletion.

You can filter the list using the search bar, which searches across the policy name and SCAP content name.

Table 32. SCAP Policies List Columns

Column	Description
Name	The display name of the compliance policy.
Content	The name of the associated SCAP content, or N/A if none is assigned.
Systems Scanned	The number of systems that have been scanned using this policy.
Compliance	A compliance badge showing the percentage of compliant systems and the ratio of compliant to total scanned systems.
Actions	Available actions: Details, Edit, and Delete.

2.9.3.6.1. Create compliance policy

The **Audit › SCAP Policies › Create** page allows you to define a new compliance policy.

Table 33. Create Compliance Policy Fields

Field	Required	Description
Policy Name	Yes	A display name for the compliance policy.
Description	No	A brief description of the policy.
SCAP Content	Yes	Select a SCAP content file. The XCCDF Profile list is populated based on this selection.
XCCDF Profile	Yes	Select an XCCDF profile from the chosen SCAP content.
Tailoring File	No	Optionally select a tailoring file to customize the profile. The Tailoring Profile list is populated based on this selection.
Tailoring Profile	No	Select a profile from the chosen tailoring file.
Advanced Arguments	No	Additional command-line arguments, for example: `--rule <rule_id> --remediate`.
OVAL Files	No	Paths to local OVAL definitions on the target system, comma separated.
Fetch Remote Resources	No	Enable fetching of remote resources during scans. This requires internet access and significant memory on the target system.



Enabling **[Fetch Remote Resources]** requires internet access and significant available memory on the target minion. Ensure the target system has sufficient resources before enabling this option.

Click **[Create]** to save the new policy.

2.9.3.6.2. Edit compliance policy

The **Audit › SCAP Policies › Edit** page allows you to update an existing compliance policy. All fields from the creation form can be modified.

Click **[Update]** to save the changes. Click **[Back to List]** to return to the policies list without saving.

2.9.3.6.3. Policy details

The **Audit › SCAP Policies › Details** page displays a comprehensive overview of a compliance policy, including compliance statistics, configuration, and scan history.

Summary cards

The top of the page shows four summary cards:

Table 34. Summary Cards

Card	Description
Total Scans	The total number of scans performed using this policy.
Systems Scanned	The number of unique systems scanned.
Compliant Scans	The number of scans where all rules passed.
Compliance Rate	The percentage of scans that are compliant.

Policy configuration

This panel displays the current configuration of the policy:

- SCAP Content
- XCCDF Profile
- Tailoring File (if configured)
- Tailoring Profile (if configured)
- OVAL Files (if configured)
- Advanced Arguments (if configured)
- Fetch Remote Resources (Yes or No)
- Description (if provided)

Scan history

The scan history table shows all scans performed using this policy. Use the checkbox **[Show only latest scan per system]** to filter the table to display only the most recent scan for each system.

You can filter the scan history using the search bar, which searches by system name.

Table 35. Scan History Columns

Column	Description
System	The name of the scanned system, linked to the system details page.
Scan Date	The date and time the scan was performed.
Passed	The number of rules that passed.
Failed	The number of rules that failed.
Other	The number of rules that were not selected or not applicable.
Status	The compliance status: Compliant (no failures) or Non-Compliant (one or more failures).
Actions	Click **[View Details]** to view the full XCCDF scan results.

2.9.3.7. Tailoring Files

The **Audit › Tailoring Files** section displays the SCAP tailoring files available in your organization. Tailoring files allow you to customize XCCDF profiles by enabling, disabling, or modifying specific rules without changing the original SCAP content.

Click **[Create]** to upload a new tailoring file. For more information about uploading tailoring files, see Upload tailoring file.

Each row in the list provides **[Edit]** and **[Delete]** action buttons. Use **[Edit]** to modify the name, description, or replace the uploaded tailoring file. Use **[Delete]** to remove the tailoring file entry. A confirmation dialog is displayed before deletion.

You can filter the list using the search bar, which searches across the label and file name fields.

Table 36. Tailoring Files List Columns

Column	Description
Label	The display name of the tailoring file.
Tailoring File Name	The file name of the uploaded tailoring file.
Actions	Available actions: Edit and Delete.

2.9.3.7.1. Upload tailoring file

The **Audit › Tailoring Files › Create** page allows you to upload a new tailoring file.

Table 37. Upload Tailoring File Fields

Field	Required	Description
Name	Yes	A display name for the tailoring file.
Description	No	A brief description of the tailoring file.
Tailoring File	Yes	The tailoring XML file (.xml) to upload.

Click **[Upload]** to save the new tailoring file.

2.9.3.7.2. Edit tailoring file

The **Audit › Tailoring Files › Edit** page allows you to update an existing tailoring file entry. You can change the name, description, or upload a replacement file. If you do not upload a new file, the existing file is retained.

Click **[Update]** to save the changes.

2.10. Configuration Menu

The Configuration section provides access to features for managing the configuration of Uyuni clients.



The Configuration menu is only available if you are signed in with a configuration administrator or Uyuni administrator account.

Within the configuration pages, you can:

- manage clients using configuration files
- configure channels offering configuration files

- manage configuration files themselves

2.10.1. Configuration Overview

The **Configuration › Overview** section is a dashboard that contains a summary of the configuration files that are managed by your organization in Uyuni. The overview summarizes managed systems, configuration channels, and files stored in configuration channels.

For more information about managing configuration files, see **Client Configuration Guide › Configuration Management**.

Configuration Summary

Provides quick information about your configuration files. Click the blue text to the right to display:

- Systems with managed configuration files
- Configuration channels
- Managed configuration files

Configuration Actions

Configuration Actions offers direct access to the most common configuration management tasks:

- View clients with managed configuration files
- View all managed configuration files
- View all managed configuration channels
- Create a new configuration or state channel
- Enable configuration management on clients

Recently Modified Configuration Files

The list shows which files have changed when and to which channel they belong. If no files have been changed, no list appears.

Table 38. Recently Modified Configuration Files Columns

Column	Description
Filename	Absolute filename of the configuration file.
Configuration Channel	Name of the configuration channel.
Modified	The time and date the file was modified.

Click the name of a file to see its Details page. Click the channel name to see its Channel Details page.

Recently Scheduled Configuration File Deployments

Each scheduled action is listed along with the status of the action. Any scheduled configuration task, from enabling configuration management on a system to deploying a specific configuration file, is displayed. Here you can quickly assess if all tasks have been successfully carried out or fix any problems.

+

Table 39. Scheduled Configuration File Deployments Columns

Column	Description
System	Host name of the system where you want to deploy the configuration file.
Files to be Deployed	Number of files to be deployed.
Scheduled By	The user who scheduled the job.
Scheduled For	The time and date the file deployment will happen.
Status	Status of the deployment: Queued

+ Clicking the blue status text displays the **System Details › Schedule** page for the specified system.

2.10.2. Channels

Uyuni manages configuration files through two channel types: Config Channels and State Channels. Config Channels store managed configuration files. State Channels use Salt states and provide an editable init.sls file. For more information about custom states, see **Specialized Guides › Salt › Salt Custom States**.

Click the name of the configuration channel to see the details page for that channel. If you click the number of files in the channel, you are taken to the List/Remove Files page of that channel. If you click the number of systems subscribed to the configuration channel, you are taken to the **Configuration Channel Details › Systems › Subscribed Systems** page for that channel.

2.10.2.1. Configuration Channel Details

Overview

The Overview page of the Configuration Channel Details page is divided into several panels:

Channel Properties [Management]

Edit the name, label, and description of the channel by clicking **[Edit Properties]**.

Channel Information

Provides status information for the contents of the channel.

Configuration Actions

Provides access to the most common configuration tasks. For Salt clients, there is a link to edit the init.sls file.

This panel allows you to deploy, compare, and add and create files. Some action are only availalble if you have files created and clients assigned to configuration channels.

List/Remove Files

This page only appears if there are files in the configuration channel. You can remove files or copy the latest versions into other configuration channels. Check the box next to files you want to manipulate, then click the action button at the bottom.

Add Files

The Add Files page has three subtabs of its own, which allow you to Upload, Import, or Create configuration files to be included in the channel.

Upload File

To upload a file into the configuration channel, browse for the file on your local system, populate all fields, and click the **[Upload Configuration File]** button. The Filename/Path field is the absolute path where the file will be deployed.

You can set the Ownership via the user name and group name and the Permissions of the file when it is deployed.

If the client has SELinux enabled, you can configure SELinux contexts to enable the required file attributes (such as user, role, and file type).

You can use Jinja templating with grains or pillar data instead of legacy macro delimiters.

Import Files

To import files from other configuration channels, check the box to the left of any file you want to import. Then click **[Import Configuration Files]**.

Create File

Create a configuration file, directory, or symbolic link to be included in the configuration channel.

Deploy Files

This page only appears when there are files in the channel and a system is subscribed to the channel. Deploy all files by clicking the **[Deploy All Files]** button or check selected files and click the **[Deploy**

Selected Files button. Select to which systems the files should be applied. All systems subscribed to this channel are listed. If you want to apply the file to a different system, subscribe it to the channel first. To deploy the files, click **Confirm & Deploy to Selected Systems**.

Systems

Manage systems subscribed to the configuration channel with two subtabs:

Subscribed Systems

All systems subscribed to the current channel are displayed. Click the name of a system to see the System Details page. To unsubscribe a system from the configuration channel, check the box to the left of the system name and click **Unsubscribe systems**.

Target Systems

This subtab displays a list of systems enabled for configuration management but not yet subscribed to the channel. To add a system to the configuration channel, check the box to the left of the system name and click **Subscribe systems**.

2.10.3. Files

This page lists the configuration files managed by Uyuni through configuration channels.

Table 40. Files Columns

Column	Description
Path	Absolute filename of the configuration file.
Configuration Channel	Name of the configuration channel that contains the file.
Systems Subscribed	Number of systems subscribed to the channel.

Click the Path of a file to see its Details tab. Click the name of the Configuration Channel to see the Overview tab of the channel. Clicking Systems Subscribed shows all systems currently subscribed to the channel containing that file.



By default, the maximum file size for configuration files is 128 KB (131072 bytes). SUSE supports a configuration file size up to 1 MB. Larger files are not guaranteed to work.

2.10.3.1. Change maximum configuration file size

The default maximum file size is set on the Uyuni Server in /usr/share/rhn/config-defaults/rhn_web.conf:

```
web.maximum_config_file_size = 131072
```

Procedure: Changing the maximum configuration file size

1. On the Uyuni Server, open /etc/rhn/rhn.conf.
2. Add or update the web.maximum_config_file_size parameter with the required value in bytes, for example:

```
web.maximum_config_file_size = 262144
```

3. Apply the configuration by restarting Uyuni:

```
mgradm restart
```

2.10.4. Systems Menu

Displays status information about your system in relation to configuration. There are two sub-pages: Managed Systems and Target Systems.

2.10.4.1. Managed Systems

By default the Managed Systems page is displayed. The listed systems have been fully prepared for configuration file deployment. The page shows systems with managed configuration files and channel subscriptions.

Click the name of a system to show the relevant **System Details › Configuration › Overview** page.

2.10.4.2. Target Systems

This page shows the systems that are not prepared for configuration file deployment, or are not yet subscribed to a configuration channel.

The table has three columns:

- The system name
- If the system is prepared for configuration file deployment
- The steps necessary to prepare the system.

To prepare a system, check the box to the left of the profile name then click the **[Enable Uyuni Configuration Management]** button. All of the preparatory steps that can be automatically performed are scheduled by

Uyuni.



You will need to perform some manual tasks to enable configuration file deployment. Follow the on-screen instructions provided to assist with each step.

2.11. Schedule Menu

The Schedule section allows you to view actions and action chains.

Actions include:

- Package alterations, including installation, upgrade, removal, and rolling back of packages
- Client reboots
- Patch installation
- Configuration file alterations, including deploy, upload, and diff
- Hardware profile updates
- Package list profile updates
- Automated installation initiation
- Product migrations
- Remote commands

For more information about actions, see **Administration Guide › Actions**.

2.11.1. Pending Actions

The **Schedule › Pending Actions** section shows actions that are in progress, or that have not yet started. Use the Filter by Action field to search the list.

Cancel pending actions by checking the action in the list, and clicking **[Cancel Actions]**. If you archive a pending action, it is not canceled, but the action item moves from the Pending Actions list to the Archived Actions list.

Table 41. Actions List Columns

Column	Description
Action	Type of action to perform. Click the action to go to Action Details.
Scheduled Time	The earliest time to perform the action.

Column	Description
Comment / Reason	Optional comment entered when the action was scheduled.
Succeeded	Number of clients on which this action was successful.
Failed	Number of clients on which this action has failed.
Pending	Number of clients on which this action is currently running
Total	Total number of clients on which this action has been scheduled.

For more information about actions, see **Administration Guide › Actions**.

2.11.2. Recurring Actions

The **Schedule › Recurring Actions** section shows all recurring actions that you have permissions for.



The recurring actions list on this page is a read-only table. To modify a schedule, you can follow the links in the Target Name column and list the schedules of an individual target.

Recurring Action Details

View the details about an action from the action list. In the Actions column, click the **[Details]** icon for the action you are interested in.

For more information about recurring actions, see **Administration Guide › Actions**.

2.11.3. Completed Actions

The **Schedule › Completed Actions** section shows actions that have been successfully completed. Use the Filter by Action field to search the list. Archive completed actions by checking the action in the list, and clicking **[Archive Actions]**.

Table 42. Completed Actions List Columns

Column	Description
Action	Type of action to perform. Click the action to go to Action Details.
Scheduled Time	The earliest time to perform the action.

Column	Description
Comment / Reason	Optional comment entered when the action was scheduled.
Succeeded	Number of clients on which this action was successful.
Failed	Number of clients on which this action has failed.
Pending	Number of clients on which this action is currently running
Total	Total number of clients on which this action has been scheduled.

For more information about actions, see **Administration Guide › Actions**.

2.11.4. Failed Actions

The **Schedule › Failed Actions** section shows actions that have not been completed, or that have returned an error. Use the Filter by Action field to search the list. Archive failed actions by checking the action in the list, and clicking **[Archive Actions]**.

Reschedule failed actions by checking the action in the list, and clicking **[Reschedule]**. Following the rescheduling, the action is:

- removed from the Event History
- replaced by the rescheduled action.

Table 43. Actions List Columns

Column	Description
Action	Type of action to perform. Click the action to go to Action Details.
Scheduled Time	The earliest time to perform the action.
Comment / Reason	Optional comment entered when the action was scheduled.
Succeeded	Number of clients on which this action was successful.
Failed	Number of clients on which this action has failed.

Column	Description
Pending	Number of clients on which this action is currently running
Total	Total number of clients on which this action has been scheduled.

For more information about actions, see **Administration Guide › Actions**.

2.11.5. Archived Actions

The **Schedule › Archived Actions** section shows actions that you have marked as archived. Use the Filter by Action field to search the list. Completed or failed actions can be archived.

For more information about actions, see **Administration Guide › Actions**.

2.11.6. Action Chains

The **Schedule › Action Chains** If you need to perform a number of sequential actions on your clients, you can create an action chain to automate them.

For more information about action chains, see **Administration Guide › Actions**.

2.11.7. Maintenance Windows

The **Schedule › Maintenance Windows** section allows you to manage your maintenance window schedules. To create a maintenance schedule, you need to have an existing .ical file that contains the calendar. Upload the calendar, create a new schedule, and assign the schedule to a client. When a schedule is applied to a client, you are prevented from executing some actions outside of the specified period.

Navigate to **Schedule › Maintenance Windows › Schedules** to see a list of all current schedules. Click **[Create]** to create a new schedule. Click **[Edit]** to change the schedule.

Navigate to **Schedule › Maintenance Windows › Calendars** to see a list of all current calendars. Click **[Create]** to create a new calendar. Click **[Edit]** to change the calendar.

For more information about maintenance windows, see **Administration Guide › Maintenance Windows**.

2.12. Users Menu

The Users menu provides access to grant and edit permissions for those who administer your system groups.

You can create new users, and edit user details, roles, and system groups.



The Users menu is only available if you are signed in to Uyuni with an administrator account.

For more information about managing users, see **Administration Guide › Users**.

2.12.1. User Details

The User Details section provides additional details about the user account, and allows you to manage permissions for the user. You can also deactivate or delete users from this section.

For more information about managing users, see **Administration Guide › Users**.

The User Details section is split into tabs:

2.12.1.1. Details

This tab allows you to change the name and password of the user account, and provides information about the various permissions the user has assigned.

Use this section to assign or remove roles, except for the Uyuni Administrator. To change a user's Uyuni Administrator role, navigate to **Admin › Users** and check or uncheck Uyuni Admin? as required.

2.12.1.2. System Groups

This tab shows the system groups the user is assigned to. Check or uncheck system groups as required.

2.12.1.3. Systems

This tab shows the clients the user is able to administer. Use system groups to modify client access levels.

Select multiple systems from this page to add them to the system set manager (SSM). For more information about SSM, see **Client Configuration Guide › System Set Manager**.

2.12.1.4. Channel Permissions

This tab shows the channel permissions for the user.

The Subscription subtab shows channels that the user has subscription permissions for. The Management subtab shows channels that the user has management permissions for.

Check channels in the list to grant permissions.

2.12.1.5. User Preferences

This tab is used to configure preference settings for users.

Table 44. User Preferences

Option	Description	Default
Email Notification	Receive email for client and Taskomatic notifications, including a daily summary email.	Checked
Uyuni List Page Size	Maximum number of items that can appear in a list on a single page.	25 entries
"Overview" Start Page	Select the information panes to display on the **Home › Overview** page.	All checked
Time Zone	Set your local timezone.	System timezone
CSV Files	Select whether to use comma or semi-colon delimiters when producing downloadable CSV files.	Comma

2.12.1.6. Addresses

This tab shows the mailing addresses associated with the user. Click **[Fill in this address]** to set a mailing address. Click **[Edit this address]** to change an existing mailing address.

2.12.2. User List

The **Users › User List** section provides access to the lists of users.

2.12.2.1. Active Users

The **Users › User List › Active** section shows all active users in your Uyuni Server.

Each user in the list shows the username, real name, assigned roles, and the date the user last signed in. Click **[Create User]** to create a new user account. Click the username to go to the User Details page.

For more information about managing users, see **Administration Guide › Users**.

2.12.2.2. Deactivated Users

The **Users › User List › Deactivated** section shows all deactivated users in your Uyuni Server.

Each user in the list shows the username, real name, assigned roles, the date the user last signed in, the user who deactivated the account, and the date the account was deactivated. Click **[Create User]** to create a new user account. Click the username to go to the User Details page.

To reactivate a user, check the username in the list and click **[Reactivate]**.

For more information about managing users, see **Administration Guide › Users**.

2.12.2.3. All Users

The **Users › User List › All** section shows all activated and deactivated users in your Uyuni Server. Deleted users are not shown in the list.

Each user in the list shows the username, real name, assigned roles, the date the user last signed in, and the current status of the user. Click **[Create User]** to create a new user account. Click the username to go to the User Details page.

For more information about managing users, see **Administration Guide › Users**.

2.12.3. System Group Configuration

The **Users › System Configuration** section allows you to configure system groups for your users.

System groups allow you to grant permissions to a group of users, instead of granting permissions to individuals. This is particularly useful if you have many users.

You can also configure system groups for users that have been externally authenticated.

For more information about managing users with system groups, see **Administration Guide › Users**.

2.13. Admin Menu

The Admin menu provides access to features for managing Uyuni configuration. Configuration tasks include creating and managing organizations, users, and tasks. You can also use the setup wizard to help configure Uyuni.



The Admin menu is only available if you are logged in to Uyuni with an administrator account.

2.13.1. Setup Wizard

The **Admin › Setup Wizard** section helps you configure Uyuni. It is the default page when you use the Uyuni Web UI for the first time.

Table 45. Setup Wizard Options

Option	Description
HTTP Proxy	Configure an HTTP proxy connection.
Organization Credentials	Configure an organization for accessing SUSE Customer Center.
Products	View product entitlements and subscribe to product channels.

2.13.1.1. Configure the HTTP Proxy

Uyuni can connect to the SUSE Customer Center (SCC) or other remote servers using a proxy. Navigate to the HTTP Proxy tab to configure the proxy.

You will need to provide the hostname of the proxy. Use the syntax <hostname>:<port>. For example: example.com:8080.

You can disable use of the proxy by clearing the fields.



When choosing a username or password for your Uyuni Proxy, ensure it does not contain an @ or : character. These characters are reserved.

2.13.1.2. Configure Organization Credentials

Your SUSE Customer Center account is associated with the administration account of your organization. You can share your SUSE Customer Center access with other users within your organization. Navigate to the Organization Credentials tab to grant users within your organization access to your SUSE Customer Center account.

Click **[Add a new credential]**, enter the username and password of the user to grant access to, and click **[Save]**. A new credential card is shown for the user you have granted access to. Use these buttons on the card to edit or revoke access:

- Check credential validation status (green tick or red cross icon). To re-check the credential with SCC, click the icon.

- Set the primary credentials for inter-server synchronization (yellow star icon).
- List the subscriptions related to a certain credential (list icon).
- Edit the credential (pencil icon).
- Delete the credential (trash can icon).

2.13.1.3. Configure Products

Your SUSE subscription entitles you to access a range of products. Navigate to the Products tab to browse the products available to you and synchronize Uyuni with SUSE Customer Center.

Filters help you search for products by description or architecture.

The list is organized by product name showing products on top which have a subscription. Freely available products appear at the end of the list. For each product, you can see the architecture it can be used on. Click the arrow next to the product name to see associated channels and extensions. Click the **[Channels]** icon to see the complete list of channels associated with each product.

For products based on SUSE Linux Enterprise 15 and above, you can choose to only synchronize required packages, or to also include recommended products. Toggle the **[include recommended]** switch on to synchronize all products, and toggle the switch off to synchronize only required products.

You can further refine which products you want to synchronize by selecting or deselecting individual product.

When you have completed your selection, click **[Add products]**, and click **[Refresh]** to schedule the synchronization.

Synchronization progress for each product is shown in a progress bar next to the product name. Depending on the products you have chosen, synchronization can take up to several hours. New products will be available for you to use in Uyuni when synchronization is complete.

If your synchronization fails, it could be because of a third party GPG key or your company firewall blocking access to the download server. Please check the notification details for the error. For more information about troubleshooting product synchronization, see **Administration Guide › Troubleshooting › Tshoot Sync**.

2.13.2. Organizations

The **Admin › Organizations** section allows you to create and manage your Uyuni organizations. Click an organization in the list to see details.

For more information about organizations, see **Administration Guide › Organizations**.

2.13.3. Access Group Management

The Access Group Management page provides an overview of all existing access groups in your organization and allows administrators to create, edit, or delete them.

Navigate to **Admin › Access Control** to open the page.

2.13.3.1. Access groups overview

The access groups table lists all custom access groups configured for the current organization. Predefined roles (such as Uyuni Administrator or Organization Administrator) are built-in system roles and cannot be edited or deleted here; they are managed under **Users › User List** and **Admin › Users**.

Use the Filter by name or description field above the table to search for specific access groups.

The table displays the following columns:

- **Name**: The unique name of the access group.
- **Description**: The description of the role and its responsibilities.
- **Organization**: The organization to which the access group belongs.
- **Users**: The number of users currently assigned to the access group.
- **Permissions**: The number of permissions granted to the access group.
- **Actions**: Contains the following actions:
  - Edit icon: Click to view and modify group details, permissions, and assigned users.
  - Delete icon: Click to delete the access group.

2.13.3.2. Create access group

To create an access group, use the following procedure:

Procedure: Creating an access group

1. In the Web UI, navigate to **Admin › Access Control** and click **[Create Access Group]**.
2. On the Details page, fill in the following fields:
   - **Name**: Enter a unique name for the access group.
   - **Description**: Enter a description explaining the purpose of the group.

- **Organization**: Select the organization to which the access group belongs.
- **Copy Permissions From**: Optionally select one or more existing access groups to inherit permissions from. Once created, the new group functions independently, and future changes to either group do not affect the other.

3. Click **[Continue]**.
4. On the Namespaces & Permissions page, select the permissions to grant to the access group:
   - Select **View** to grant read-only access to a namespace.
   - Select **Modify** to grant full access, including creating, updating, or deleting resources.
   - Use the search bar (Filter by name) to locate specific namespaces.
   - Filter permissions using the API, Web, and Only selected checkboxes.
   - Click **[Expand All]** or **[Collapse All]** to expand or collapse all namespaces in the hierarchy.
5. Click **[Continue]**.
6. On the Users page, assign users to this access group:
   - Select a user from the Search & Add Users dropdown to add them to the group.
   - Review the list of assigned users in the table (showing Username, Email, and Real Name).
   - To remove an assigned user, click the Delete icon in the Actions column.
7. Click **[Continue]**.
8. On the Review page, verify the access group details, assigned users, and granted permissions.

9. Click **[Create]** to finish creating the access group.

2.13.3.3. Namespaces and permissions

Permissions in Uyuni are organized hierarchically by namespaces. Namespaces represent two distinct scopes:

API namespaces

Represent programmatic API endpoints and XML-RPC/JSON-RPC functions (such as api.system.bootstrap or api.saltkey.accept). In the Web UI, API namespaces are indicated by an API icon. These permissions govern automated calls, scripts, and API interactions with the Uyuni Server.

Web UI namespaces

Represent functional areas, pages, and actions in the Web UI. For example, the account.address namespace corresponds to the **User Account › Addresses** page in the Web UI, while system.details.packages corresponds to the packages subtab in the system details view.

Each namespace supports two access levels:

- **View**: Grants read-only access to view pages, inspect configurations, or retrieve data.
- **Modify**: Grants full access to create, update, execute, or delete resources within that namespace.

The permissions table includes the following controls:

- **Search**: Filter namespaces by name using the Filter by name field.
- **API filter**: Display only permissions for API endpoints.
- **Web filter**: Display only permissions for the Web UI.
- **Only selected filter**: Display only the permissions currently selected for this access group, providing a quick summary of the granted rights.
- **Expand / Collapse**: Toggle individual tree branches or use **[Expand All]** / **[Collapse All]** to expand or collapse the entire namespace tree.



Uyuni provides descriptions for common namespaces in the permissions table. SUSE plans to add full descriptions of all namespaces in future releases. For more information about RBAC architecture and namespace examples, see **Administration Guide › Role Based Access Control**.

2.13.3.4. Edit or delete an access group

To modify an existing access group, use the following procedure:

Procedure: Editing an access group

1. In the Web UI, navigate to **Admin › Access Control**.
2. In the Actions column of the access group, click the Edit icon.
3. The Access Group Details page opens with the Details, Namespaces & Permissions, and Users tabs.
4. Adjust group properties, permissions, or user assignments as needed across the tabs. Note that the organization cannot be changed after creation.
5. Click **[Update Access Group]** at the bottom of the page to save your changes.

To delete an access group, use the following procedure:

Procedure: Deleting an access group

1. In the Web UI, navigate to **Admin › Access Control**.
2. In the Actions column of the access group, click the Delete icon.
3. In the Delete Access Group dialog, confirm the deletion. Deleting an access group revokes the custom role and its permissions from all assigned users.

2.13.4. Users

The **Admin › Users** section allows you to view and manage all users of the organization you are logged in to. Every user shows the username, real name, the organization they are associated with, and whether the user is an organization or Uyuni administrator.

To change a user's Uyuni Administrator role, check or uncheck Uyuni Admin as required.

Click a username to modify the user account details, and change other administrator roles.

For more information, see **Reference Guide › Users › User Details**.

2.13.5. Manager Configuration

The **Admin › Manager Configuration** section contains tabs to allow you to configure Uyuni.

Table 46. Configuration Options

Option	Description
General	Configure your Uyuni installation.
Bootstrap Script	Generate a custom bootstrap script.
Organizations	Create and configure organizations and users.
Restart	Restart Uyuni. You will need to do this after making configuration changes.
Cobbler	Run a Cobbler synchronization.
Monitoring	Enable server monitoring.

2.13.5.1. General

On the **Admin › Manager Configuration › General** page you can configure your Uyuni installation.

Table 47. Bootstrap Script Options

Option	Description	Default
Administrator Email Address	Email address of the Uyuni administrator.	Pre-populated
Uyuni Hostname	Hostname of the Uyuni Server.	Pre-populated
HTTP Proxy	The hostname and port of the proxy, if you are using one. Use syntax <hostname>:<port>, for example: <example.com>:8080.	None
HTTP Proxy username	The username to use on the proxy server, if you are using one.	None
HTTP Proxy password	The password to use on the proxy server, if you are using one.	None
Confirm HTTP Proxy password	The directory where RPM packages are mirrored.	/var/spacewalk/
RPM repository mount point	The hostname of the proxy server, if you are using one.	None
Default to SSL	Check to use SSL as the default value for communications.	Checked

2.13.5.2. Bootstrap Script

In the **Admin › Manager Configuration › Bootstrap Script** section you can generate a custom bootstrap script. Bootstrap scripts are used to register clients with Uyuni. The generated script will be placed in /srv/www/htdocs/pub/bootstrap/ on your Uyuni Server.

Table 48. Bootstrap Script Options

Option	Description	Default
Uyuni Server hostname	The hostname for the Uyuni Server to register the client to	Pre-populated
SSL cert location	Location and name of the SSL certificate	Pre-populated
Bootstrap using Salt	Check to bootstrap clients	Checked
Enable SSL	Check to use the corporate public CA certificate on the client, uncheck to use self-managed CA certificates.	Checked
Enable Client GPG checking	Check to use GPG, uncheck to disable GPG checking	Checked
Enable Remote Configuration	Check to allow configuration from a remote server.	Unchecked
Enable Remote Commands	Check to allow commands from a remote server.	Unchecked
Client HTTP Proxy	The hostname of the proxy server, if you are using one.	Unpopulated
Client HTTP Proxy Username	The username to use on the proxy server, if you are using one.	Unpopulated
Client HTTP Proxy Password	The password to use on the proxy server, if you are using one.	Unpopulated



Do not disable SSL in your bootstrap script. Ensure that Enable SSL is checked in the Web UI, or that the setting `USING_SSL=1` exists in the bootstrap script. If you disable SSL, the registration process requires custom SSL certificates. For more about custom certificates, see **Administration Guide › Ssl Certs**.

2.13.5.3. Configure Organizations

The **Admin › Manager Configuration › Organizations** section contains details about organizations in Uyuni, and provides links to create and configure organizations and users.

2.13.5.4. Restart

The **Admin › Manager Configuration › Restart** section allows you to restart Uyuni. You will need to do this after making configuration changes. It will take some time for Uyuni to become available again after a restart.

2.13.5.5. Cobbler

The **Admin › Manager Configuration › Cobbler** page allows you to run a Cobbler synchronization. You can repair or rebuild the contents of the /srv/tftpboot/ and /srv/www/cobbler/ directories after a manual modification of the Cobbler setup.

For more information about autoinstallation powered by Cobbler, see **Client Configuration Guide › Autoinst Intro**.



SUSE only supports Cobbler functions that are available in the Uyuni Web UI, or through the Uyuni API. Only supported features are documented here.



Using NFS for the persisent volumes of Cobbler is not supported.

2.13.5.6. Monitoring

The **Admin › Manager Configuration › Monitoring** section allows you to enable Uyuni monitoring with Prometheus.

For more information about monitoring, see **Administration Guide › Monitoring**.

2.13.6. Task Schedules

The **Admin › Task Schedules** section lists all predefined task bunches. Tasks can be grouped together in bunches to simplify managing them.

This page shows the schedule for each bunch of tasks. Every schedule shows how frequently it runs using cron notation, the time it became active, and the bunch that it belongs to.

Click a schedule to change its frequency, disable or activate it.



Do not disable a schedule if you are not certain what it does. Some schedules are essential

for Uyuni to work properly.

For more information about task schedules, see **Administration Guide › Task Schedules**.

2.13.7. Task Engine Status

The **Admin › Task Engine Status** section shows all running tasks by the Uyuni task engine.

Navigate to the Last Execution Times tab to see the task list. Each task shows the time it was last run, and the current status of the task.

Navigate to the Runtime Status tab to see all tasks that have run in the past five minutes. Each task shows the start and end time, the amount of time the task ran for, and the current status. Some tasks will also provide further data, if available.

2.13.8. Show Tomcat Logs

The **Admin › Show Tomcat Logs** section shows the Apache Tomcat log file. You can also view the Tomcat log from the command prompt at /var/log/rhn/rhn_web_ui.log.

The **Admin › Show Tomcat Logs** section is only available if you are signed in to Uyuni with an administrator account.

2.14. Help Menu

The Help section opens the current version of the Uyuni documentation in a new browser tab. This is the documentation installed locally on your Uyuni Server.

For all versions and formats of the Uyuni documentation, see https://www.uyuni-project.org/uyuni-docs/

2.14.1. Documentation

The **Help › Documentation 2026.11** section opens the current version of the Uyuni documentation in a new browser tab. This is the documentation installed locally on your Uyuni Server.

For all versions and formats of the Uyuni documentation, see https://www.uyuni-project.org/uyuni-docs/index.html.

2.14.2. Release Notes

The **Help › Release Notes** section opens the current version of the Uyuni Release Notes in a new browser tab.

2.14.3. API Menu

The **Help › API** section contains links to the available API calls, and includes an API FAQ and sample scripts.

2.14.3.1. API Overview

The **Help › API › Overview** section provides a list of available API calls. Click the name of an API call to see the relevant documentation.

For the full API documentation, see API Documentation.

2.14.3.2. API FAQ

The **Help › API › FAQ** section contains frequently asked questions related to Uyuni APIs.

See: https://documentation.suse.com/multi-linux-manager/2026.11/api/docs/api/faqs.html

2.14.3.3. API Sample Scripts

The **Help: › API › Sample Scripts** section contains example API calls for you to copy. The scripts are written in Ruby, Perl, and Python.

See: https://www.uyuni-project.org/uyuni-docs-api/uyuni/api/scripts.html

Chapter 3. spacecmd Reference



To access a shell inside the Server container, run mgrctl term on the container host. From there, one can run the CLI tools as usual.

The following section will help you become more familiar with the spacecmd command-line interface. This interface is available for Uyuni, Satellite and Spacewalk servers. spacecmd is written in Python and uses the XML-RPC API provided by the server.

What can spacecmd do for me?

- Manage almost all aspects of Uyuni from the command line with spacecmd
- Tab completion is available for all commands
- Single commands can be passed to spacecmd without entering the interactive shell (excellent for shell scripts)
- May also be accessed and used as an interactive shell
- Advanced search methods are available for finding specific systems, thus removing the need to create system groups (nevertheless groups are still recommended)
- Complete functionality through the Spacewalk API. Almost all commands that can be executed from the Web UI can be performed via the spacecmd command-line

3.1. Configuring spacecmd



To access a shell inside the Server container, run mgrctl term on the container host. From there, one can run the CLI tools as usual.

The following section provides configuration tips for spacecmd.

3.1.1. Setup spacecmd credentials

Normally spacecmd prompts you for a username and password each time you attempt to login to the interactive shell. Alternatively you can configure spacecmd with a credentials file to avoid this requirement.

Procedure: Creating a spacecmd credentials file

1. Create a hidden spacecmd directory in your home directory and set permissions:

```
mkdir ~/.spacecmd
chmod 700 ~/.spacecmd
```

2. Create a config file in ~/.spacecmd/ and provide proper permissions:

```
touch ~/.spacecmd/config
chmod 600 ~/.spacecmd/config
```

3. Edit the config file and add the following configuration lines. (You can use either localhost, when running spacecmd from your Uyuni server container, or the FQDN of your Uyuni server):

```
[spacecmd]

server=FQDN-here

username=username-here
password=password-here
```

4. Check connectivity by entering spacecmd as root:

```
# spacecmd
```

3.1.2. spacecmd quiet mode

By default spacecmd prints server status messages during connection attempts. These messages can cause a lot of clutter when parsing system lists. The following alias will force spacecmd to use quiet mode thus preventing this behavior. Add the following line to your ~/.bashrc file:

```
alias spacecmd='spacecmd -q'
```

3.1.3. spacecmd help

spacecmd help can be accessed by typing spacecmd -h --help

```
Usage: spacecmd [options] [command]

Options:
  -c CONFIG, --config CONFIG
                        config file to use [default: ~/.spacecmd/config]
  -u USERNAME, --username=USERNAME
                        use this username to connect to the server
  -p PASSWORD, --password=PASSWORD
                        use this password to connect to the server
  -s SERVER, --server=SERVER
                        connect to this server [default: local hostname]
  --nossl               use HTTP instead of HTTPS
  --nohistory           do not store command history
  -y, --yes             answer yes for all questions
  -q, --quiet           print only error messages
```

```
  -d, --debug           print debug messages (can be passed multiple times)
  -h, --help            show this help message and exit
```

As root you can access available functions without entering the spacecmd shell:

```
# spacecmd -- help

        Documented commands (type help <topic>):
========================================
activationkey_addchildchannels         org_trustdetails
activationkey_addconfigchannels        package_details
activationkey_addentitlements          package_listdependencies
activationkey_addgroups                package_listerrata
activationkey_addpackages              package_listinstalledsystems
activationkey_clone                    package_listorphans
activationkey_create                   package_remove
activationkey_delete                   package_removeorphans
activationkey_details                  package_search
activationkey_diff                     repo_addfilters
activationkey_disable                  repo_clearfilters
activationkey_disableconfigdeployment  repo_create

...
```

3.2. help

List all available spacecmd commands with the help function.

Check for additional help on a specific function by calling for example:

```
user_create --help
```

Listing 1. Full List of Available Help Commands

```
Documented commands (type help <topic>):
========================================
activationkey_addchildchannels         org_removetrust
activationkey_addconfigchannels        org_rename
activationkey_addentitlements          org_trustdetails
activationkey_addgroups                package_details
activationkey_addpackages              package_listdependencies
activationkey_clone                    package_listerrata
activationkey_create                   package_listinstalledsystems
activationkey_delete                   package_listorphans
activationkey_details                  package_remove
activationkey_diff                     package_removeorphans
activationkey_disable                  package_search
activationkey_disableconfigdeployment  repo_addfilters
activationkey_enable                   repo_clearfilters
activationkey_enableconfigdeployment   repo_create
activationkey_export                   repo_delete
activationkey_import                   repo_details
activationkey_list                     repo_list
activationkey_listbasechannel          repo_listfilters
activationkey_listchildchannels        repo_removefilters
activationkey_listconfigchannels       repo_rename
```

```
activationkey_listentitlements          repo_setfilters
activationkey_listgroups                repo_updatessl
activationkey_listpackages              repo_updateurl
activationkey_listsystems               report_duplicates
activationkey_removechildchannels       report_errata
activationkey_removeconfigchannels      report_inactivesystems
activationkey_removeentitlements        report_ipaddresses
activationkey_removegroups              report_kernels
activationkey_removepackages            report_outofdatesystems
activationkey_setbasechannel            report_ungroupedsystems
activationkey_setconfigchannelorder     scap_getxccdfscandetails
activationkey_setcontactmethod          scap_getxccdfscanruleresults
activationkey_setdescription            scap_listxccdfscans
activationkey_setuniversaldefault       scap_schedulexccdfscan
activationkey_setusagelimit             schedule_cancel
api                                     schedule_details
clear                                   schedule_getoutput
clear_caches                            schedule_list
configchannel_addfile                   schedule_listarchived
configchannel_backup                    schedule_listcompleted
configchannel_clone                     schedule_listfailed
configchannel_create                    schedule_listpending
configchannel_delete                    schedule_reschedule
configchannel_details                   snippet_create
configchannel_diff                      snippet_delete
configchannel_export                    snippet_details
configchannel_filedetails               snippet_list
configchannel_forcedeploy               snippet_update
configchannel_import                    softwarechannel_adderrata
configchannel_list                      softwarechannel_adderratabydate
configchannel_listfiles                 softwarechannel_addpackages
configchannel_listsystems               softwarechannel_addrepo
configchannel_removefiles               softwarechannel_clone
configchannel_sync                      softwarechannel_clonetree
configchannel_updatefile                softwarechannel_create
configchannel_verifyfile                softwarechannel_delete
cryptokey_create                        softwarechannel_details
cryptokey_delete                        softwarechannel_diff
cryptokey_details                       softwarechannel_errata_diff
cryptokey_list                          softwarechannel_errata_sync
custominfo_createkey                    softwarechannel_getorgaccess
custominfo_deletekey                    softwarechannel_list
custominfo_details                      softwarechannel_listallpackages
custominfo_listkeys                     softwarechannel_listbasechannels
custominfo_updatekey                    softwarechannel_listchildchannels
distribution_create                     softwarechannel_listerrata
distribution_delete                     softwarechannel_listerratabydate
distribution_details                    softwarechannel_listlatestpackages
distribution_list                       softwarechannel_listpackages
distribution_rename                     softwarechannel_listrepos
distribution_update                     softwarechannel_listsyncschedule
errata_apply                            softwarechannel_listsystems
errata_delete                           softwarechannel_mirrorpackages
errata_details                          softwarechannel_regenerateneededcache
errata_findbycve                        softwarechannel_regenerateyumcache
errata_list                             softwarechannel_removeerrata
errata_listaffectedsystems              softwarechannel_removepackages
errata_listcves                         softwarechannel_removerepo
errata_publish                          softwarechannel_removesyncschedule
errata_search                           softwarechannel_setorgaccess
errata_summary                          softwarechannel_setsyncschedule
filepreservation_create                 softwarechannel_sync
filepreservation_delete                 softwarechannel_syncrepos
filepreservation_details                ssm_add
filepreservation_list                   ssm_clear
```

```
get_apiversion                          ssm_intersect
get_certificateexpiration               ssm_list
get_serverversion                       ssm_remove
get_session                             system_addchildchannels
group_addsystems                        system_addconfigchannels
group_backup                            system_addconfigfile
group_create                            system_addcustomvalue
group_delete                            system_addentitlements
group_details                           system_addnote
group_list                              system_applyerrata
group_listsystems                       system_comparepackageprofile
group_removesystems                     system_comparepackages
group_restore                           system_comparewithchannel
help                                    system_createpackageprofile
history                                 system_delete
kickstart_addactivationkeys             system_deletenotes
kickstart_addchildchannels              system_deletepackageprofile
kickstart_addcryptokeys                 system_deployconfigfiles
kickstart_addfilepreservations          system_details
kickstart_addoption                     system_installpackage
kickstart_addpackages                   system_list
kickstart_addscript                     system_listbasechannel
kickstart_addvariable                   system_listchildchannels
kickstart_clone                         system_listconfigchannels
kickstart_create                        system_listconfigfiles
kickstart_delete                        system_listcustomvalues
kickstart_details                       system_listentitlements
kickstart_diff                          system_listerrata
kickstart_disableconfigmanagement       system_listevents
kickstart_disableremotecommands         system_listhardware
kickstart_enableconfigmanagement        system_listinstalledpackages
kickstart_enablelogging                 system_listnotes
kickstart_enableremotecommands          system_listpackageprofiles
kickstart_export                        system_listupgrades
kickstart_getcontents                   system_lock
kickstart_getsoftwaredetails            system_reboot
kickstart_getupdatetype                 system_removechildchannels
kickstart_import                        system_removeconfigchannels
kickstart_import_raw                    system_removecustomvalues
kickstart_importjson                    system_removeentitlement
kickstart_list                          system_removepackage
kickstart_listactivationkeys            system_rename
kickstart_listchildchannels             system_runscript
kickstart_listcryptokeys                system_schedulehardwarerefresh
kickstart_listcustomoptions             system_schedulepackagerefresh
kickstart_listoptions                   system_search
kickstart_listpackages                  system_setbasechannel
kickstart_listscripts                   system_setconfigchannelorder
kickstart_listvariables                 system_setcontactmethod
kickstart_removeactivationkeys          system_show_packageversion
kickstart_removechildchannels           system_syncpackages
kickstart_removecryptokeys              system_unlock
kickstart_removefilepreservations       system_updatecustomvalue
kickstart_removeoptions                 system_upgradepackage
kickstart_removepackages                toggle_confirmations
kickstart_removescript                  user_adddefaultgroup
kickstart_removevariables               user_addgroup
kickstart_rename                        user_addrole
kickstart_setcustomoptions              user_create
kickstart_setdistribution               user_delete
kickstart_setlocale                     user_details
kickstart_setpartitions                 user_disable
kickstart_setselinux                    user_enable
kickstartsetupdatetype                  user_list
kickstart_updatevariable                user_listavailableroles
```

```
list_proxies                          user_removedefaultgroup
login                                 user_removegroup
logout                                user_removerole
org_addtrust                          user_setemail
org_create                            user_setfirstname
org_delete                            user_setlastname
org_details                           user_setpassword
org_list                              user_setprefix
org_listtrusts                        whoami
org_listusers                         whoamitalkingto


Miscellaneous help topics:
==========================
time  systems  ssm
```

3.3. history

List recent commands using the history command.

```
spacecmd {SSM:0}> history
   1  help
   2  api
   3  exit
   4  help
   5  time --help
   6  quit
   7  clear
spacecmd {SSM:0}>
```

3.4. Troubleshooting spacecmd

This section provides troubleshooting solutions when working with spacecmd

3.4.1. Creating a distribution where spacecmd sets localhost instead of FQDN

Situation

When creating a distribution with spacecmd it will automatically set localhost as the server name instead of the FQDN of Uyuni. This will result in the following kernel option being written:

```
install=http://localhost/ks/dist/<distributionname>
```

Resolution

Set the FQDN in $HOME/.spacecmd/config like the following:

```
test:~/.spacecmd # cat config

[spacecmd]
server=test.mytest.env
```

```
username=admin
password=password
nossl=0
```

Cause

This problem may be experienced if $HOME/.spacecmd/config has been created and the server name option was set to localhost.

3.4.2. spacecmd not accepting commands or options

When running spacecmd non-interactively:

- you must escape arguments passed to the command.
- always put -- before arguments, to avoid them being treated as global arguments.
- make sure you escape any quotes that you pass to the functions so that they are not interpreted.

An example of a well-formed spacecmd command:

```
spacecmd -s server1 -- softwarechannel_create -n \'My Channel\' -l channel1 -a x86_64
```

3.4.3. spacecmd caching problems

The spacecmd command keeps a cache of the various systems and packages that you have installed. Sometimes, this can result in a mismatch between the system name and the system ID.

To clear the spacecmd cache, use this command:

```
spacecmd clear_caches
```

3.5. spacecmd Functions

The following sections provide descriptions for all documented spacecmd commands. Each command is grouped by the function prefix. Keep in mind that all commands may also be called using scripts and passed to spacecmd as stand-alone commands.

3.5.1. activationkey

The following spacecmd commands are available for use with activation keys.

3.5.1.1. activationkey_addchildchannels

Add child channels to an activation key.

```
usage: activationkey_addchildchannels KEY <CHANNEL ...>
```

3.5.1.2. activationkey_addconfigchannels

Add configuration channels to an activation key.

```
usage: activationkey_addconfigchannels KEY <CHANNEL ...> [options]

options:
  -t add channels to the top of the list
  -b add channels to the bottom of the list
```

3.5.1.3. activationkey_addentitlements

Add available entitlements to an activation key.

```
usage: activationkey_addentitlements KEY <ENTITLEMENT ...>
```



In the WebUI entitlements are known as System Types. Nevertheless the spacecmd backend still utilizes the entitlements term. Therefore any scripts you may be using can remain unchanged.

3.5.1.4. activationkey_addgroups

Add existing groups to an activation key.

```
usage: activationkey_addgroups KEY <GROUP ...>
```

3.5.1.5. activationkey_addpackages

Add packages to an activation key.

```
usage: activationkey_addpackages KEY <PACKAGE ...>
```

3.5.1.6. activationkey_clone

Clone an existing activation key.

```
usage examples:
                 activationkey_clone foo_key -c bar_key
                 activationkey_clone foo_key1 foo_key2 -c prefix
                 activationkey_clone foo_key -x "s/foo/bar"
                 activationkey_clone foo_key1 foo_key2 -x "s/foo/bar"

options:
  -c CLONE_NAME  : Name of the resulting key, treated as a prefix for multiple
                   keys
  -x "s/foo/bar" : Optional regex replacement, replaces foo with bar in the
                   clone description, base-channel label, child-channel
                   labels, config-channel names
```

3.5.1.7. activationkey_create

Create a new activation key.

```
usage: activationkey_create [options]

options:
  -n NAME
  -d DESCRIPTION
  -b BASE_CHANNEL
  -u set key as universal default
  -e [enterprise_entitled,virtualization_host]
```

3.5.1.8. activationkey_delete

Delete an existing activation key.

```
usage: activationkey_delete KEY
```

3.5.1.9. activationkey_details

Show details of an existing activation key.

```
usage: activationkey_details KEY ...
```

3.5.1.10. activationkey_diff

Check the difference between two activation keys.

```
usage: activationkey_diff SOURCE_ACTIVATIONKEY TARGET_ACTIVATIONKEY
```

3.5.1.11. activationkey_disable

Disable an existing activation key.

```
usage: activationkey_disable KEY [KEY ...]
```

3.5.1.12. activationkey_disableconfigdeployment

Disable configuration channel deployment for an existing activation key.

```
usage: activationkey_disableconfigdeployment KEY
```

3.5.1.13. activationkey_enable

Enable an existing activation key.

```
usage: activationkey_enable KEY [KEY ...]
```

3.5.1.14. activationkey_enableconfigdeployment

Enable configuration channel deployment for an existing activation key.

```
usage: activationkey_enableconfigdeployment KEY
```

3.5.1.15. activationkey_export

Export activation keys to a JSON formatted file.

```
usage: activationkey_export [options] [<KEY> ...]

options:
    -f outfile.json : specify an output filename, defaults to <KEY>.json
                      if exporting a single key, akeys.json for multiple keys,
                      or akey_all.json if no KEY specified (export ALL)

Note : KEY list is optional, default is to export ALL keys
```

3.5.1.16. activationkey_import

Import activation keys from JSON files

```
usage: activationkey_import <JSONFILE ...>
```

3.5.1.17. activationkey_list

List all existing activation keys.

```
usage: activationkey_list
```

3.5.1.18. activationkey_listbasechannel

List the base channel associated with an activation key.

```
usage: activationkey_listbasechannel KEY
```

3.5.1.19. activationkey_listchildchannels

List child channels associated with an activation key.

```
usage: activationkey_listchildchannels KEY
```

3.5.1.20. activationkey_listconfigchannels

List configuration channels associated with an activation key.

```
usage: activationkey_listconfigchannels KEY
```

3.5.1.21. activationkey_listentitlements

List entitlements associated with an activation key.

```
usage: activationkey_listentitlements KEY
```

3.5.1.22. activationkey_listgroups

List groups associated with an activation key

```
usage: activationkey_listgroups KEY
```

3.5.1.23. activationkey_listpackages

List packages associated with an activation key.

```
usage: activationkey_listpackages KEY
```

3.5.1.24. activationkey_listsystems

List systems registered with an activation key.

```
usage: activationkey_listsystems KEY
```

3.5.1.25. activationkey_removechildchannels

Remove child channels from an activation key.

```
usage: activationkey_removechildchannels KEY <CHANNEL ...>
```

3.5.1.26. activationkey_removeconfigchannels

Remove configuration channels from an activation key.

```
usage: activationkey_removeconfigchannels KEY <CHANNEL ...>
```

3.5.1.27. activationkey_removeentitlements

Remove entitlements from an activation key.

```
usage: activationkey_removeentitlements KEY <ENTITLEMENT ...>
```

3.5.1.28. activationkey_removegroups

Remove groups from an activation key.

```
usage: activationkey_removegroups KEY <GROUP ...>
```

3.5.1.29. activationkey_removepackages

Remove packages from an activation key.

```
usage: activationkey_removepackages KEY <PACKAGE ...>
```

3.5.1.30. activationkey_setbasechannel

Set the base channel for an activation key.

```
usage: activationkey_setbasechannel KEY CHANNEL
```

3.5.1.31. activationkey_setconfigchannelorder

Set the ranked order of configuration channels.

```
usage: activationkey_setconfigchannelorder KEY
```

3.5.1.32. activationkey_setcontactmethod

Set the contact method to use for systems registered with a specific key. (Use the XML-RPC API to access the latest contact methods.)

```
usage: activationkey_setcontactmethod KEY CONTACT_METHOD
```

3.5.1.33. activationkey_setdescription

Add a description for an activation key.

```
usage: activationkey_setdescription KEY DESCRIPTION
```

3.5.1.34. activationkey_setuniversaldefault

Set a specific key as the universal default.

```
usage: activationkey_setuniversaldefault KEY
```



Using a universal default key is not a Best Practice recommendation.

3.5.2. api

The following API command and its options are available for calling the XML-RPC API directly. Calling the API directly allows you to use the latest features in Uyuni from the command-line using spacecmd as a wrapper for stand-alone commands or used from within scripts.

To gain access to the latest feature additions call api api.getApiCallList from within spacecmd to list all currently available API commands formatted in json.

3.5.2.1. api_

Call XML-RPC API with arguments directly.

```
usage: api [options] API_STRING

options:
  -A, --args  Arguments for the API other than session id in comma separated
              strings or JSON expression
  -F, --format   Output format
  -o, --output   Output file

examples:
  api api.getApiCallList
  api --args "sysgroup_A" systemgroup.listSystems
  api -A "rhel-i386-server-5,2011-04-01,2011-05-01" -F "%(name)s" \
      channel.software.listAllPackages
```

3.5.3. clear

Clears the terminal screen.

3.5.4. clear_caches

Clear the internal caches kept for systems and packages.

```
usage: clear_caches
```

3.5.5. configchannel

The following spacecmd commands are available for use with configuration channels.

3.5.5.1. configchannel_addfile

Creates a configuration file.

```
usage: configchannel_addfile [CHANNEL] [options]

options:
  -c CHANNEL
  -p PATH
  -r REVISION
  -o OWNER [default: root]
  -g GROUP [default: root]
  -m MODE [defualt: 0644]
  -x SELINUX_CONTEXT
  -d path is a directory
  -s path is a symlink
  -b path is a binary (or other file which needs base64 encoding)
  -t SYMLINK_TARGET
```

```
  -f local path to file contents

  Note re binary/base64: Some text files, notably those containing trailing
  newlines, those containing ASCII escape characters (or other charaters not
  allowed in XML) need to be sent as binary (-b).  Some effort is made to auto-
  detect files which require this, but you may need to explicitly specify.
```

3.5.5.2. configchannel_backup

Backup a configuration channel.

```
usage: configchannel_backup CHANNEL [OUTDIR]

OUTDIR defaults to $HOME/spacecmd-backup/configchannel/YYYY-MM-DD/CHANNEL
```

3.5.5.3. configchannel_clone

Clone configuration channels.

```
usage examples:
                configchannel_clone foo_label -c bar_label
                configchannel_clone foo_label1 foo_label2 -c prefix
                configchannel_clone foo_label -x "s/foo/bar"
                configchannel_clone foo_label1 foo_label2 -x "s/foo/bar"

options:
  -c CLONE_LABEL : name/label of the resulting cc (note does not update
                   description, see -x option), treated as a prefix if
                   multiple keys are passed
  -x "s/foo/bar" : Optional regex replacement, replaces foo with bar in the
                   clone name, label and description
  Note : If no -c or -x option is specified, interactive is assumed
```

3.5.5.4. configchannel_create

Create a configuration channel.

```
usage: configchannel_create [options]

options:
  -n NAME
  -l LABEL
  -d DESCRIPTION
```

3.5.5.5. configchannel_delete

Delete a configuration channel.

```
usage: configchannel_delete CHANNEL ...
```

3.5.5.6. configchannel_details

Show the details of a configuration channel.

```
usage: configchannel_details CHANNEL ...
```

3.5.5.7. configchannel_diff

Find differences between configuration channels.

```
usage: configchannel_diff SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.5.8. configchannel_export

Export configuration channels to a json formatted file.

```
usage: configchannel_export <CHANNEL>... [options]
options:
    -f outfile.json : specify an output filename, defaults to <CHANNEL>.json
                      if exporting a single channel, ccs.json for multiple
                      channels, or cc_all.json if no CHANNEL specified
                      e.g (export ALL)

Note : CHANNEL list is optional, default is to export ALL
```

3.5.5.9. configchannel_filedetails

Show the details of a file in a configuration channel.

```
usage: configchannel_filedetails CHANNEL FILE [REVISION]
```

3.5.5.10. configchannel_forcedeploy

Forces a redeployment of files within a channel on all subscribed systems.

```
usage: configchannel_forcedeploy CHANNEL
```

3.5.5.11. configchannel_import

Import configuration channels from a json file.

```
usage: configchannel_import <JSONFILES...>
```

3.5.5.12. configchannel_list

List all configuration channels.

```
usage: configchannel_list
```

3.5.5.13. configchannel_listfiles

List all files in a configuration channel.

```
usage: configchannel_listfiles CHANNEL ...
```

3.5.5.14. configchannel_listsystems

List all systems subscribed to a configuration channel.

```
usage: configchannel_listsystems CHANNEL
```

3.5.5.15. configchannel_removefiles

Remove configuration files.

```
usage: configchannel_removefile CHANNEL <FILE ...>
```

3.5.5.16. configchannel_sync

Sync configuration files between two configuration channels.

```
usage: configchannel_sync SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.5.17. configchannel_updatefile

Update a configuration file.

```
usage: configchannel_updatefile CHANNEL FILE
```

3.5.5.18. configchannel_verifyfile

Verify a configuration file.

```
usage: configchannel_verifyfile CHANNEL FILE <SYSTEMS>

<SYSTEMS> may be substituted with any of the following targets:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.6. cryptokey

The following spacecmd commands are available for use with cryptographic keys.

3.5.6.1. cryptokey_create

Create a cryptographic key.

```
usage: cryptokey_create [options]

options:
  -t GPG or SSL
  -d DESCRIPTION
  -f KEY_FILE
```

3.5.6.2. cryptokey_delete

Delete a cryptographic key.

```
usage: cryptokey_delete NAME
```

3.5.6.3. cryptokey_details

Show the contents of a cryptographic key.

```
usage: cryptokey_details KEY ...
```

3.5.6.4. cryptokey_list

List all cryptographic keys (SSL, GPG).

```
usage: cryptokey_list
```

3.5.7. custominfo

The following spacecmd commands are available for working with custom keys.

3.5.7.1. custominfo_createkey

Create a custom key.

```
usage: custominfo_createkey [NAME] [DESCRIPTION]
```

3.5.7.2. custominfo_deletekey

Delete a custom key.

```
usage: custominfo_deletekey KEY ...
```

3.5.7.3. custominfo_details

Show the details of a custom key.

```
usage: custominfo_details KEY ...
```

3.5.7.4. custominfo_listkeys

List all custom keys.

```
usage: custominfo_listkeys
```

3.5.7.5. custominfo_updatekey

Update a custom key.

```
usage: custominfo_updatekey [NAME] [DESCRIPTION]
```

3.5.8. distribution

The following spacecmd commands are available for working with kickstart distributions.

3.5.8.1. distribution_create

Create a Kickstart tree.

```
usage: distribution_create [options]

options:
  -n NAME
  -p path to tree
  -b base channel to associate with
  -t install type [fedora|rhel_4/5/6|suse|generic_rpm]
```

3.5.8.2. distribution_delete

Delete a Kickstart tree.

```
usage: distribution_delete LABEL
```

3.5.8.3. distribution_details

Show the details of a Kickstart tree.

```
usage: distribution_details LABEL
```

3.5.8.4. distribution_list

List the available autoinstall trees.

```
usage: distribution_list
```

3.5.8.5. distribution_rename

Rename a Kickstart tree.

```
usage: distribution_rename OLDNAME NEWNAME
```

3.5.8.6. distribution_update

Update the path of a Kickstart tree.

```
usage: distribution_update NAME [options]

options:
  -p path to tree
```

```
  -b base channel to associate with
  -t install type [fedora|rhel_4/5/6|suse|generic_rpm]
```

3.5.9. errata

The following spacecmd commands are available for use with errata data.

3.5.9.1. errata_apply

Apply an patch to all affected systems.

```
usage: errata_apply ERRATA|search:XXX ...
```

3.5.9.2. errata_delete

Delete an patch.

```
usage: errata_delete ERRATA|search:XXX ...
```

3.5.9.3. errata_details

Show the details of an patch.

```
usage: errata_details ERRATA|search:XXX ...
```

3.5.9.4. errata_findbycve

List errata addressing a CVE.

```
usage: errata_findbycve CVE-YYYY-NNNN ...
```

3.5.9.5. errata_list

List all patches.

```
usage: errata_list
```

3.5.9.6. errata_listaffectedsystems

List of systems affected by an patch.

```
usage: errata_listaffectedsystems ERRATA|search:XXX ...
```

3.5.9.7. errata_listcves

List of CVEs addressed by an patch.

```
usage: errata_listcves ERRATA|search:XXX ...
```

3.5.9.8. errata_publish

Publish a patch to a channel.

```
usage: errata_publish ERRATA|search:XXX <CHANNEL ...>
```

3.5.9.9. errata_search

List patches that meet user provided criteria

```
usage: errata_search CVE|RHSA|RHBA|RHEA|CLA ...

Example:
> errata_search CVE-2009:1674
> errata_search RHSA-2009:1674
```

3.5.9.10. errata_summary

Print a summary of all errata.

```
usage: errata_summary
```

3.5.10. filepreservation

The following spacecmd commands are available for working with kickstart file preservation lists.

3.5.10.1. filepreservation_create

Create a file preservation list.

```
usage: filepreservation_create [NAME] [FILE ...]
```

3.5.10.2. filepreservation_delete

Delete a file preservation list.

```
filepreservation_delete NAME
```

3.5.10.3. filepreservation_details

Show the details of a file preservation list.

```
usage: filepreservation_details NAME
```

3.5.10.4. filepreservation_list

List all file preservations.

```
usage: filepreservation_list
```

3.5.11. get

The following spacecmd commands are available for use with get.

3.5.11.1. get_apiversion

Display the API version of the server.

```
usage: get_apiversion
```

3.5.11.2. get_certificateexpiration

Print the expiration date of the server's entitlement certificate.

```
usage: get_certificateexpiration
```

3.5.11.3. get_serverversion

Display Uyuni server version.

```
usage: get_serverversion
```

3.5.11.4. get_session

Show the current session string.

```
usage: get_session
```

3.5.12. group

3.5.12.1. group_addsystems

Add systems to a group.

```
usage: group_addsystems GROUP <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.12.2. group_backup

Backup a system group.

```
usage: group_backup NAME [OUTDIR]

OUTDIR defaults to $HOME/spacecmd-backup/group/YYYY-MM-DD/NAME
```

3.5.12.3. group_create

Create a system group.

```
usage: group_create [NAME] [DESCRIPTION]
```

3.5.12.4. group_delete

Delete a system group.

```
usage: group_delete NAME ...
```

3.5.12.5. group_details

Show the details of a system group.

```
usage: group_details GROUP ...
```

3.5.12.6. group_list

List available system groups.

```
usage: group_list
```

3.5.12.7. group_listsystems

List the members of a group.

```
usage: group_listsystems GROUP
```

3.5.12.8. group_removesystems

Remove systems from a group.

```
usage: group_removesystems GROUP <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.12.9. group_restore

Restore a system group.

```
usage: group_backup INPUTDIR [NAME] ...
```

3.5.13. kickstart

The following spacecmd functions are available for use with kickstart.

3.5.13.1. kickstart_addactivationkeys

Add activation keys to a Kickstart profile.

```
usage: kickstart_addactivationkeys PROFILE <KEY ...>
```

3.5.13.2. kickstart_addchildchannels

Add a child channels to a Kickstart profile.

```
usage: kickstart_addchildchannels PROFILE <CHANNEL ...>
```

3.5.13.3. kickstart_addcryptokeys

Add cryptography keys to a Kickstart profile.

```
usage: kickstart_addcryptokeys PROFILE <KEY ...>
```

3.5.13.4. kickstart_addfilepreservations

Add file preservations to a Kickstart profile.

```
usage: kickstart_addfilepreservations PROFILE <FILELIST ...>
```

3.5.13.5. kickstart_addoption

Set an option for a Kickstart profile.

```
usage: kickstart_addoption PROFILE KEY [VALUE]
```

3.5.13.6. kickstart_addpackages

Add packages to a Kickstart profile.

```
usage: kickstart_addpackages PROFILE <PACKAGE ...>
```

3.5.13.7. kickstart_addscript

Add a script to a Kickstart profile.

```
usage: kickstart_addscript PROFILE [options]

options:
  -p PROFILE
  -e EXECUTION_TIME ['pre', 'post']
  -i INTERPRETER
  -f FILE
  -c execute in a chroot environment
  -t ENABLING_TEMPLATING
```

3.5.13.8. kickstart_addvariable

Add a variable to a Kickstart profile.

```
usage: kickstart_addvariable PROFILE KEY VALUE
```

3.5.13.9. kickstart_clone

Clone a Kickstart profile.

```
usage: kickstart_clone [options]

options:
  -n NAME
  -c CLONE_NAME
```

3.5.13.10. kickstart_create

Create a Kickstart profile.

```
usage: kickstart_create [options]

options:
  -n NAME
  -d DISTRIBUTION
  -p ROOT_PASSWORD
  -v VIRT_TYPE ['none', 'para_host', 'qemu', 'xenfv', 'xenpv']
```

3.5.13.11. kickstart_delete

Delete kickstart profiles.

```
usage: kickstart_delete PROFILE
usage: kickstart_delete PROFILE1 PROFILE2
usage: kickstart_delete "PROF*"
```

3.5.13.12. kickstart_details

Show the details of a Kickstart profile.

```
usage: kickstart_details PROFILE
```

3.5.13.13. kickstart_diff

List differences between two kickstart files.

```
usage: kickstart_diff SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.13.14. kickstart_disableconfigmanagement

Disable configuration management on a Kickstart profile.

```
usage: kickstart_disableconfigmanagement PROFILE
```

3.5.13.15. kickstart_disableremotecommands

Disable remote commands on a Kickstart profile.

```
usage: kickstart_disableremotecommands PROFILE
```

3.5.13.16. kickstart_enableconfigmanagement

Enable configuration management on a Kickstart profile.

```
usage: kickstart_enableconfigmanagement PROFILE
```

3.5.13.17. kickstart_enablelogging

Enable logging for a Kickstart profile.

```
usage: kickstart_enablelogging PROFILE
```

3.5.13.18. kickstart_enableremotecommands

Enable remote commands on a Kickstart profile.

```
usage: kickstart_enableremotecommands PROFILE
```

3.5.13.19. kickstart_export

Export kickstart profiles to json formatted file.

```
usage: kickstart_export <KSPROFILE>... [options]
options:
    -f outfile.json : specify an output filename, defaults to <KSPROFILE>.json
                      if exporting a single kickstart, profiles.json for multiple
                      kickstarts, or ks_all.json if no KSPROFILE specified
                      e.g (export ALL)

Note : KSPROFILE list is optional, default is to export ALL
```

3.5.13.20. kickstart_getcontents

Show the contents of a Kickstart profile as they would be presented to a client.

```
usage: kickstart_getcontents LABEL
```

3.5.13.21. kickstart_getsoftwaredetails

Gets kickstart profile software details.

```
usage: kickstart_getsoftwaredetails KS_LABEL
usage: kickstart_getsoftwaredetails KS_LABEL KS_LABEL2 ...
```

3.5.13.22. kickstart_getupdatetype

Get the update type for a kickstart profiles.

```
usage: kickstart_getupdatetype PROFILE
usage: kickstart_getupdatetype PROFILE1 PROFILE2
usage: kickstart_getupdatetype "PROF*"
```

3.5.13.23. kickstart_import

Import a Kickstart profile from a file.

```
usage: kickstart_import [options]

options:
  -f FILE
  -n NAME
  -d DISTRIBUTION
```

```
  -v VIRT_TYPE ['none', 'para_host', 'qemu', 'xenfv', 'xenpv']
```

3.5.13.24. kickstart_import_raw

Import a raw Kickstart or AutoYaST profile from a file.

```
usage: kickstart_import_raw [options]

options:
  -f FILE
  -n NAME
  -d DISTRIBUTION
  -v VIRT_TYPE ['none', 'para_host', 'qemu', 'xenfv', 'xenpv']
```

3.5.13.25. kickstart_importjson

Import kickstart profiles from json file.

```
usage: kickstart_import <JSONFILES...>
```

3.5.13.26. kickstart_list

List the available Kickstart profiles.

```
usage: kickstart_list
```

3.5.13.27. kickstart_listactivationkeys

List the activation keys associated with a Kickstart profile.

```
usage: kickstart_listactivationkeys PROFILE
```

3.5.13.28. kickstart_listchildchannels

List the child channels of a Kickstart profile.

```
usage: kickstart_listchildchannels PROFILE
```

3.5.13.29. kickstart_listcryptokeys

List the crypto keys associated with a Kickstart profile.

```
usage: kickstart_listcryptokeys PROFILE
```

3.5.13.30. kickstart_listcustomoptions

List the custom options of a Kickstart profile.

```
usage: kickstart_listcustomoptions PROFILE
```

3.5.13.31. kickstart_listoptions

List the options of a Kickstart profile.

```
usage: kickstart_listoptions PROFILE
```

3.5.13.32. kickstart_listpackages

List the packages for a Kickstart profile.

```
usage: kickstart_listpackages PROFILE
```

3.5.13.33. kickstart_listscripts

List the scripts for a Kickstart profile.

```
usage: kickstart_listscripts PROFILE
```

3.5.13.34. kickstart_listvariables

List the variables of a Kickstart profile.

```
usage: kickstart_listvariables PROFILE
```

3.5.13.35. kickstart_removeactivationkeys

Remove activation keys from a Kickstart profile.

```
usage: kickstart_removeactivationkeys PROFILE <KEY ...>
```

3.5.13.36. kickstart_removechildchannels

Remove child channels from a Kickstart profile.

```
usage: kickstart_removechildchannels PROFILE <CHANNEL ...>
```

3.5.13.37. kickstart_removecryptokeys

Remove crypto keys from a Kickstart profile.

```
usage: kickstart_removecryptokeys PROFILE <KEY ...>
```

3.5.13.38. kickstart_removefilepreservations

Remove file preservations from a Kickstart profile.

```
usage: kickstart_removefilepreservations PROFILE <FILE ...>
```

3.5.13.39. kickstart_removeoptions

Remove options from a Kickstart profile.

```
usage: kickstart_removeoptions PROFILE <OPTION ...>
```

3.5.13.40. kickstart_removepackages

Remove packages from a Kickstart profile.

```
usage: kickstart_removepackages PROFILE <PACKAGE ...>
```

3.5.13.41. kickstart_removescript

Add a script to a Kickstart profile.

```
usage: kickstart_removescript PROFILE [ID]
```

3.5.13.42. kickstart_removevariables

Remove variables from a Kickstart profile.

```
usage: kickstart_removevariables PROFILE <KEY ...>
```

3.5.13.43. kickstart_rename

Rename a Kickstart profile

```
usage: kickstart_rename OLDNAME NEWNAME
```

3.5.13.44. kickstart_setcustomoptions

Set custom options for a Kickstart profile.

```
usage: kickstart_setcustomoptions PROFILE
```

3.5.13.45. kickstart_setdistribution

Set the distribution for a Kickstart profile.

```
usage: kickstart_setdistribution PROFILE DISTRIBUTION
```

3.5.13.46. kickstart_setlocale

Set the locale for a Kickstart profile.

```
usage: kickstart_setlocale PROFILE LOCALE
```

3.5.13.47. kickstart_setpartitions

Set the partitioning scheme for a Kickstart profile.

```
usage: kickstart_setpartitions PROFILE
```

3.5.13.48. kickstart_setselinux

Set the SELinux mode for a Kickstart profile.

```
usage: kickstart_setselinux PROFILE MODE
```

3.5.13.49. kickstartsetupdatetype

Set the update type for a kickstart profiles.

```
usage: kickstartsetupdatetype [options] KS_LABEL

options:
    -u UPDATE_TYPE ['red_hat', 'all', 'none']
```

3.5.13.50. kickstart_updatevariable

Update a variable in a Kickstart profile.

```
usage: kickstart_updatevariable PROFILE KEY VALUE
```

3.5.14. list_proxies

The following spacecmd function is available for listing proxies.

3.5.14.1. list_proxies

List the proxies within the user's organization.

```
usage: list_proxies
```

3.5.15. login

Connect as a specific user to the SUSE manager server.

```
# spacecmd -- login <USERNAME>
```

3.5.16. logout

Logout from server as the current user.

```
# spacecmd -- logout
```

3.5.17. org

The following spacecmd functions are available for use with organizations.

3.5.17.1. org_addtrust

Add a trust between two organizations

```
usage: org_addtrust YOUR_ORG ORG_TO_TRUST
```

3.5.17.2. org_create

Create an organization.

```
usage: org_create [options]

options:
  -n ORG_NAME
  -u USERNAME
  -P PREFIX (Dr., Mr., Miss, Mrs., Ms.)
  -f FIRST_NAME
  -l LAST_NAME
  -e EMAIL
  -p PASSWORD
  --pam enable PAM authentication
```

3.5.17.3. org_createfirst

Create the initial organization and admin user after completing the installation.

```
usage: org_createfirst [options]

options:
  -n ORG_NAME
  -u USERNAME
  -f FIRST_NAME
  -l LAST_NAME
  -e EMAIL
  -p PASSWORD
```

3.5.17.4. org_delete

Delete an organization.

```
usage: org_delete NAME
```

3.5.17.5. org_details

Show the details of an organization.

```
usage: org_details NAME
```

3.5.17.6. org_list

List all organizations.

```
usage: org_list
```

3.5.17.7. org_listtrusts

List an organization's trusts.

```
org_listtrusts NAME
```

3.5.17.8. org_listusers

List an organization's users.

```
org_listusers NAME
```

3.5.17.9. org_removetrust

Remove a trust between two organizations.

```
usage: org_removetrust YOUR_ORG TRUSTED_ORG
```

3.5.17.10. org_rename

Rename an organization.

```
usage: org_rename OLDNAME NEWNAME
```

3.5.17.11. org_trustdetails

Show the details of an organizational trust.

```
usage: org_trustdetails TRUSTED_ORG
```

3.5.18. package

The following spacecmd functions are available for working with packages.

3.5.18.1. package_details

Show the details of a software package.

```
usage: package_details PACKAGE ...
```

3.5.18.2. package_listdependencies

List the dependencies for a package.

```
usage: package_listdependencies PACKAGE
```

3.5.18.3. package_listerrata

List the errata that provide this package.

```
usage: package_listerrata PACKAGE ...
```

3.5.18.4. package_listinstalledsystems

List the systems with a package installed.

```
usage: package_listinstalledsystems PACKAGE ...
```

3.5.18.5. package_listorphans

List packages that are not in a channel.

```
usage: package_listorphans
```

3.5.18.6. package_remove

Remove a package from Uyuni/Satellite

```
usage: package_remove PACKAGE ...
```

3.5.18.7. package_removeorphans

Remove packages that are not in a channel.

```
usage: package_removeorphans
```

3.5.18.8. package_search

Find packages that meet the given criteria.

```
usage: package_search NAME|QUERY
```

```
Example: package_search kernel
```

Advanced Search

```
Available Fields: name, epoch, version, release, arch, description, summary

Example: name:kernel AND version:2.6.18 AND -description:devel
```

3.5.19. proxy_container_config

The following spacecmd functions are available for use with proxy container configuration

3.5.19.1. proxy_container_config_generate_cert

Create Uyuni Proxy container configuration and generate new SSL server certificate for it.

```
usage: proxy_container_config_generate_cert PROXY_FQDN PARENT_FQDN MAX_CACHE EMAIL

parameters:
  PROXY_FQDN  the fully qualified domain name of the proxy to create.
  PARENT_FQDN the fully qualified domain name of the server or another proxy to connect
to.
  MAX_CACHE   the maximum cache size in MB. 60% of the storage is a good value.
  EMAIL       the email of the proxy administrator

options:
  -o, --output Path where to create the generated configuration. Default: 'config.zip'
  -p, --ssh-port SSH port the proxy listens one. Default: 22
  --ca-cert path to the certificate of the CA to use to generate a new proxy certificate.
           Using /root/ssl-build/RHN-ORG-TRUSTED-SSL-CERT by default.
  --ca-key path to the private key of the CA to use to generate a new proxy certificate.
           Using /root/ssl-build/RHN-ORG-PRIVATE-SSL-KEY by default.
  --ca-pass path to a file containing the password of the CA private key, will be prompted
if not passed.
  --ssl-cname alternate name of the proxy to set in the certificate. Can be provided
multiple times
  --ssl-country country code to set in the certificate. If omitted, default values from
mgr-ssl-tool will be used.
  --ssl-state state name to set in the certificate. If omitted, default values from mgr-
ssl-tool will be used.
  --ssl-city the city name to set in the certificate. If omitted, default values from mgr-
ssl-tool will be used.
  --ssl-org the organization name to set in the certificate. If omitted, default values
```

```
from mgr-ssl-tool will be used.
  --ssl-org-unit the organization unit name to set in the certificate. If omitted, default
values from mgr-ssl-tool will be used.
  --ssl-email the email to set in the certificate. If omitted, default values from mgr-
ssl-tool will be used.
```

3.5.19.2. proxy_container_config

Create Uyuni Proxy container configuration and use already existing SSL server certificate.

```
usage: proxy_container_config [options] PROXY_FQDN PARENT_FQDN MAX_CACHE EMAIL ROOT_CA CRT
KEY

parameters:
  PROXY_FQDN  the fully qualified domain name of the proxy to create.
  PARENT_FQDN the fully qualified domain name of the server or another proxy to connect
to.
  MAX_CACHE   the maximum cache size in MB. 60% of the storage is a good value.
  EMAIL       the email of the proxy administrator
  CA          path to the root CA used to sign the proxy certificate in PEM format
  CRT         path to the proxy certificate in PEM format
  KEY         path to the proxy certificate private key in PEM format

options:
  -o, --output Path where to create the generated configuration. Default: 'config.zip'
  -p, --ssh-port SSH port the proxy listens one. Default: 22
  -i, --intermediate-ca  Path to an intermediate CA used to sign the proxy
            certicate in PEM format. May be provided multiple times.
```

3.5.20. repo

The following spacecmd functions are available for working with repositories.

3.5.20.1. repo_addfilters

Add filters for a user repository.

```
usage: repo_addfilters repo <filter ...>
```

3.5.20.2. repo_clearfilters

Clears the filters for a user repository.

```
usage: repo_clearfilters repo
```

3.5.20.3. repo_create

Create a user repository.

```
usage: repo_create <options>

options:
  -n, --name   name of repository
  -u, --url    url of repository

  --ca         SSL CA certificate (not required)
  --cert       SSL Client certificate (not required)
  --key        SSL Client key (not required)
```

3.5.20.4. repo_delete

Delete a user repository.

```
usage: repo_delete <repo ...>
```

3.5.20.5. repo_details

Show the details of a user repository.

```
usage: repo_details <repo ...>
```

3.5.20.6. repo_list

List all available user repository.

```
usage: repo_list
```

3.5.20.7. repo_listfilters

Show the filters for a user repository.

```
usage: repo_listfilters repo
```

===repo_removefilters

Remove filters from a user repository.

```
usage: repo_removefilters repo <filter ...>
```

3.5.20.8. repo_rename

Rename a user repository.

```
usage: repo_rename OLDNAME NEWNAME
```

3.5.20.9. repo_setfilters

Set the filters for a user repo.

```
usage: repo_setfilters repo <filter ...>
```

3.5.20.10. repo_updatessl

Change the SSL certificates of a user repository.

```
usage: repo_updatessl <options>
options:
  --ca          SSL CA certificate (not required)
  --cert        SSL Client certificate (not required)
  --key         SSL Client key (not required)
```

3.5.20.11. repo_updateurl

Change the URL of a user repository.

```
usage: repo_updateurl <repo> <url>
```

3.5.21. report

The following spacecmd functions are available for working with reports.

3.5.21.1. report_duplicates

List duplicate system profiles.

```
usage: report_duplicates
```

3.5.21.2. report_errata

List all errata and how many systems they affect.

```
usage: report_errata [ERRATA|search:XXX ...]
```

3.5.21.2.1. report_inactivesystems

List all inactive systems.

```
usage: report_inactivesystems [DAYS]
```

3.5.21.3. report_ipaddresses

List the hostname and IP of each system.

```
usage: report_network [<SYSTEMS>]

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.21.4. report_kernels

List the running kernel of each system.

```
usage: report_kernels [<SYSTEMS>]

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.21.5. report_outofdatesystems

List all out-of-date systems.

```
usage: report_outofdatesystems
```

3.5.21.6. report_ungroupedsystems

List all ungrouped systems.

```
usage: report_ungroupedsystems
```

3.5.22. scap

The following spacecmd functions are available for working with OpenSCAP.

3.5.22.1. scap_getxccdfscandetails

Get details of given OpenSCAP XCCDF scan.

```
usage: scap_getxccdfscandetails <XID>
```

3.5.22.2. scap_getxccdfscanruleresults

Return a full list of RuleResults for given OpenSCAP XCCDF scan.

```
usage: scap_getxccdfscanruleresults <XID>
```

3.5.22.3. scap_listxccdfscans

Return a list of finished OpenSCAP scans for given systems.

```
usage: scap_listxccdfscans <SYSTEMS>
```

3.5.22.4. scap_schedulexccdfscan

Schedule Scap XCCDF scan.

```
usage: scap_schedulexccdfscan PATH_TO_XCCDF_FILE XCCDF_OPTIONS SYSTEMS

Example:
> scap_schedulexccdfscan '/usr/share/openscap/scap-security-xccdf.xml' 'profile Web-
Default' \
system-scap.example.com
```

3.5.23. schedule

The following spacecmd functions are available for working with scheduling.

3.5.23.1. schedule_cancel

Cancel a scheduled action.

```
usage: schedule_cancel ID|* ...
```

3.5.23.2. schedule_details

Show the details of a scheduled action.

```
usage: schedule_details ID
```

3.5.23.3. schedule_getoutput

Show the output from an action.

```
usage: schedule_getoutput ID
```

3.5.23.4. schedule_list

List all actions.

```
usage: schedule_list [BEGINDATE] [ENDDATE]

Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would mean 2 hours in the
future.  You can also use negative values to express times in the past (e.g., -7d would be
one week ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.23.5. schedule_listarchived

List archived actions.

```
usage: schedule_listarchived [BEGINDATE] [ENDDATE]

Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would mean 2 hours in the
future.  You can also use negative values to express times in the past (e.g., -7d would be
one week ago).
```

```
Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.23.6. schedule_listcompleted

List completed actions.

```
Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would mean 2 hours in the
future.  You can also use negative values to express times in the past (e.g., -7d would be
one week ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.23.7. schedule_listfailed

List failed actions.

```
usage: schedule_listfailed [BEGINDATE] [ENDDATE]

Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would mean 2 hours in the
future.  You can also use negative values to express times in the past (e.g., -7d would be
one week ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.23.8. schedule_listpending

List pending actions.

```
usage: schedule_listpending [BEGINDATE] [ENDDATE]

Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would mean 2 hours in the
future.  You can also use negative values to express times in the past (e.g., -7d would be
one week ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.23.9. schedule_reschedule::

Reschedule failed actions.

```
usage: schedule_reschedule ID|* ...
```

3.5.24. snippet

The following spacecmd functions are available for working with Kickstart snippets.

3.5.24.1. snippet_create

Create a Kickstart snippet

```
usage: snippet_create [options]

options:
  -n NAME
  -f FILE
```

3.5.24.2. snippet_delete

Delete a Kickstart snippet.

```
usage: snippet_removefile NAME
```

3.5.24.3. snippet_details

Show the contents of a snippet.

```
usage: snippet_details SNIPPET ...
```

3.5.24.4. snippet_list

List the available Kickstart snippets.

```
usage: snippet_list
```

3.5.24.5. snippet_update

Update a Kickstart snippet.

```
usage: snippet_update NAME
```

3.5.25. softwarechannel

The following spacecmd functions are available for working with software channels.

3.5.25.1. softwarechannel_adderrata

Add patches from one channel into another channel.

```
usage: softwarechannel_adderrata SOURCE DEST <ERRATA|search:XXX ...>
Options:
    -q/--quick : Don't display list of packages (slightly faster)
    -s/--skip :  Skip errata which appear to exist already in DEST
```

3.5.25.2. softwarechannel_adderratabydate

Add errata from one channel into another channel based on a date range.

```
usage: softwarechannel_adderratabydate [options] SOURCE DEST BEGINDATE ENDDATE
Date format : YYYYMMDD
Options:
        -p/--publish : Publish errata to the channel (don't clone)
```

3.5.25.3. softwarechannel_addpackages

Add packages to a software channel.

```
usage: softwarechannel_addpackages CHANNEL <PACKAGE ...>
```

3.5.25.4. softwarechannel_addrepo

Add a repo to a software channel.

```
usage: softwarechannel_addrepo CHANNEL REPO
```

3.5.25.5. softwarechannel_clone

Clone a software channel.

```
usage: softwarechannel_clone [options]

options:
  -s SOURCE_CHANNEL
  -n NAME
  -l LABEL
  -p PARENT_CHANNEL
  --gpg-copy/-g (copy SOURCE_CHANNEL GPG details)
  --gpg-url GPG_URL
  --gpg-id GPG_ID
  --gpg-fingerprint GPG_FINGERPRINT
  -o do not clone any patches
  --regex/-x "s/foo/bar" : Optional regex replacement,
        replaces foo with bar in the clone name and label
```



Patches already cloned in the organization are reused as they are, so changes to the original patches since then, such as a retraction, are not included. For more information, see **Administration Guide › Channel Clones**.

3.5.25.6. softwarechannel_clonetree

Clone a software channel and its child channels.

```
usage: softwarechannel_clonetree [options]A
             e.g    softwarechannel_clonetree foobasechannel -p "my_"
                    softwarechannel_clonetree foobasechannel -x "s/foo/bar"
                    softwarechannel_clonetree foobasechannel -x "s/^/my_"

options:
  -s/--source-channel SOURCE_CHANNEL
  -p/--prefix PREFIX (is prepended to the label and name of all channels)
  --gpg-copy/-g (copy GPG details for correspondoing source channel))
  --gpg-url GPG_URL (applied to all channels)
  --gpg-id GPG_ID (applied to all channels)
  --gpg-fingerprint GPG_FINGERPRINT (applied to all channels)
  -o do not clone any errata
  --regex/-x "s/foo/bar" : Optional regex replacement,
        replaces foo with bar in the clone name, label and description
```



Patches already cloned in the organization are reused as they are, so changes to the original patches since then, such as a retraction, are not included. For more information,

see **Administration Guide › Channel Clones**.

3.5.25.7. softwarechannel_create

Create a software channel.

```
usage: softwarechannel_create [options]

options:
  -n NAME
  -l LABEL
  -p PARENT_CHANNEL
  -a ARCHITECTURE ['ia32', 'ia64', 'x86_64', 'ppc',
                   'i386-sun-solaris', 'sparc-sun-solaris']
  -c CHECKSUM ['sha1', 'sha256', 'sha384', 'sha512']
  -u GPG_URL
  -i GPG_ID
  -f GPG_FINGERPRINT
```

3.5.25.8. softwarechannel_delete

Delete a software channel.

```
usage: softwarechannel_delete <CHANNEL ...>
```

3.5.25.9. softwarechannel_details

Show the details of a software channel.

```
usage: softwarechannel_details <CHANNEL ...>
```

3.5.25.10. softwarechannel_diff

Check the difference between software channels.

```
usage: softwarechannel_diff SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.25.11. softwarechannel_errata_diff

Check the difference between software channel files.

```
usage: softwarechannel_errata_diff SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.25.12. softwarechannel_errata_sync

Sync errata of two software channels.

```
usage: softwarechannel_errata_sync SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.25.13. softwarechannel_getorgaccess

Get the org-access for the software channel.

```
usage : softwarechannel_getorgaccess : get org access for all channels
usage : softwarechannel_getorgaccess <channel_label(s)> : get org access for specific
channel(s)
```

3.5.25.14. softwarechannel_list

List all available software channels.

```
usage: softwarechannel_list [options]'
options:
  -v verbose (display label and summary)
  -t tree view (pretty-print child-channels)
```

3.5.25.15. softwarechannel_listallpackages

List all packages in a channel.

```
usage: softwarechannel_listallpackages CHANNEL
```

3.5.25.16. softwarechannel_listbasechannels

List all base software channels.

```
usage: softwarechannel_listbasechannels [options]
options:
  -v verbose (display label and summary)
```

3.5.25.17. softwarechannel_listchildchannels

List child software channels.

```
usage:
softwarechannel_listchildchannels [options]
softwarechannel_listchildchannels : List all child channels
```

```
softwarechannel_listchildchannels CHANNEL : List children for a specific base channel
options:
 -v verbose (display label and summary)
```

3.5.25.18. softwarechannel_listerrata

List the errata associated with a software channel.

```
usage: softwarechannel_listerrata <CHANNEL ...> [from=yyyymmdd [to=yyyymmdd]]
```

3.5.25.19. softwarechannel_listerratabydate

List errata from channelbased on a date range.

```
usage: softwarechannel_listerratabydate CHANNEL BEGINDATE ENDDATE
Date format : YYYYMMDD
```

3.5.25.20. softwarechannel_listlatestpackages

List the newest version of all packages in a channel.

```
usage: softwarechannel_listlatestpackages CHANNEL
```

3.5.25.21. softwarechannel_listpackages

List the most recent packages available from a software channel.

```
usage: softwarechannel_listpackages CHANNEL
```

3.5.25.22. softwarechannel_listrepos

List the repos for a software channel.

```
usage: softwarechannel_listrepos CHANNEL
```

3.5.25.23. softwarechannel_listsyncschedule

List sync schedules for all software channels.

```
usage: softwarechannel_listsyncschedule : List all channels
```

3.5.25.24. softwarechannel_listsystems

List all systems subscribed to a software channel.

```
usage: softwarechannel_listsystems CHANNEL
```

3.5.25.25. softwarechannel_mirrorpackages

Download packages of a given channel.

```
usage: softwarechannel_mirrorpackages CHANNEL
Options:
    -l/--latest : Only mirror latest package version
```

3.5.25.26. softwarechannel_regenerateneededcache

Regenerate the needed errata and package cache for all systems.

```
usage: softwarechannel_regenerateneededcache
```

3.5.25.27. softwarechannel_regenerateyumcache

Regenerate the YUM cache for a software channel.

```
usage: softwarechannel_regenerateyumcache <CHANNEL ...>
```

3.5.25.28. softwarechannel_removeerrata

Remove patches from a software channel.

```
usage: softwarechannel_removeerrata CHANNEL <ERRATA:search:XXX ...>
```

3.5.25.29. softwarechannel_removepackages

Remove packages from a software channel.

```
usage: softwarechannel_removepackages CHANNEL <PACKAGE ...>
```

3.5.25.30. softwarechannel_removerepo

Remove a repo from a software channel.

```
usage: softwarechannel_removerepo CHANNEL REPO
```

3.5.25.31. softwarechannel_removesyncschedule

Removes the repo sync schedule for a software channel.

```
usage: softwarechannel_setsyncschedule <CHANNEL>
```

3.5.25.32. softwarechannel_setorgaccess

Set the org-access for the software channel.

```
usage : softwarechannel_setorgaccess <channel_label> [options]
-d,--disable : disable org access (private, no org sharing)
-e,--enable : enable org access (public access to all trusted orgs)
```

3.5.25.33. softwarechannel_setsyncschedule

Sets the repo sync schedule for a software channel.

```
usage: softwarechannel_setsyncschedule <CHANNEL> <SCHEDULE>

The schedule is specified in Quartz CronTrigger format without enclosing quotes.
For example, to set a schedule of every day at 1am, <SCHEDULE> would be 0 0 1 * * ?
```

3.5.25.34. softwarechannel_sync

Sync the packages of two software channels.

```
usage: softwarechannel_sync SOURCE_CHANNEL TARGET_CHANNEL
```

3.5.25.35. softwarechannel_syncrepos

Sync users repos for a software channel.

```
usage: softwarechannel_syncrepos <CHANNEL ...>
```

3.5.26. ssm

The following spacecmd functions are available for use with the system set manager (SSM).

3.5.26.1. ssm_add

Add systems to the SSM.

```
usage: ssm_add <SYSTEMS>

see 'help ssm' for more details

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.26.2. ssm_clear

Remove all systems from the SSM.

```
usage: ssm_clear
```

3.5.26.3. ssm_intersect

Replace the current SSM with the intersection of the current list of systems and the list of systems passed as arguments.

```
usage: ssm_intersect <SYSTEMS>

see 'help ssm' for more details

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNE
```

3.5.26.4. ssm_list

List the systems currently in the SSM.

```
usage: ssm_list

see 'help ssm' for more details
```

3.5.26.5. ssm_remove

Remove systems from the SSM.

+

```
usage: ssm_remove <SYSTEMS>

see 'help ssm' for more details

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27. system

The following spacecmd functions are available for use with systems.

3.5.27.1. system_addchildchannels

Add child channels to a system.

```
usage: system_addchildchannels <SYSTEMS> <CHANNEL ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.2. system_addconfigchannels

Add config channels to a system.

```
usage: system_addconfigchannels <SYSTEMS> <CHANNEL ...> [options]

options:
  -t add channels to the top of the list
  -b add channels to the bottom of the list

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.3. system_addconfigfile

Create a configuration file.

```
Note this is only for system sandbox or locally-managed files
Centrally managed files should be created via configchannel_addfile
usage: system_addconfigfile [SYSTEM] [options]

options:
  -S/--sandbox : list only system-sandbox files
  -L/--local   : list only locally managed files
  -p PATH
  -r REVISION
  -o OWNER [default: root]
  -g GROUP [default: root]
  -m MODE [defualt: 0644]
  -x SELINUX_CONTEXT
  -d path is a directory
  -s path is a symlink
  -b path is a binary (or other file which needs base64 encoding)
  -t SYMLINK_TARGET
  -f local path to file contents

  Note re binary/base64: Some text files, notably those containing trailing
  newlines, those containing ASCII escape characters (or other charaters not
  allowed in XML) need to be sent as binary (-b).  Some effort is made to auto-
  detect files which require this, but you may need to explicitly specify.
```

3.5.27.4. system_addcustomvalue

Set a custom value for a system.

```
usage: system_addcustomvalue KEY VALUE <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.5. system_addentitlements

Add entitlements to a system.

```
usage: system_addentitlements <SYSTEMS> ENTITLEMENT

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.6. system_addnote

Set a note for a system.

```
usage: system_addnote <SYSTEM> [options]

options:
  -s SUBJECT
  -b BODY

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.7. system_applyerrata

Apply errata to a system.

```
usage: system_applyerrata <SYSTEMS> [ERRATA|search:XXX ...]

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.8. system_comparepackageprofile

Compare a system against a package profile.

```
usage: system_comparepackageprofile <SYSTEMS> PROFILE

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.9. system_comparepackages

Compare the packages between two systems.

```
usage: system_comparepackages SOME_SYSTEM ANOTHER_SYSTEM
```

3.5.27.10. system_comparewithchannel

Compare the installed packages on a system with those in the channels it is registered to, or optionally some other channel.

```
usage: system_comparewithchannel <SYSTEMS> [options]
options:
         -c/--channel : Specific channel to compare against,
                        default is those subscribed to, including
                        child channels

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.11. system_createpackageprofile

Create a package profile.

```
usage: system_createpackageprofile SYSTEM [options]

options:
  -n NAME
  -d DESCRIPTION
```

3.5.27.12. system_delete

Delete a system profile.

```
usage: system_delete <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.13. system_deletenotes

Delete notes from a system.

```
usage: system_deletenotes <SYSTEM> <ID|*>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.14. system_deletepackageprofile

Delete a package profile.

```
usage: system_deletepackageprofile PROFILE
```

3.5.27.15. system_deployconfigfiles\

Deploy all configuration files for a system.

```
usage: system_deployconfigfiles <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.16. system_details

Show the details of a system profile.

```
usage: system_details <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.17. system_installpackage

Install a package on a system.

```
usage: system_installpackage <SYSTEMS> <PACKAGE ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.18. system_list

List all system profiles.

```
usage: system_list
```

3.5.27.19. system_listbasechannel

List the base channel for a system.

```
usage: system_listbasechannel <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.20. system_listchildchannels

List the child channels for a system.

```
usage: system_listchildchannels <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.21. system_listconfigchannels

List the config channels of a system.

```
usage: system_listconfigchannels <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.22. system_listconfigfiles

List the managed config files of a system.

```
usage: system_listconfigfiles <SYSTEMS>'
options:
  -s/--sandbox : list only system-sandbox files
  -l/--local   : list only locally managed files
```

```
  -c/--central : list only centrally managed files
  -q/--quiet   : quiet mode (omits the header)

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.23. system_listcustomvalues

List the custom values for a system.

```
usage: system_listcustomvalues <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.24. system_listentitlements

List the entitlements for a system.

```
usage: system_listentitlements <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.25. system_listerrata

List available errata for a system.

```
usage: system_listerrata <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.26. system_listeventhistory

List the event history for a system.

```
usage: system_listeventhistory <SYSTEMS> [options]

options:
  -s START_TIME list only the events happened after the specified time. [Default: returns
all events]
  -o OFFSET skip the first events. Ignored if -l is not specified as well. [Default: 0]
  -l LIMIT limit the results to the specified number of events. [Default: no limit]

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.27. system_listevents

List the event history for a system.

```
usage: system_listevents <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.28. system_listhardware

List the hardware details of a system.

```
usage: system_listhardware <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.29. system_listinstalledpackages

List the installed packages on a system.

```
usage: system_listinstalledpackages <SYSTEMS>
```

```
<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.30. system_listnotes

List the available notes for a system.

```
usage: system_listnotes <SYSTEM>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.31. system_listpackageprofiles

List all package profiles.

```
usage: system_listpackageprofiles
```

3.5.27.32. system_listupgrades

List the available upgrades for a system.

```
usage: system_listupgrades <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.33. system_lock

Lock a system.

```
usage: system_lock <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
```

```
channel:CHANNEL
```

3.5.27.34. system_reboot

Reboot a system.

```
usage: system_reboot <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.35. system_removechildchannels

Remove child channels from a system.

```
usage: system_removechildchannels <SYSTEMS> <CHANNEL ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.36. system_removeconfigchannels

Remove config channels from a system.

```
usage: system_removeconfigchannels <SYSTEMS> <CHANNEL ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.37. system_removecustomvalues

Remove a custom value for a system.

```
usage: system_removecustomvalues <SYSTEMS> <KEY ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
```

```
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.38. system_removeentitlement

Remove an entitlement from a system.

```
usage: system_removeentitlement <SYSTEMS> ENTITLEMENT

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.39. system_removepackage

Remove a package from a system.

```
usage: system_removepackage <SYSTEMS> <PACKAGE ...>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.40. system_rename

Rename a system profile.

```
usage: system_rename OLDNAME NEWNAME
```

3.5.27.41. system_runscript

Schedule a script to run on the list of systems provided.

```
usage: system_runscript <SYSTEMS> [options]

options:
  -u USER
  -g GROUP
  -t TIMEOUT
  -s START_TIME
  -l LABEL
  -f FILE
```

```
<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL


Dates can be any of the following:
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM]
format.  The year, month and day are required, while the hours and
minutes are not; the hours and minutes will default to 0000 if no
values are provided.

Deltas:
Dates can be expressed as delta values.  For example, '2h' would
mean 2 hours in the future.  You can also use negative values to
express times in the past (e.g., -7d would be one week ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.27.42. system_schedulehardwarerefresh

Schedule a hardware refresh for a system.

```
usage: system_schedulehardwarerefresh <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.43. system_schedulepackagerefresh

Schedule a software package refresh for a system.

```
usage: system_schedulepackagerefresh <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.44. system_search

List systems that match the given criteria.

```
usage: system_search QUERY

Available Fields:
id
name
ip
hostname
device
vendor
driver
uuid

Examples:
> system_search device:vmware
> system_search ip:192.168.82
```

3.5.27.45. system_setbasechannel

Set a system's base software channel.

```
usage: system_setbasechannel <SYSTEMS> CHANNEL

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.46. system_setconfigchannelorder

Set the ranked order of configuration channels.

```
usage: system_setconfigchannelorder <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.47. system_setcontactmethod

Set the contact method for a given system.

```
Available contact methods: ['default', 'ssh-push', 'ssh-push-tunnel']
```

```
usage: system_setcontactmethod <SYSTEMS> <CONTACT_METHOD>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.48. system_show_packageversion

Shows version of installed package on a given system.

```
usage: system_show_packageversion <SYSTEM> <PACKAGE>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.49. system_syncpackages

Sync packages between two systems.

```
usage: system_syncpackages SOURCE TARGET
```

system_unlock

Unlock a system.

```
usage: system_unlock <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.50. system_updatecustomvalue

Update a custom value for a system.

```
usage: system_updatecustomvalue KEY VALUE <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
```

```
channel:CHANNEL
```

3.5.27.51. system_upgradepackage

Upgrade a package on a system.

```
usage: system_upgradepackage <SYSTEMS> <PACKAGE ...>|*

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.27.52. system_needrebootafterupdate

Shows whether a reboot would be needed if available patches were applied.

```
usage: system_needrebootafterupdate <SYSTEMS>

<SYSTEMS> can be any of the following:
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.28. toggle

The following spacecmd functions are available to toggle functions on and off.

3.5.28.1. toggle_confirmations

Toggle confirmation messages on/off.

```
usage: toggle_confirmations
```

3.5.29. user

The following spacecmd functions are available managing users.

3.5.29.1. user_adddefaultgroup

Add a default group to an user account.

```
usage: user_adddefaultgroup USER <GROUP ...>
```

3.5.29.2. user_addgroup

Add a group to an user account.

```
usage: user_addgroup USER <GROUP ...>
```

3.5.29.3. user_addrole

Add a role to an user account.

```
usage: user_addrole USER ROLE
```

3.5.29.4. user_create

Create an user.

```
usage: user_create [options]

options:
  -u USERNAME
  -f FIRST_NAME
  -l LAST_NAME
  -e EMAIL
  -p PASSWORD
  --pam enable PAM authentication
```

3.5.29.5. user_delete

Delete an user.

```
usage: user_delete NAME
```

3.5.29.6. user_details

Show the details of an user.

```
usage: user_details USER ...
```

3.5.29.7. user_disable

Disable an user account.

```
usage: user_disable NAME
```

3.5.29.8. user_enable

Enable an user account.

```
usage: user_enable NAME
```

3.5.29.9. user_list

List all users.

```
usage: user_list
```

3.5.29.10. user_listavailableroles

List all available roles for users.

```
usage: user_listavailableroles
```

3.5.29.11. user_removedefaultgroup

Remove a default group from an user account.

```
usage: user_removedefaultgroup USER <GROUP ...>
```

3.5.29.12. user_removegroup

Remove a group to an user account.

```
usage: user_removegroup USER <GROUP ...>
```

3.5.29.13. user_removerole

Remove a role from an user account.

```
usage: user_removerole USER ROLE
```

3.5.29.14. user_setemail

Set an user accounts email field.

```
usage: user_setemail USER EMAIL
```

3.5.29.15. user_setfirstname

Set an user accounts first name field.

```
usage: user_setfirstname USER FIRST_NAME
```

3.5.29.16. user_setlastname

Set an user accounts last name field.

```
usage: user_setlastname USER LAST_NAME
```

3.5.29.17. user_setpassword

Set an user accounts name prefix field.

```
usage: user_setpassword USER PASSWORD
```

3.5.29.18. user_setprefix

Set an user accounts name prefix field.

```
usage: user_setprefix USER PREFIX
```

3.5.30. whoami

The following command is available for returning the currently logged spacecmd username.

3.5.30.1. whoami

Print the currently logged spacecmd user.

```
spacecmd {SSM:0}> whoami
admin
```

3.5.31. whoamitalkingto

The following spacecmd function is available for returning the server hostname.

3.5.31.1. whoamitalkingto

Return the server hostname that spacecmd is connected with.

```
spacecmd {SSM:0}> whoamitalkingto
MGR_SERVER_HOSTNAME
```

3.5.32. Miscellaneous Help Topics

The following help topics are printed with all functions requiring the relevant information.

3.5.32.1. time

Dates can be any of the following:

```
Explicit Dates:
Dates can be expressed as explicit date strings in the YYYYMMDD[HHMM] format.
The year, month and day are required, while the hours and minutes are not; the hours and
minutes will default to 0000 if no values are provided.

Deltas:
Dates can be expressed as delta values.
For example, '2h' would mean 2 hours in the future.
You can also use negative values to express times in the past (e.g., -7d would be one week
ago).

Units:
s -> seconds
m -> minutes
h -> hours
d -> days
```

3.5.32.2. systems

<SYSTEMS> can be any of the following:

```
name
ssm (see 'help ssm')
search:QUERY (see 'help system_search')
group:GROUP
channel:CHANNEL
```

3.5.32.3. ssm

The System Set Manager (SSM) is a group of systems that you can perform tasks on as a group.

```
Adding Systems:
> ssm_add group:rhel5-x86_64
> ssm_add channel:rhel-x86_64-server-5
> ssm_add search:device:vmware
> ssm_add host.example.com

Intersections:
> ssm_add group:rhel5-x86_64
> ssm_intersect group:web-servers

Using the SSM:
> system_installpackage ssm zsh
> system_runscript ssm
```

Chapter 4. Command Line Tools



To access a shell inside the Server container, run mgrctl term on the container host. From there, one can run the CLI tools as usual.

There are several command line tools available in Uyuni. Every action that can be completed using the Web UI can be performed at a command prompt instead. Additionally, there are some actions that can only be performed at the command prompt.

Manage package and channel synchronization with:

- spacewalk-repo-sync
- mgr-sync

Manage bootstrapping with:

- mgr-create-bootstrap-repo

Some of these command line tools are installed by default. To install a command line tool, you can use the Uyuni Web UI, or use your package manager at the command prompt.

Procedure: Installing Command Line Tools with the WebUI

1. In the Uyuni Web UI, navigate to **Systems › System List**, select the client to install the tool on, and navigate to the **Software › Packages › Install** sub-tab.
2. Use the search tool to search for the command line tool you want to install.
3. Check the package to install, and click **[Install Selected Packages]**.
4. Click **[Confirm]** to begin installation.

Procedure: Installing Command Line Tools from the Command Prompt

1. On the client that you want to install the packages on, at the command prompt, as root, use zypper to install the package:

```
zypper in <CLI_TOOL_NAME>
```

4.1. Synchronization CLI Tools



To access a shell inside the Server container, run mgrctl term on the container host. From there, one can run the CLI tools as usual.

There are two tools for synchronizing clients to the server. For clients that are connected to the SUSE Customer

Center, use mgr-sync. For all other clients, use spacewalk-repo-sync.

4.1.1. Synchronize SCC Repositories With mgr-sync

The primary use of mgr-sync is to connect to the SUSE Customer Center, retrieve product and package information, and prepare channels for synchronization with the Uyuni Server.

This tool is designed for use with a SUSE support subscription. It is not required for open source distributions, including openSUSE, CentOS, and Ubuntu.

The available commands and arguments for mgr-sync are listed in this table. Use this syntax for mgr-sync commands:

```
mgr-sync [-h] [--version] [-v] [-s] [-d {1,2,3}] {list,add,refresh,delete}
```

Table 49. mgr-sync Commands

Command	Description	Example Use
list	List channels, organization credentials, or products	mgr-sync list channels
add	Add channels, organization credentials, or products	mgr-sync add channel <channel_name>
refresh	Refresh the local copy of products, channels, and subscriptions	mgr-sync refresh
delete	Delete existing SCC organization credentials from the local system	mgr-sync delete credentials
sync	Synchronize specified channel or ask for it when left blank	mgr-sync sync channel <channel_name>

To see the full list of options specific to a command, use this command:

```
mgr-sync <command> --help
```

Table 50. mgr-sync Optional Arguments

Option	Abbreviated option	Description	Example Use
help	h	Display the command usage and options	mgr-sync --help

Option	Abbreviated option	Description	Example Use
version	N/A	Display the currently installed version of mgr-sync	mgr-sync --version
verbose	v	Provide verbose output	mgr-sync --verbose refresh
store-credentials	s	Store credentials a local hidden file	mgr-sync --store -credentials
debug	d	Log additional debugging information. Requires a level of 1, 2, 3. 3 provides the highest amnount of debugging information	mgr-sync -d 3 refresh
no-sync	N/A	Use with the add command to add products or channels without beginning a synchronization	mgr-sync --no-sync add <channel_name>

Logs for mgr-sync are located in:

- /var/log/rhn/mgr-sync.log
- /var/log/rhn/rhn_web_api.log

4.1.2. Synchronize Repositories with spacewalk-repo-sync

The spacewalk-repo-sync tool synchronizes software repositories into Uyuni channels. In most cases, this happens automatically, but you can use the tool to run it manually if required.

The spacewalk-repo-sync tool has these primary commands:

Table 51. spacewalk-repo-sync Options

Option	Description	Example Use
list	List all custom channels and the repositories assigned to them.	spacewalk-repo-sync --list
channel	Synchronize a single channel to all repositories assigned to it.	spacewalk-repo-sync --channel <custom-channel>

Option	Description	Example Use
deep-verify	ignore cached package checksums.	spacewalk-repo-sync --deep-verify
force-all-errata	force re-importing all the patches.	spacewalk-repo-sync --deep-verify
no-packages	excludes packages from the operation.	spacewalk-repo-sync --deep-verify --no-packages

For a complete list of options, see the spacewalk-repo-sync manpage:

```
man spacewalk-repo-sync
```

4.1.3. Troubleshooting Synchronization

If you are having trouble synchronizing with spacewalk-repo-sync you can find out more by watching the HTTP log as the command runs.

Procedure: Troubleshooting Synchronization Problems

1. Log the HTTP output into /var/log/zypper.log:

```
ZYPP_MEDIA_CURL_DEBUG=2 spacewalk-repo-sync --channel <channel-label>
```

2. Export the setting:

```
export URLGRABBER_DEBUG=DEBUG
```

3. Start the synchronization:

```
/usr/bin/spacewalk-repo-sync --channel <channel-label> --type yum
```

```
You can increase the debug level, by adding the `-vvv` option to the command.
```

4. When the complete completes, or fails, disable debug mode:

```
unset URLGRABBER_DEBUG
```

4.1.3.1. Add Custom Extra HTTP Headers

You can add custom HTTP headers to the requests made by spacewalk-repo-sync at the time of synchronization. The custom HTTP headers are defined in the /etc/rhn/spacewalk-repo-sync/extra_headers.conf configuration file. The headers can be defined by repository name or channel label.

You can also define global headers by putting them in the main section. For example:

```
[testchannel]
X-MY-HEADER-1=VALUE
X-MY-HEADER-2=VALUE

[mychannel]
X-MY-HEADER-3=VALUE
X-MY-HEADER-4=VALUE

[main]
X-MYGLOBAL-HEADER=VALUE
```

This can be particularly useful when dealing with Red Hat Update Infrastructure (RHUI) repositories in the public cloud.

4.2. Channel Management CLI Tools



To access a shell inside the Server container, run mgrctl term on the container host. From there, one can run the CLI tools as usual.

There are tools for managing channels on the server. With spacewalk-remove-channel, list and delete channels in various ways.

4.2.1. Manage Channels with spacewalk-remove-channel

Usage: spacewalk-remove-channel [options]

The use of spacewalk-remove-channel is to remove channels in various ways.

The available commands and arguments for spacewalk-remove-channel are listed in this table. Use this syntax for spacewalk-remove-channel commands:

```
spacewalk-remove-channel [options]
```

The spacewalk-remove-channel tool has these primary commands:

Table 52. spacewalk-remove-channel Options

Option	Description	Example Use
list	List defined channels and exit.	spacewalk-remove-channel --list
channel	Delete this channel (can be present multiple times).	spacewalk-remove-channel --channel=CHANNEL

Option	Description	Example Use
channel-with-children	Delete this channel and its child channels (can be present multiple times).	spacewalk-remove-channel --channel-with-children=CHANNEL_WITH_CHILDREN
unsubscribe	Unsubscribe systems registered to the specified channels. Note: Credentials are needed	spacewalk-remove-channel --unsubscribe
justdb	Delete only from the database, do not remove files from disk.	spacewalk-remove-channel --justdb
just-kickstart-trees	Remove only the kickstart trees for the channels specified.	spacewalk-remove-channel --just-kickstart-trees
skip-channels	Remove only packages from channel not the channel itself.	spacewalk-remove-channel --skip-channels

For a complete list of options and abbreviated options, see the --help output or the spacewalk-remove-channel manpage:

```
man spacewalk-remove-channel
```

For more information, see **Administration Guide › Removing Channels**.

4.3. Bootstrapping Command Line Tools



To access a shell inside the Server container run mgrctl term on the container host. From there, one can run the CLI tools as usual.

The mgr-create-bootstrap-repo tool allows you to create a bootstrap repository.

Use the mgr-create-bootstrap-repo command on the Uyuni Server to create a new bootstrap repository. The -l option lists all available repositories:

```
mgr-create-bootstrap-repo -l
```

Give the repository name to create the bootstrap repository you require:

```
mgr-create-bootstrap-repo <repo-name>
```

You can also create a new bootstrap repository from a custom channel, with the --with-custom-channels

option:

```
mgr-create-bootstrap-repo --with-custom-channels
```

If you create a bootstrap repository that contains custom channels, and later attempt to rebuild with the mgr-create-bootstrap-repo command, the custom channel information will remain in the bootstrap repository. To remove custom channel information from your bootstrap repository, use the --flush option when you rebuild:

```
mgr-create-bootstrap-repo --flush
```

Chapter 5. GNU Free Documentation License

Copyright © 2000, 2001, 2002 Free Software Foundation, Inc. 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA. Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondarily, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.

C. State on the Title page the name of the publisher of the Modified Version, as the publisher.

D. Preserve all the copyright notices of the Document.

E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.

F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.

H. Include an unaltered copy of this License.

I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.

K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.

L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.

M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.

N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.

O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these

sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties—for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other

respects regarding verbatim copying of that document.

7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See http://www.gnu.org/copyleft/.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.

ADDENDUM: How to use this License for your documents

Copyright (c) YEAR YOUR NAME. Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".