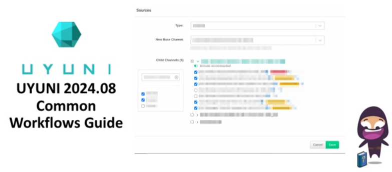


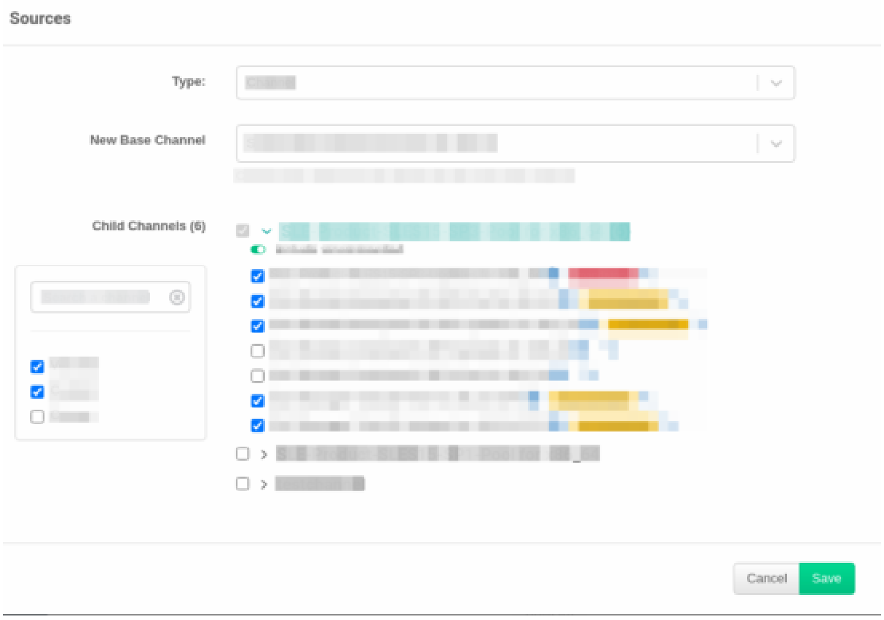
UYUNI 2024.08 Common Workflows Guide Instructions

Contents

1 UYUNI 2024.08 Common Workflows Guide
2 Product Information
3 Product Usage Instructions
4 Chapter 1. Client Onboarding
5 Chapter 2. Clients Update Using Recurring Actions
6 Chapter 3. Configuration Management
7 Related Topics
8 Chapter 4. Content Lifecycle Management
9 Chapter 5. Product Upgrade via Web UI
10 Chapter 6. GNU Free Documentation License
11 Documents / Resources
11.1 References
12 Related Posts

UYUNI

UYUNI 2024.08 Common Workflows Guide



Specifications

- Product Name: Uyuni 2024.08
- Release Date: August 23, 2024

Product Information

The Uyuni 2024.08 is a software tool designed for common workflows management.

Product Usage Instructions

Client Onboarding

- **Use Case:** This workflow is used for onboarding new clients.
- **Outcome:** Successful onboarding of clients.
- **Preparation:** Gather all necessary client information.
- **Step-by-step Workflow Instructions:** Follow the detailed instructions in the manual for client onboarding.

Clients Update Using Recurring Actions

- **Use Case/Situation:** Updating client information through recurring actions.
- **Outcome/Resolution:** Ensuring client data is up to date.
- **Preparation:** Set up recurring actions for client updates.
- **Step-by-Step Workflow Instructions:** Refer to the manual for detailed steps on updating clients using recurring actions

Configuration Management

- **Use Case:** Managing configurations for clients.
- **Outcome:** Efficient configuration management.
- **Preparation:** Gather necessary configuration details.

- **Step-by-step Workflow Instructions:** Follow the manual for instructions on managing configurations.

Content Lifecycle Management

- **Use Case:** Managing the lifecycle of content.
- **Outcome:** Effective content lifecycle management.
- **Preparations:** Prepare content lifecycle plans.
- **Step-by-step Workflow Instructions:** Detailed instructions for managing content lifecycles are provided in the manual.

FAQ

- **Q: Can I use Uyuni 2024.08 for project management?**
  A: Uyuni 2024.08 is primarily designed for common workflows management, but it may not be suitable for complex project management tasks.

Uyuni 2024.08
Common Workflows
August 23 2024

Common workflows overview
Updated: 2024-08-23
The Uyuni Common Workflows Guide covers most commonly used workflows you need to install, manage, and configure your clients with Uyuni.
Each workflow in this book has a clear goal, and provides detailed steps to achieve that goal.
It is designed to help you better understand both routine and advanced tasks, by explaining what you are achieving in each step, and the various options available to you along the way.
Each routine will be decribed as Workflow.

Chapter 1. Client Onboarding

Uyuni is all about managing client systems. So one of the first things you need to do is onboard some clients. This workflow shows you how to set up your Uyuni Server to manage a new client, set up the software channels you need, and bootstrap the client using an activation key.

Use Case
This workflow shows you how to onboard a client to your Uyuni Server.
The client must be running a supported Linux operating system. For a list of supported client systems, see Installation-and-upgrade › Client-requirements.
This is one of the first tasks you need to do when you set up Uyuni for the first time, and you will probably have to do it many more times as you use the product.
Outcome
When you have completed this workflow, your client is onboarded, and it can be seen in the systems list of the Uyuni Web UI. You can then use Uyuni to manage the client.

Preparation
Before you start, you should already have:

- Uyuni Server installed, that you can access using the Web UI.
- Client machine with an operating system installed, which you can access across the network that your Uyuni

Server is on, using SSH.

- Appropriate subscriptions from **http://scc.suse.com** for the products you are using.

This workflow uses a SUSE Linux Enterprise Server 15 SP2 operating system. You can use other Linux operating systems, but some of the steps might be different. For more information on onboarding other clients, see Client-configuration › Registration-methods.

Step-by-step Workflow Instructions
Procedure: Configure a Fully Qualified Domain Name (FQDN) on Your Client

1. On the client, at the command prompt, show the current hostname:
   hostname -f
2. This command will probably return an error, or show something like localhost. two periods. In this example, we are using client1.suma.example
   hostnamectl set-hostname client1.suma.example
3. Check that your change was successful:
   hostnamectl
4. Open YaST and navigate to Network Services › Hostnames. Edit the hostname to match the one you just set, and click OK .
5. In YaST, navigate to System › Network Settings and go to the Hostname/DNS tab. In the Static hostname field, type your new hostmame.
6. Check that the change was successful:
   hostname -f
   This command should return your new FQDN.
   Procedure: Prepare Software Channels on the Uyuni Server
   1. In the Uyuni Web UI, navigate to Admin › Setup Wizard.
   2. In the Organization Credentials tab, ensure you have entered your SUSE Customer Center credentials, and are correctly authenticated.
   3. In the Products tab, ensure that the product catalog is fully updated:
   4. Use the product search bar to find the channels you need for your client operating system. Check the channels you want to install, and click Add products :
   5. Wait for the product channels to fully synchronize. Depending on the products you have chosen, this could take a long time.

Procedure: Create an Activation Key

1. In the Uyuni Web UI, navigate to Systems › Activation Keys, and click Create Key .
2. Give your activation key a name, and select the base channel that matches the client you want to onboard. This should be the product you just enabled:
3. Check the child channels to include, and any add-on system types you want clients registered with this key to have. Click **Create Activation Key** .

Procedure: Bootstrap the Client

1. In the Uyuni Web UI, navigate to Systems › Bootstrapping.

2. Type the hostname and provide authentication credentials for the client you want to onboard, and select the activation key. Click **Bootstrap** :
3. Navigate to Systems › System List to manage your new client.

Related Topics

- For more information about supported clients and client features, see Client-configuration › Supported-features.
- For more information about different onboarding methods, and instructions for clients running various operating systems, see Client-configuration › Registration-methods.
- For more information about general client concepts, see Client-configuration › Channels.

Chapter 2. Clients Update Using Recurring Actions

This workflow shows how to automate updating the clients registered at Uyuni using recurring actions.

Use Case / Situation
Automated update of clients is benefitial when:

- update of a large number of clients is wanted
- the workflow should not be re-done every execution
- a dedicated maintenance window exists.

Outcome / Resolution
Successful completion of this workflow results in consistent and supportable state.

Preparation
Before you start, you should have a number of clients onboarded. It may make sense to have them sorted into groups you want to update together. In this workflow we use a system group named infra-services.

Step-by-Step Workflow Instructions
To update a client two steps are required. A third step is optional but highly recommended to finalize the update process.
Procedure 1: Creating a Recurring Action to Update Salt Itself

1. As an example, we create the action to update Salt itself as a recurring action for all systems in the organization. In the Uyuni Web UI, navigate to Home › My Organization › Recurring Actions and click Create .
2. Select Action Type Custom State and enter a Schedule Name like update-salt.
3. Select a schedule. For example, Weekly: Wednesday, 9:00 am .
4. Assign the update-salt state by selecting the checkbox.
5. Click Save Changes to save the action.
6. You can edit the execution order of the states if needed. Click Confirm to confirm the order.
7. Click Create Schedule to save the action.

Procedure 2: Creating a Recurring Action to Apply All Available Updates to the Systems

1. As an example we create the action to apply all updates as a recurring action for a system group called infra-services. In the Uyuni Web UI go to Systems › System Groups and click on infra- services.

2. Now go to Recurring Actions and click Create .
3. Select Action Type Custom State and enter a Schedule Name like full-system-update.
4. Select a Schedule. For example, Weekly: Wednesday, 9:30 am . Keep enough time between this action and the update-salt action. The update-salt actions must be finished on all systems before this action should be executed.
5. Assign the states util.syncall, certs, channels and uptodate by selecting the checkboxes. To perform a reboot afterwards you can also add reboot or rebootifneeded.
6. Save the action by clicking Save Changes .
7. You can edit the execution order of the states. The order should be util.syncall, certs, channels, uptodate and finally reboot or rebootifneeded if chosen. Click Confirm to store the order.
8. Click Create Schedule to save the action.

Procedure 4: Creating a Recurring Action to Run a Highstate After the Update

1. As an example, we create the action to apply the highstate for the same group which was fully updated before. In the Uyuni Web UI, navigate to Systems › System Groups and click infra-services.
2. Go to Recurring Actions and click Create .
3. Select Action Type Highstate and enter a Schedule Name like highstate.
4. Select a Schedule. For example, Weekly: Wednesday, 10:30 am . Again, keep enough time between this action and the full-system-update action.
5. Click Create Schedule to save the action.

Related Topics

- For more information about recurring actions, see Recurring Actions.
- For more information about custom info values, see Client-configuration › Custom-info.

Chapter 3. Configuration Management

You can use configuration files and channels to manage configuration for your clients, rather than configuring each client manually. This workflow shows you how to use the Uyuni Web UI to create a centrally managed configuration file, assign it to a client, and apply the configuration.

1. **Use Case**

   If you are managing a lot of clients, you probably do not want to manually apply configuration settings to each of them in turn. Configuration channels are used to organize configuration files. You can subscribe clients to configuration channels, and deploy configuration files as required.
2. **Outcome**

   When you have completed this workflow, you will have a configuration channel containing a configuration file, have assigned clients to the channel, and applied the configuration successfully.
3. **Preparation**

   Before you start, you should already have:
   - Uyuni Server installed, that you can access using the Web UI.
   - At least one client registered to your server.
   - Appropriate subscriptions from http://scc.suse.com for the products you are using.

This workflow uses a centrally managed configuration file and a Salt state. You can also use locally managed configuration files and different methods, to get more flexibility in how you manage configuration in your environment. For more information about the different ways to manage configuration, see Client-configuration › Configuration-management.

Step-by-step Workflow instructions

Procedure: Create a New Configuration Channel and file

1. In the Uyuni Web UI, navigate to Configuration › Channels and click Create State Channel .
2. Type a name, label, and description for your configuration file, and type the contents of your configuration file. An example that you can copy is at the end of this section. . Click Create Config State Channel
3. Procedure: Assign Clients to the Configuration Channel
4. In the Uyuni Web UI, navigate to Systems › Systems List and select the client you want to assign to your configuration channel.
5. Navigate to the Configuration tab. In the guimenu: Configuration Overview section, click Subscribe to channels .
6. Check the configuration channel you created earlier, and click Continue .
7. If you have more than one configuration channel, you can rank them in order of importance, or click Update Channel Rankings to finish.

Procedure: Apply the Configuration to Your Client

1. In the Uyuni Web UI, navigate to Systems › Systems List and select the client you want to assign to your configuration channel.
2. Navigate to the Configuration tab. In the guimenu:Configuration Actions section, click Deploy all managed config files .

Example

1. SLS State for Keeping Clients Updated

```
include:
  - channels

int_keep_system_up2date_updatestack:
  pkg.latest:
    - pkgs:
      - salt
      - salt-minion
{%- if grains.os_family == 'Suse'%}
      - zypper
      - libzypp
{%- elif grains['os_family'] == 'RedHat' %}
{%- if grains['osmajorrelease'] >= 8 %}
      - dnf
{%- else %}
      - yum
{%- endif %}
{%- endif %}
    - require:
      - sls: channels
    - order: last

int_keep_system_up2date_pkgs:
  pkg.uptodate:
    - require:
      - sls: channels
      - pkg: int_keep_system_up2date_updatestack
    - order: last

int_reboot_if_needed:
  cmd.run:
    - name: shutdown -r +5
{%- if grains['os_family'] == 'RedHat' and grains['osmajorrelease'] >= 8 %}
    - onlyif: 'dnf -q needs-restarting -r; [ $? -eq 1 ]'
{%- elif grains['os_family'] == 'RedHat' and grains['osmajorrelease'] <= 7 %}
    - onlyif: 'needs-restarting -r; [ $? -eq 1 ]'
{%- elif grains['os_family'] == 'Debian' %}
    - onlyif:
      - test -e /var/run/reboot-required
{%- else %}
    - onlyif: 'zypper ps -s; [ $? -eq 102 ]'
{%- endif %}
```

Related Topics

- For more information about configuration management, see Client-configuration › Configuration-management.
- For more information about SLS files, see: https://docs.saltproject.io/en/latest/topics/tutorials/starting_states.html.

Chapter 4. Content Lifecycle Management

If you are managing a lot of clients and you need to apply customized packages to them, you can use content lifecycle management (CLM) to manage your packages. CLM allows you to customize and test packages before updating production clients. It is also useful if you need to apply updates during a limited maintenance window.

1. **Use Case**

   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. You can use CLM to manage your software channels from development, through testing, and rolling the changes out to your clients.

2. **Outcome**

   When you have completed this workflow, you will have a content lifecycle project set up. You will have created a basic CLM project, and promoted it through its lifecycle.

3. **Preparations**

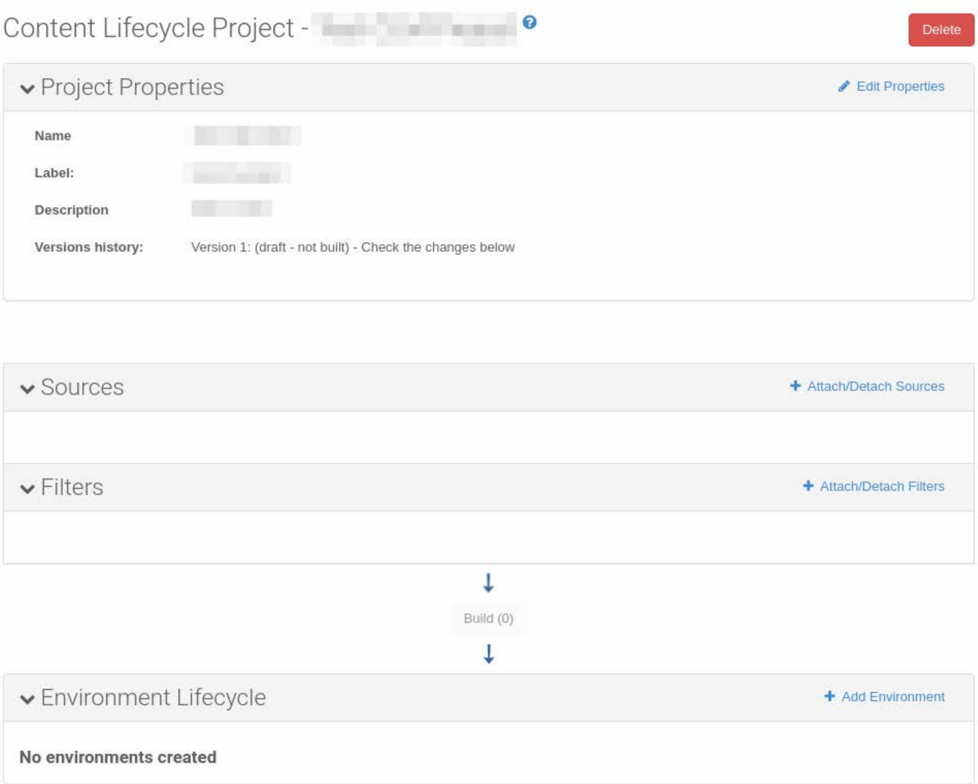
   Before you start, you should already have:

   - Uyuni Server installed, which you can access using the Web UI.
   - Client machine with an operating system installed, which you can access across the network that your Uyuni Server is on, using SSH.
   - Appropriate subscriptions from http://scc.suse.com for the products you are using.

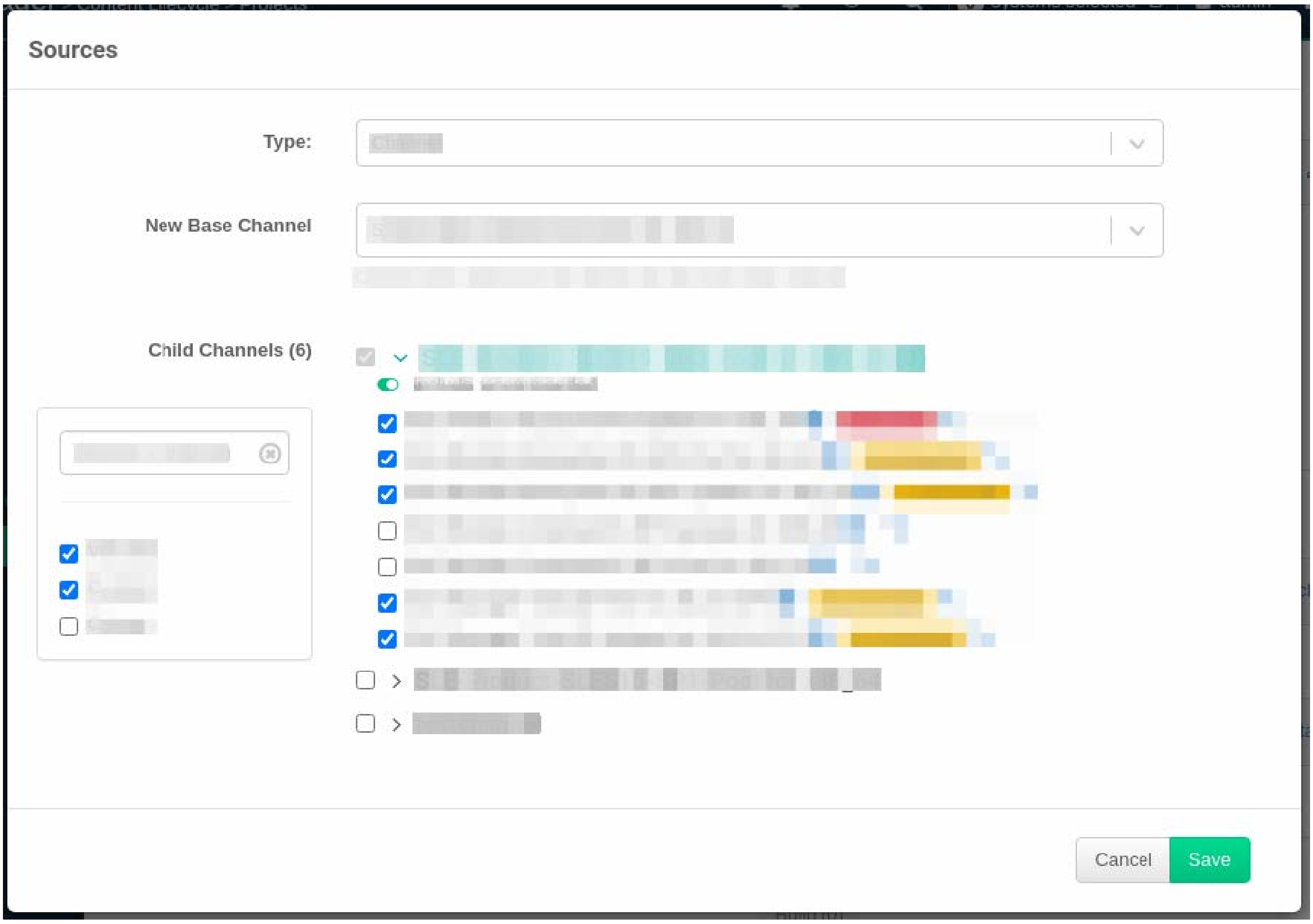
Step-by-step Workflow Instructions

Procedure: Create a new CLM Project

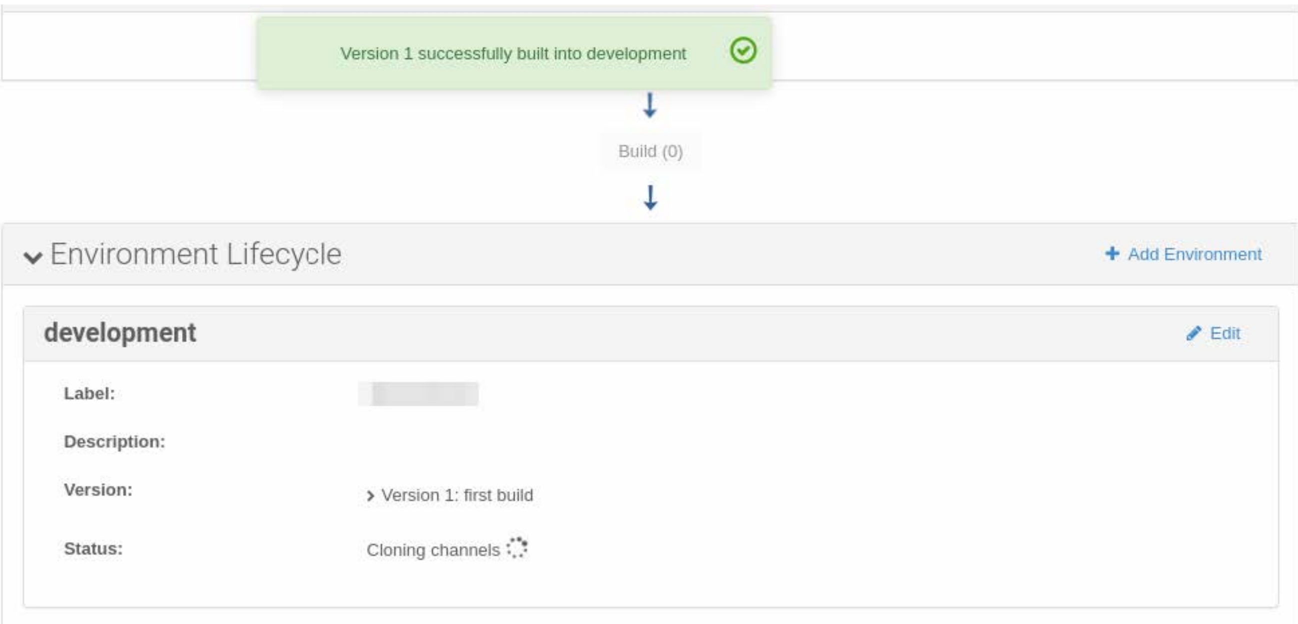
1. In the Uyuni Web UI, navigate to Content Lifecycle › Projects, and click Create Project . Type a name, label, and description for your project, and click Create .



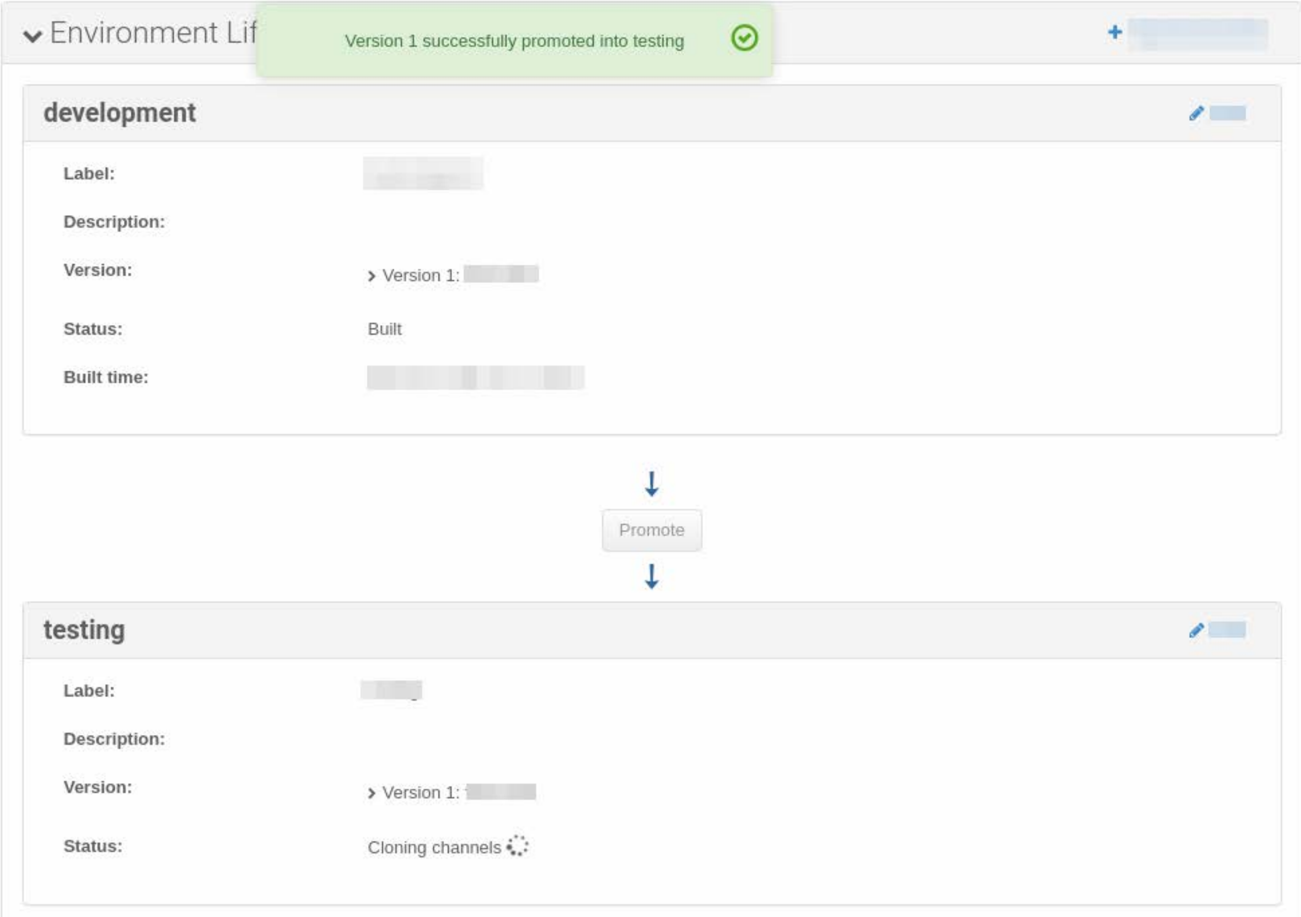
2. In the Sources section, click Attach/Detach Sources . Select the source type, and select a base channel for your project. The available child channels for the selected base channel are displayed, including information on whether the channel is mandatory or recommended. Check the child channels you require, and click Save to return to the project page.



3. Leave the Filters section blank for now, we will not be using them in this example. You can add filters later on if you need to.
4. In the Environment Lifecycle section, create three environments: production, testing, and development. Click Add Environment and complete the name and label for each. For the production environment, leave the Insert before field blank. For the testing environment, in the Insert before field, select production. For the development environment, in the Insert before field, select testing“.

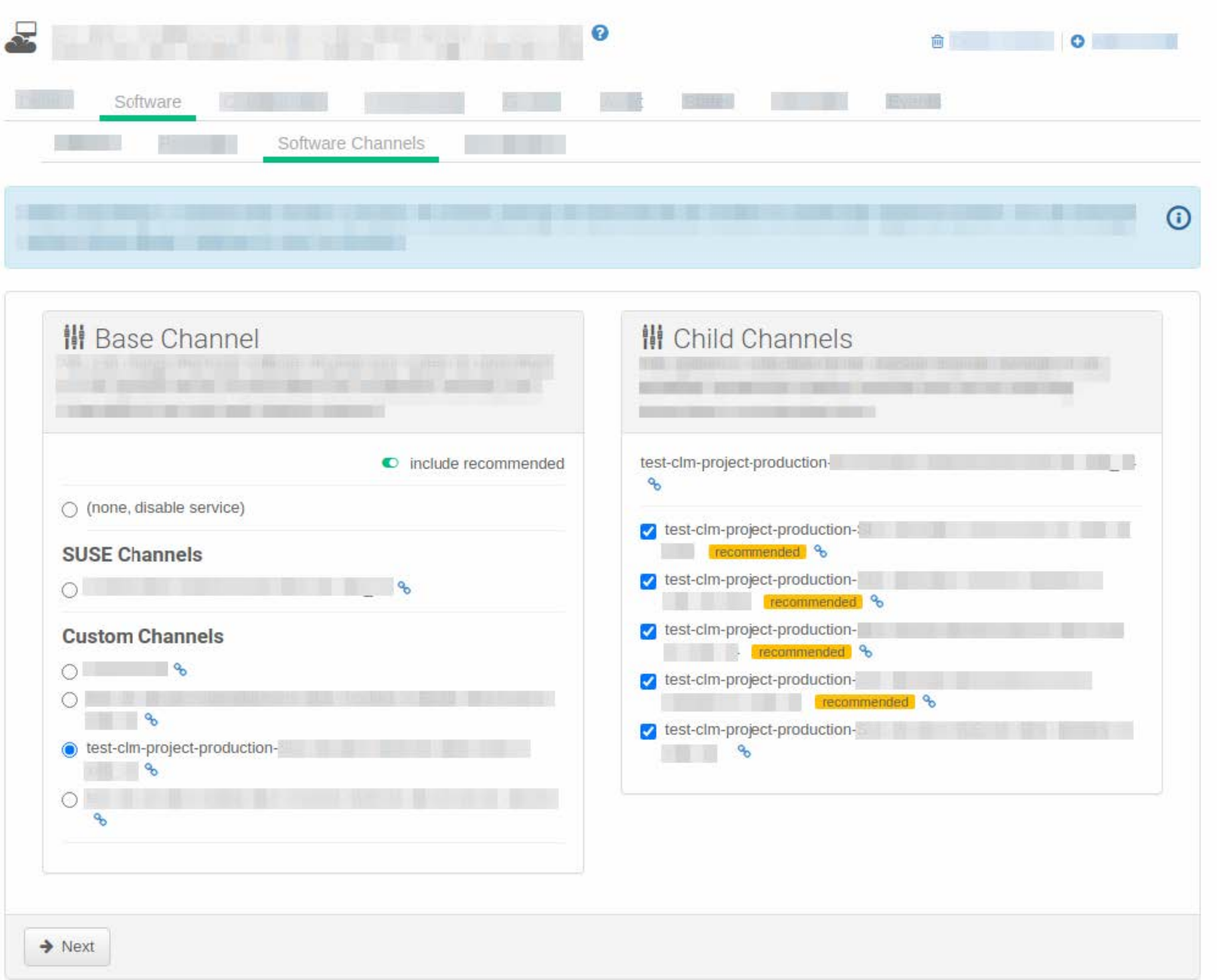


5. Click Build to build version 1 of your project:



Procedure: Assign Clients

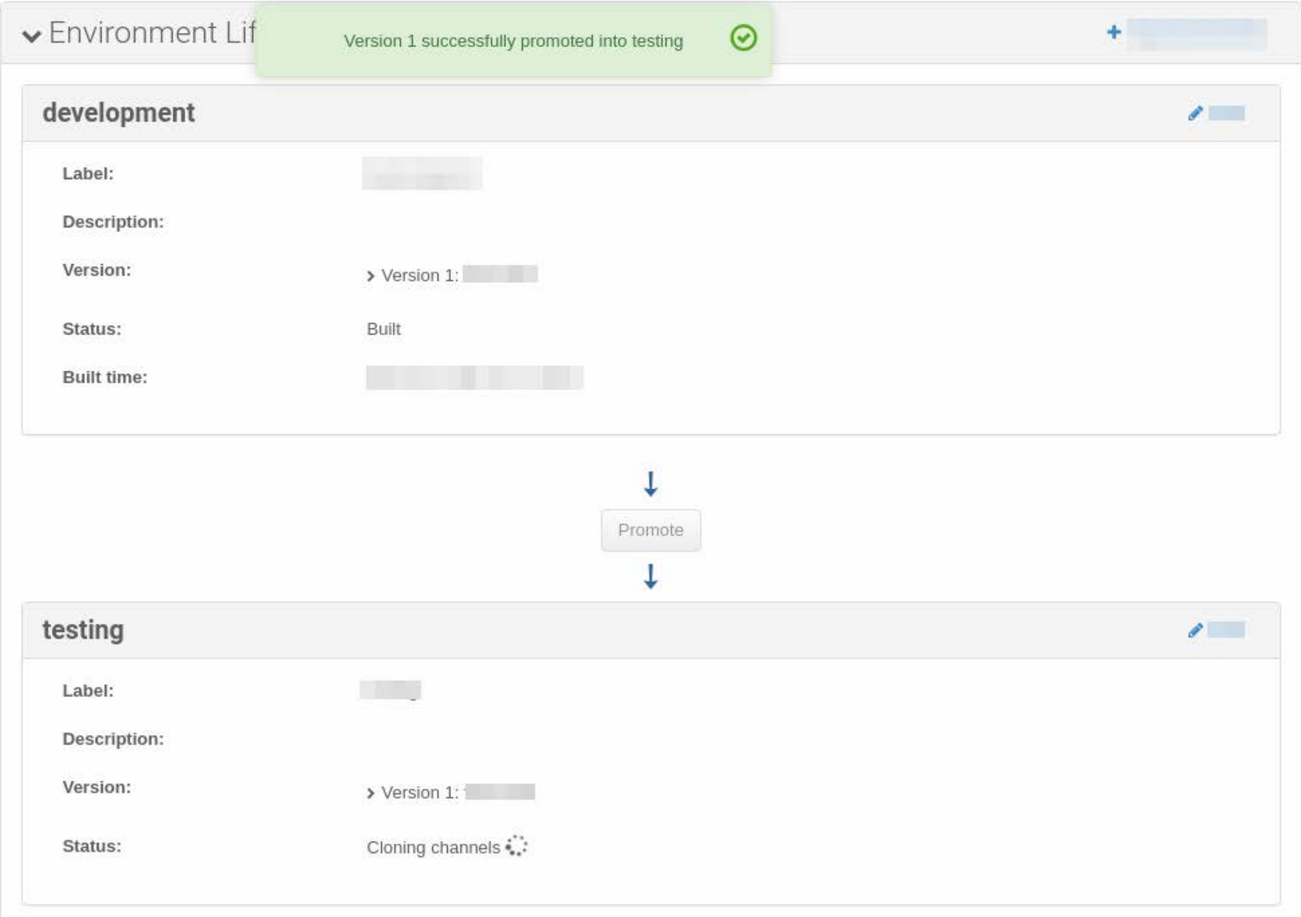
1. Navigate to Systems › System List, select the client to assign, and go to the Software › Software Channels tab.
2. In the Base Channel section, select the CLM project and environment you want to assign the client to. For example, if you want this client to receive updates from your CLM only when packages are in the production environment, assign the base channel <CLM_Project_Name>-production-<Channel_Name>. Alternatively, you could use this client as a way to test if your CLM packages are working as expected before you promote them to development, so you assign the base channel <CLM_Project_Name>-testing-<Channel_Name>.



3. Click Next to assign the client.

Procedure: Promote Environments

1. In the Uyuni Web UI, navigate to Content Lifecycle › Projects, and select the project you want to work with.
2. In the Environment Lifecycle section, locate the environment to promote to its successor, and click Promote . You can monitor build progress in the Environment Lifecycle section.



Related Topics

- For more information about CLM, including information about how to use filters, see Administration › Content-lifecycle.
- For CLM examples, see Administration › Content-lifecycle-examples.

Chapter 5. Product Upgrade via Web UI

If you want to upgrade the registered SUSE Linux Enterprise client pack to a newer product version, it can be done either on the command line or via Web UI.
This document describes and illustrates in detail the product upgrade using the Web UI.

Product versions used are not reflective of the actual latest versions available. They are used for illustration purposes only. As an example, the following procedure describes the upgrade to version 15 SP5 from and older version 15. If you are targeting a different version, select the corresponding channels and versions.

Procedure: Upgrading Product to a Newer Version Using Web UI

1. Log in to Uyuni Web UI and navigate to Admin › Setup Wizard › Products and search for SUSE Linux Enterprise Server 15 SP5 x86_64.
2. Select the recommended channels.
3. Click Add Products .
4. Navigate to Systems › Registered client › Software › Product Migration. You will see the targets available for that registered client.
5. Select SUSE Linux Enterprise Server 15 SP5 x86_64. This will expand further.

6. Select Target Base Channel as SLE-Product-SLES15-SP5-Pool for x86_64. Keep Allow Vendor Change unchecked.
7. Click Schedule Migration . The message will be highlighted It is better to do a dry run first so continuing with dry run first.
8. Click Dry run and check the status of the simulation in Events › History. You should see a return code 0 indicating a successful dry run.
9. Click Schedule Migration to perform the actual product migration. The message will be highlighted on top of the screen indicating the scheduling of the action.
10. When the upgrade is complete, check the status in Events › History.
11. On the Uyuni Web UI side, verify the succesfully completed product upgrade by going to Systems › Registered client › Details.
12. On the client side you can verify it by running:
    cat /etc/os-release
13. The output will look similar to:
    NAME="SLES" VERSION="15-SP5″
    VERSION_ID="15.5″
    PRETTY_NAME="SUSE Linux Enterprise Server 15 SP5″ ID="sles"
    ID_LIKE="suse"
    ANSI_COLOR="0;32″
    CPE_NAME="cpe:/o:suse:sles:15:sp5″
    DOCUMENTATION_URL="https://documentation.suse.com/"

Chapter 6. GNU Free Documentation License

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.

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.

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.

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.

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:

- 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.
- 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.
- State on the Title page the name of the publisher of the Modified Version, as the publisher.
- Preserve all the copyright notices of the Document.
- Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- 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.
- Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- Include an unaltered copy of this License.
  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.
  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.

- 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.
- 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.
- Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
- Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.
- 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.

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".

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.

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.

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.

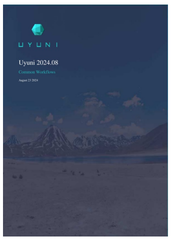
TERMINATION
You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

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”.

Documents / Resources

	**UYUNI 2024.08 Common Workflows Guide** [pdf] Instructions 2024.08, 2024.08, 2024.08, 2024.08 Common Workflows Guide, 2024.08, Common Workflows Guide, Workflows Guide, Guide

References

- What is Copyleft? - GNU Project - Free Software Foundation
- User Manual