

Ask me anything!

Increase your orchard knowledge



ATIX-Teams: Engineering, Support and Consulting

2021-03-23

Will you also support CentOS 8 forks like AlmaLinux or RockyLinux?

- ▶ Context: CentOS 8 will be deprecated at the end of 2021.
- ▶ Promising alternatives: Alma Linux and RockyLinux
- ▶ RC for Alma Linux: successfully deployed via orcharhino
- ▶ Support: one or both for managed hosts if and when they're stable.
- ▶ Host OS for orcharhino will most likely not include CentOS 8

What's on the 2021/2022 roadmap?



- ▶ 4 more releases this year \pm 1.
- ▶ summer: foreman 2.3 (with Katello in version 3.18), maintaining pulp at version 2.
- ▶ upgrades concerning Application Centric deployment.
- ▶ orcharhino 6.0: Pulp 3, Foreman 2.5 and Katello 4.1
- ▶ include the foreman_webhooks \Rightarrow replace the foreman_hooks.
- ▶ 2022: EL8 base

What is the difference between installation media and synced content? Why are they differentiated?

- ▶ "All media" → "Installation media": reference to an online installation medium
- ▶ orcharhino copies kernel and initrd to tftp-directory
- ▶ Synced content: additional function implemented in Katello
- ▶ Note: synced content only available, if host is attached to fitting content source and content view

Are there plans to make Debian repositories in Katello directly usable for PXE/iPXE installations?

- ▶ Katello 4.1 and Pulp 3 for deb content.
- ▶ Timeframe: orcharhino 6.0 at the end of 2021

Is it possible to control Bare Metal hardware via orcharhino (IPMI/BMC or the like)?

- ▶ Plugin for that purpose: store the IP of the server's management interface
- ▶ Control over the power management
- ▶ Complex functions as hooks
- ▶ Be prepared to a future migration to Foreman webhooks!

How can I customize templates and what do I need to be aware of?

- ▶ Different types of templates: provisioning, reports, jobs, ...
- ▶ Never unlock templates!
- ▶ Clone existing templates.
- ▶ Tab with documentation for syntax and a some variables
- ▶ Assign to the appropriate OS and select it in the operating system
- ▶ Cloned templates are not updated.

Monitor Content Hosts Applications Configure Infrastructure Administer

Provisioning Templates > Edit Kickstart default

Template Inputs Type Association History Locations Organizations **Help**

Template syntax

Provisioning templates are generated using the Embedded Ruby (ERB) language. The following table and example snippet shows global methods, variables and class methods and how to use them. These are guaranteed to work via the safe mode rendering, to ensure a template can do nothing harmful. [For more info visit our documentation.](#)

Examples

- > Comments
- > In-line code syntax
- > Printing data
- > Variables
- > Calling methods on objects
- > Safe mode methods
- > Global macros
- > Iterating
- > Inputs

Safe mode methods and variables

Class	Allowed methods or members
Global methods (macros)	all_host_statuses all_host_statuses_hash bootdisk_chain_url bootdisk_raise default_template_url dns_lookup errata foreman_server_fqdn foreman_server_url foreman_settings_url foreman_url gem_version compare global_setting grub_pass host_applicable_errata_filtered host_applicable_errata_id host_collections host_collections_names host_content_facet host_sec host_kernel_release host_latest_applicable_pxe_version host_param host_param? host_param_false? host_param_true? host_products host_products_names host_puppet_classes host_redhat_subscription_names host_sle host_status host_subscriptions host_subscriptions_names host_optime_seconds indent input insights_remediation ka_console last_checkin load_domains load_errata_applications load_host_groups load_hosts load_locations load_operating_system load_organizations load_pools load_realms load_smart_proxies load_subnets load_user_groups load_users log_debug log_error log_fatal log_info log_warn mac_name match media_path media_provider media_url number_to_currency number_to_human number_to_human_size number_to_percentage number_with_delimiter number_with_precision plugin_present? preview? pxe_kernel_options raise read rpm_hiv read_name registered_at registered_through repository_url root_pass save_to_file snippet snippet_if_exists snippets sortable_version sub_sku subnet_hoa_param? subnet_param subscription_manager_configuration_url template_name user_auth_source_name
Global variables	@additional_media @arch @cpu @host @initrd @initrd_url @kernel @kernel_url @kexec @initrd @kexec_kernel @mediaghost @mediaserver @osver @proseed_path @proseed_server @provisioning_type @repo @static @template_name @tftp
ActiveRecord::AssociationRelation	[] each find_in_batches first group_by map size sort_by to_a
ActiveRecord::Associations::CollectionProxy	[] each expiring_in_days find_in_batches first group_by map size to_a
ActiveRecord::Batches::BatchEnumerator	[] each each_record first map size to_a
ActiveRecord::Relation	[] each find_in_batches first group_by map size to_a

How do I get errata for CentOS 7 if I don't get the repositories from ATIX?
Can I run an errata service locally like for Debian?

- ▶ Service we offer to our customers
- ▶ Not installable on premises.

How can I maintain hosts on a minor release of the operating system, for example RHEL 7.8 rather than upgrading to RHEL 7.9?

- ▶ have the relevant repositories on the orcharhino.
- ▶ publish repositories in a content view.
- ▶ It is also possible to have all versions in one content view, we will split them in the next step.
- ▶ In the example picture you can see some RHEL 7.x versions.

Fix hosts on a minor release



x86_64 7.9	⊖	+
x86_64 7.8	⊖	+
x86_64 7.7	⊖	+
x86_64 7.6	⊖	+
x86_64 7.5	⊖	+
x86_64 7.4	⊖	+

How can I maintain hosts on a minor release of the operating system, for example RHEL 7.8 rather than upgrading to RHEL 7.9?

- ▶ Now we create an activation key to which we assign a version.
- ▶ Now you can do this for every version you want to host.
- ▶ With this activation key the host gets only the operating system version you set.

Fix hosts on a minor release



Activation Key Content

Release Version:

7Server



Save

Cancel

Environment :

Library

CentOS7-Test

Library

CentOS8-Test

Fix hosts on a minor release



Activation Key Content

Release Version:

7.8



Save

Cancel

Environment :



Library



CentOS7-Test

How can I maintain hosts on a minor release of the operating system, for example RHEL 7.8 rather than upgrading to RHEL 7.9?


- ▶ It is possible to change the version on the host via the subscription-manager.
- ▶ Changing version is also possible through the content-host page.

Fix hosts on a minor release



Content Host Content

Release Version:

Content View: Composite RHEL 7 

Lifecycle Environment : Library CentOS7-Test

Fix hosts on a minor release



Content Host Content

Release Version:

Content View: Composite RHEL 7

Lifecycle Environment :

Library CentOS7-Test

How can I maintain hosts on a minor release of the operating system, for example RHEL 7.8 rather than upgrading to RHEL 7.9?

- ▶ If you never want to change the version, create a content-view with only one version
- ▶ Advisable to use the ExtendetUpdateSupport repository to get updates.

Fix hosts on a minor release



The screenshot displays the RPM package management interface in Red Hat Ansible Tower. The left sidebar contains navigation options: Monitor, Content, Hosts, Applications, Configure, Infrastructure, and Administrator. The main content area is split into two panes. The left pane shows a tree view of RPMs, with the following items listed under 'Red Hat Enterprise Linux for S-JIS (RHEL 7 Server) - Extended Update Support (RPMs)':

- x86_64 7Server
- x86_64 7.3
- x86_64 7.6
- x86_64 7.5
- x86_64 7.4
- x86_64 7.3
- x86_64 7.2
- x86_64 7.1

The right pane shows a list of RPM packages for 'Red Hat Enterprise Linux 7 Server - Extended Update Support (Debug RPMs)'. The packages listed are:

- Red Hat Enterprise Linux 7 Server Kickstart x86_64 7.8
- Red Hat Enterprise Linux 7 Server - Optional RPMs x86_64 7Server
- Red Hat Enterprise Linux 7 Server RPMs x86_64 7Server
- Red Hat Enterprise Linux 8 for x86_64 - AppStream Kickstart 8.3
- Red Hat Enterprise Linux 8 for x86_64 - AppStream RPMs 8
- Red Hat Enterprise Linux 8 for x86_64 - BaseOS Kickstart 8.3
- Red Hat Enterprise Linux 8 for x86_64 - BaseOS RPMs 8
- Red Hat Enterprise Linux 8 for x86_64 - Supplementary RPMs 8

Is there a plan to group SLES repos in the "Products" overview?

- ▶ How would you like to group repositories, on which page, and why?
- ▶ Prefix products with something like 'scc_'
- ▶ Subcategories for e.g. SLES or openSUSE not feasible due to naming scheme
- ▶ Tip: create a feature request to rename SCC products with prefix: 'scc_'.

Will it be possible soon to also synchronize SLES repos "on_demand" instead of "immediate"?

- ▶ Is currently not working.
- ▶ This will be a feature of orcharhino 6.0.

We manage about 3300 servers through our Orcharhino with multiple smart proxies. What is the best practice to update many hosts in a small time frame?

- ▶ "It depends".
 - ▶ Group your managed hosts!
 - ▶ Distribute the content and the hosts over your orcharhino proxies!
 - ▶ Consider ansible-runner!
 - ▶ Perform regular upgrade to keep the overall volume small.

End



Thank you for your attention!