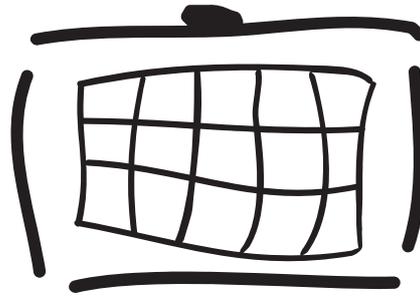


User guide for Radiator VNF Manager GUI

Radiator VNF Flex

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Radiator

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This document describes the available actions in the graphical user interface for Radiator VNF Manager.

Radiator VNF Manager GUI



Welcome to Radiator VNF Manager!

This is Radiator VNF Manager GUI

[Run jobs](#)

[Documents and guides](#)

[License information](#)

Radiator VNF Manager home

Radiator VNF Manager home page shows the available functionalities. *Run jobs* requires authentication and from there user can manage both Radiator VNF hosts and Radiator VNF Manager. *Documents and guides* opens page with available Radiator VNF Flex documentation. *License information* shows the Radiator licenses and Radiator VNF Flex Lifecycle Policy.

Run jobs

Projects	Activity	Actions
Radiator VNF Jobs	None	Action ▾
Radiator VNF Manager Jobs	None	Action ▾

Radiator VNF Manager projects home

Radiator VNF Manager projects home page shows the available projects for the logged in user. There are two projects, **Radiator VNF Jobs** for managing the Radiator VNF hosts and **Radiator VNF Manager Jobs** for managing the Radiator VNF Manager itself. The Radiator VNF Jobs project is visible with both regular and admin user access, while the Radiator VNF Manager Jobs project is only visible for the admin user.

Once either of the available projects is selected, the **All jobs** page is shown which lists the available jobs per project.

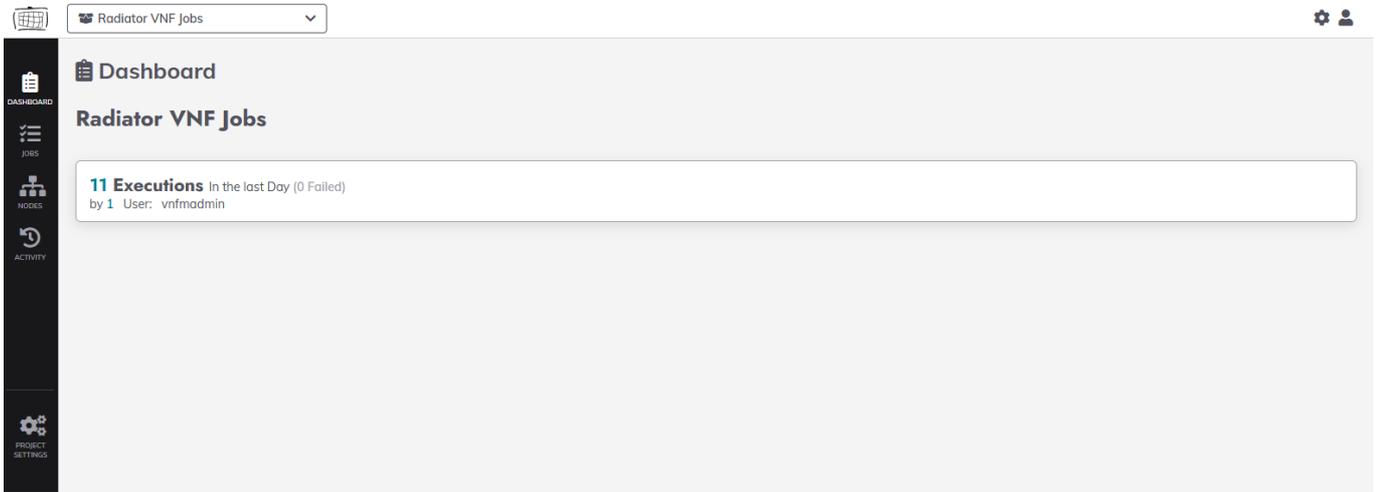
The screenshot displays the 'All Jobs' interface in Radiator VNF Manager. At the top, there's a navigation bar with a dropdown menu set to 'Radiator VNF Jobs' and a search bar. Below this, a sidebar on the left contains icons for 'DASHBOARD', 'JOBS', 'NODES', and 'ACTIVITY'. The main content area is titled 'All Jobs 16' and includes a list of jobs with expand/collapse options. The jobs listed include tasks like 'Upload OpenStack credentials', 'Upload OpenStack image', 'Import existing OpenStack image', 'Upload configuration file', 'Upload configuration package', 'Create hosts', 'Setup hosts', 'Start Radiator instances', 'Stop Radiator instances', 'Restart Radiator instances', 'Update Radiator configuration', 'Label Radiator configuration', 'Switch Radiator configuration', 'Update hosts', 'Destroy hosts', and 'Show configuration'. Below the job list is an 'Activity for Jobs' section showing a table of 11 job executions. The table columns include execution time, duration, user, job name, and cloud ID. The jobs are all marked as successful (green checkmarks).

Execution Time	Duration	User	Job Name	Cloud ID	Job ID
03/20/2023 5:25 PM Today at 5:25 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: Vowifi1 radiatorvnfhosts: Vowifi1-Vowifi1	#11
03/20/2023 5:23 PM Today at 5:23 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: M2M radiatorvnfhosts: Sales-VNFM-M2M-v	#10
03/20/2023 5:21 PM Today at 5:21 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: IoT radiatorvnfhosts: Sales-IoT-vnf-ho	#9
03/20/2023 5:18 PM Today at 5:18 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: fixedline radiatorvnfhosts: fixedline-	#8
03/20/2023 5:15 PM Today at 5:15 PM	0 minute	by vnfmadmin	11 Create hosts	cloudid: Vowifi1	#7
03/20/2023 5:13 PM Today at 5:13 PM	3 minutes	by vnfmadmin	11 Create hosts	cloudid: IoT	#6
03/20/2023 5:02 PM Today at 5:02 PM	2 minutes	by vnfmadmin	11 Create hosts	cloudid: M2M	#5
03/20/2023 4:59 PM Today at 4:59 PM	2 minutes	by vnfmadmin	11 Create hosts	cloudid: fixedline	#4
03/20/2023 4:56 PM Today at 4:56 PM	3 minutes	by vnfmadmin	11 Create hosts	cloudid: fixedline	#3
03/20/2023 4:45 PM Today at 4:45 PM	1 ok 0 minute	by vnfmadmin	10 Upload configuration package	cloudinfo: fd12df55-206e-4235-b3eb-a5c6516186b	#2

Radiator VNF Jobs

On the left side there are a *Dashboard*, *Jobs*, *Nodes*, and *Activity* options. On the top is a drop down list that allows easily changing the project if the user has access to both projects, and on the main area of the page all the available Jobs are shown with possible earlier activity.

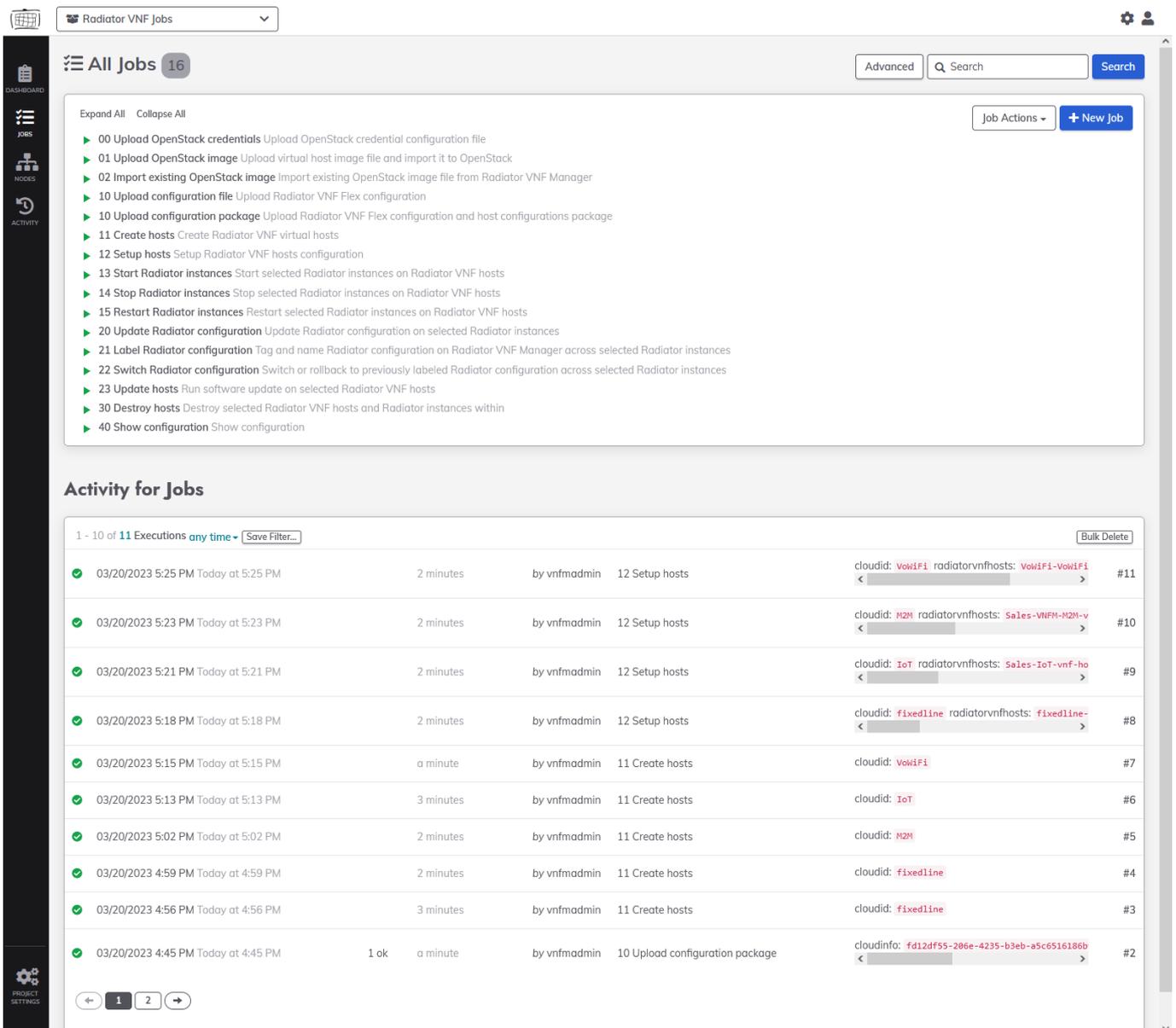
Dashboard



Radiator VNF Jobs Dashboard

Dashboard shows the total number of executions that has happened in the selected project during last day.

Jobs



Radiator VNF Jobs

Jobs open the All jobs page with available jobs and possible earlier activity from the selected project.

Nodes

The screenshot shows the 'Nodes' page in the Radiator VNF Manager. At the top, there is a navigation bar with 'Radiator VNF Jobs' and a search icon. Below this is a sidebar with navigation options: DASHBOARD, JOBS, NODES, ACTIVITY, and PROJECT SETTINGS. The main content area is titled 'Nodes' and features a search bar with the placeholder text 'Enter a node filter, or .* for all nodes'. Below the search bar, there are two sections: 'TAGS' and 'FILTERS'. The 'TAGS' section contains a list of tags such as 'IoT (3)', 'VoWiFi (1)', 'meta_belongs_M2M (2)', etc. The 'FILTERS' section shows 'All Nodes 18'. The 'Browse' tab is selected.

Radiator VNF Nodes

This screenshot shows the 'Nodes' page with a search filter applied, resulting in 22 nodes. The search filter is '.*'. The page displays a list of nodes with columns for 'NODE', 'TAGS', and 'USER @ HOST'. The 'NODE' column lists nodes like 'Sales-IoT-vnf-host-dbhost', 'Sales-IoT-vnf-host-radiatorA_A', etc. The 'TAGS' column shows associated tags like 'meta_vm_tag_dbhost', 'IoT', 'meta_belongs_IoT', etc. The 'USER @ HOST' column shows the user and IP address for each node, such as 'vnfadmin @ 172.17.100.42'. At the bottom, there are pagination controls showing 'Jump to: 1' and 'Per page: 20'.

NODE	TAGS	USER @ HOST
> Sales-IoT-vnf-host-dbhost AlmaLinux 9.0	meta_vm_tag_dbhost IoT meta_belongs_IoT	vnfadmin @ 172.17.100.42
> Sales-IoT-vnf-host-radiatorA_A AlmaLinux 9.0	meta_vm_tag_radiatorA_A IoT meta_belongs_IoT	vnfadmin @ 172.17.100.157
> Sales-IoT-vnf-host-radiatorLB AlmaLinux 9.0	meta_vm_tag_radiatorLB IoT meta_belongs_IoT	vnfadmin @ 172.17.100.31
> Sales-VNFM-M2M-vnf-host-M2Mhost1 AlmaLinux 9.0	meta_belongs_M2M M2M meta_vm_tag_M2Mhost1	vnfadmin @ 172.17.100.211
> Sales-VNFM-M2M-vnf-host-M2Mhost2 AlmaLinux 9.0	meta_belongs_M2M M2M meta_vm_tag_M2Mhost2	vnfadmin @ 172.17.100.250
> VoWiFi-VoWiFi-vnf-host-VoWiFi AlmaLinux 9.0	meta_vm_tag_VoWiFi VoWiFi meta_belongs_VoWiFi	vnfadmin @ 10.17.70.81
> fixedline-vnf-host-develDB AlmaLinux 9.0	fixedline meta_belongs_fixedline meta_vm_tag_develDB	vnfadmin @ 10.17.70.240
> fixedline-vnf-host-radiator_1 AlmaLinux 9.0	fixedline meta_belongs_fixedline meta_vm_tag_radiator_1	vnfadmin @ 172.17.100.119
> fixedline-vnf-host-radiator_2 AlmaLinux 9.0	fixedline meta_vm_tag_radiator_2 meta_belongs_fixedline	vnfadmin @ 172.17.100.181
> fixedline-vnf-host-testing_DB AlmaLinux 9.0	fixedline meta_belongs_fixedline meta_vm_tag_testing_DB	vnfadmin @ 10.17.70.167
> localhost server AlmaLinux 9.1	local	rundeck @ localhost
> radiator@acct AlmaLinux 9.0	all_radiator_instances radiatorA_A_radiator_instances IoT_radiators	vnfadmin @ 172.17.100.157
> radiator@auth AlmaLinux 9.0	all_radiator_instances radiatorA_A_radiator_instances IoT_radiators	vnfadmin @ 172.17.100.157
> radiator@dbat AlmaLinux 9.0	M2Mhost1_radiator_instances all_radiator_instances M2M_radiators	vnfadmin @ 172.17.100.211
> radiator@foobar AlmaLinux 9.0	M2Mhost2_radiator_instances all_radiator_instances M2M_radiators	vnfadmin @ 172.17.100.250
> radiator@lb AlmaLinux 9.0	all_radiator_instances radiatorLB_radiator_instances IoT_radiators	vnfadmin @ 172.17.100.31
> radiator@rr1 AlmaLinux 9.0	radiator_1_radiator_instances all_radiator_instances fixedline_radiat..	vnfadmin @ 172.17.100.119
> radiator@rr2 AlmaLinux 9.0	all_radiator_instances radiator_2_radiator_instances fixedline_radiat..	vnfadmin @ 172.17.100.181
> radiator@vrf1 AlmaLinux 9.0	VoWiFi_radiator_instances all_radiator_instances VoWiFi_radiators	vnfadmin @ 10.17.70.81
> radiator@vrf2 AlmaLinux 9.0	VoWiFi_radiator_instances all_radiator_instances VoWiFi_radiators	vnfadmin @ 10.17.70.81

Radiator VNF Nodes

Nodes open the page that by default allows to browse the nodes by tags, by clicking the tag, or by pressing the *All Nodes* filter. Nodes can also be searched by typing the filter, for example *.** and pressing the *Search*.

Hosts vs instances vs nodes

Hosts or Radiator VNF hosts refer to virtual machines running in OpenStack (in OpenStack language these are usually called instances). Host can be either Radiator host (running Radiator) or any other kind of host, for example DB host where database server is running. Hosts are visible on the Radiator VNF Manager GUI *Nodes* page. Hosts are also the target node on some of the jobs, for example job [30 Destroy hosts](#) requires that the user selects the Radiator VNF hosts that should be destroyed. The actual tasks inside Radiator VNF Flex Ansible playbooks may refer to hosts also as workers, and the output can contain variable names with "worker" in them. This is Radiator VNF Flex's internal functionality, but in all these cases worker means hosts.

Instances refer to Radiator instances, that is the Radiator process running on the Radiator host. There can be multiple Radiator instances per Radiator host, for example:

- for performance reasons: multiple instances handling large loads with couple Radiator instances configured for load balancing and couple Radiator instances configured to handle authentication
- for logistic reasons: for example traffic goes to Radiator proxy instance first, which then forwards the traffic to Radiator instance doing authentication
- separating authentication and accounting to different instances

Each Radiator instance is visible on the *Nodes* page together with the Radiator VNF hosts. Instances are also the target nodes on some of the jobs, for example job [13 Start Radiator instances](#) require that the user selects the Radiator instances that should be started.

The differences between hosts and instances are:

- A single host can contain multiple Radiator instances.
- Job targeting host will affect the whole host, regardless if there are multiple Radiator instances or not.
- Job targeting multiple Radiator instances can target Radiator instances on various hosts within the cloud.
- Host does not need to be Radiator host, but it can be for example DB host. Radiator instance is always Radiator process.

"Nodes" is visible on GUI in various places. For example the "Nodes" on the left panel indicates a page that shows all the Nodes (meaning all available hosts and Radiator instances) managed by this Radiator VNF Manager along additional information that the nodes have like tags (for example which cloud the node belongs to) and IP address. "Nodes" text is also visible on the jobs, for example on job [13 Start Radiator instances](#) nodes refers to Radiator instances that the operation will target.

In short, depending on the context Nodes will mean either Radiator VNF hosts or Radiator instances.

Activity

Radiator VNF Jobs
⚙️ 👤

🏠 DASHBOARD
📋 JOBS
👤 NODES
🔄 ACTIVITY
⚙️ PROJECT SETTINGS

Activity

11 Executions any time
 Auto refresh [Bulk Delete](#)

✔️	03/20/2023 5:25 PM Today at 5:25 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: Vowifi radiatorvnfhosts: Vowifi-Vowifi	#11
✔️	03/20/2023 5:23 PM Today at 5:23 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: M2M radiatorvnfhosts: Sales-VNFN-M2M-v	#10
✔️	03/20/2023 5:21 PM Today at 5:21 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: IoT radiatorvnfhosts: Sales-IoT-vnf-ho	#9
✔️	03/20/2023 5:18 PM Today at 5:18 PM	2 minutes	by vnfmadmin	12 Setup hosts	cloudid: fixedline radiatorvnfhosts: fixedline-	#8
✔️	03/20/2023 5:15 PM Today at 5:15 PM	a minute	by vnfmadmin	11 Create hosts	cloudid: Vowifi	#7
✔️	03/20/2023 5:13 PM Today at 5:13 PM	3 minutes	by vnfmadmin	11 Create hosts	cloudid: IoT	#6
✔️	03/20/2023 5:02 PM Today at 5:02 PM	2 minutes	by vnfmadmin	11 Create hosts	cloudid: M2M	#5
✔️	03/20/2023 4:59 PM Today at 4:59 PM	2 minutes	by vnfmadmin	11 Create hosts	cloudid: fixedline	#4
✔️	03/20/2023 4:56 PM Today at 4:56 PM	3 minutes	by vnfmadmin	11 Create hosts	cloudid: fixedline	#3
✔️	03/20/2023 4:45 PM Today at 4:45 PM	1 ok a minute	by vnfmadmin	10 Upload configuration package	cloudinfo: fd12df55-206e-4235-b3eb-a5c6516186b	#2
✔️	03/20/2023 4:41 PM Today at 4:41 PM	12 seconds	by vnfmadmin	00 Upload OpenStack credentials	cloudcredentials: 3d55d3f2-163d-405a-9eb8-5883	#1

Radiator VNF Activity

Activity opens the Activity page that shows execution history and information related to the executions. Execution history can be filtered when performing a search.

Jobs to manage Radiator VNF hosts

For convenience, the jobs are ordered to match the most common execution flow where new hosts are created and set up to the OpenStack based on the uploaded configuration. Also the order indicates which information is required by the later jobs, for example it is impossible to create hosts unless the OpenStack credentials and the Radiator VNF Manager configuration files have been uploaded first.

00 Upload OpenStack credentials

The screenshot shows the '00 Upload OpenStack credentials' job configuration in the Radiator VNF Manager. The interface includes a sidebar with navigation options (Dashboard, Jobs, Nodes, Activity, Project Settings), a top navigation bar with 'Radiator VNF Jobs' and user settings, and a main content area. The main content area displays the job title, a unique ID, and a 'Run Job Now' button. Below this is a file upload section with a 'Browse...' button and a 'Log Output' dropdown. A stats table at the bottom shows 1 execution with a 100% success rate and a 12s average duration.

00 Upload OpenStack credentials

Create Radiator VNF Manager credentials file. See chapter *Radiator VNF Manager credentials file* in [Deployment and configuration guide for Radiator VNF Manager](#) for more information about the file.

1. Browse to the credentials file and select it.
2. Press *Run Job Now*.

The job uploads the file to the Radiator VNF Manager disk to `/var/lib/radiatorvnf/incoming/` directory, reads it and creates an OpenStack `clouds.yaml` file `/etc/openstack/clouds.yaml` which is then used by rest of the operations. The processed credentials file is stored to the Radiator VNF Manager `/var/lib/radiatorvnf/incoming/processed_credentials/` directory.

01 Upload OpenStack image

The screenshot shows the '01 Upload OpenStack image' configuration page. At the top, there's a dropdown for 'Radiator VNF Jobs' and a user profile icon. The main title is '01 Upload OpenStack image' with an 'Action' dropdown. Below it, the instruction reads 'Upload virtual host image file and import it to OpenStack'. A unique ID '735f1a5a-210f-4056-91fa-d6c52aaa77a9' is displayed with a copy icon and a 'Definition' link. The 'Follow execution' section has a 'Log Output' dropdown and a 'Run Job Now' button. The configuration fields include: 'Radiator VNF cloud' set to 'fixedline', 'Image file to upload' with a 'Browse...' button and 'No file selected.' text, and 'Image name' with a text input field. A 'Stats' and 'Activity' tab is visible at the bottom, showing '0 EXECUTIONS' and '- AVG DURATION'.

01 Upload OpenStack image

1. Select the cloud (OpenStack project) where to upload the OpenStack image.
2. Browse to the qcow2 image file and select it.
3. Enter the name that the image will get in OpenStack.
4. Press *Run Job Now*.

The job uploads the file to the Radiator VNF Manager disk to `/var/lib/radiatorvnf/flex-ansible/files/tmpimages/` directory and uploads the image from there to selected OpenStack project. Image file is left to the Radiator VNF Manager disk.

02 Import image from Radiator VNF Manager to OpenStack

The screenshot shows the '02 Import existing OpenStack image' configuration page. At the top, there's a dropdown for 'Radiator VNF Jobs' and a user profile icon. The main title is '02 Import existing OpenStack image' with an 'Action' dropdown. Below it, the instruction reads 'Import existing OpenStack image file from Radiator VNF Manager'. A unique ID '49d6ea7d-5198-47c2-9b07-20ebe73beedb' is displayed with a copy icon and a 'Definition' link. The 'Follow execution' section has a 'Log Output' dropdown and a 'Run Job Now' button. The configuration fields include: 'Radiator VNF cloud' set to 'M2M', 'OpenStack image to import' with a dropdown menu showing 'AlmaLinux-9-GenericCloud-9.0-20221102.x86_64.qcow2', and 'Image name' with a text input field containing 'test image'. A 'Stats' and 'Activity' tab is visible at the bottom, showing '0 EXECUTIONS' and '- AVG DURATION'.

02 Import image from Radiator VNF Manager to OpenStack

Radiator VNF Manager may contain a cloud image created by the operating system vendor for initial testing purposes.

1. Select the cloud (OpenStack project) where to upload the OpenStack image.
2. Select the available image.
3. Enter the name that the image will get in OpenStack.
4. Press *Run Job Now*.

The job uploads the image from Radiator VNF Manager `/var/lib/radiatorvnf/flex-ansible/files/cloudimages/` directory to selected OpenStack project.

10 Upload configuration file

10 Upload configuration file

Create Radiator VNF Manager configuration file. See chapter *Radiator VNF Manager configuration file* in [Deployment and configuration guide for Radiator VNF Manager](#).

1. Browse to the Radiator VNF Manager configuration file and select it.
2. Press *Run Job Now*.

The job uploads the file to the Radiator VNF Manager disk to `/var/lib/radiatorvnf/incoming/` directory, reads it and populates the Radiator VNF Manager internal information so it can be used by rest of the operations. The processed Radiator VNF Manager configuration file is stored to the Radiator VNF Manager `/var/lib/radiatorvnf/incoming/processed_cloudinfos/` directory.

10 Upload configuration package

The screenshot displays the '10 Upload configuration package' job configuration in the Radiator VNF Manager. The interface includes a sidebar with navigation options (Dashboard, Jobs, Hosts, Activity, Project Settings), a top navigation bar with 'Radiator VNF Jobs' and a user profile icon, and a main content area. The main content area has a title '10 Upload configuration package', a subtitle 'Upload Radiator VNF Flex configuration and host configurations package', and a job ID 'e0acbd0a-afe8-40f9-97e7-99e97f46a1a1'. Below this, there are two upload fields: 'Configuration file to upload' with 'cloudinfo.yaml' and 'Configuration package to upload' with 'vnfiles.zip'. A 'Run Job Now' button is visible. At the bottom, a 'Stats' section shows '1 EXECUTIONS', '100% SUCCESS RATE', and '47s AVG DURATION'.

10 Upload configuration package

Create Radiator VNF Manager configuration file and a package that contains all the files that are referred to in the Radiator VNF Manager configuration file like Radiator configuration, possible hook files etc. See chapter *Radiator VNF Manager configuration file* in [Deployment and configuration guide for Radiator VNF Manager](#). Suitable package types are .zip, .tar, .tar.gz, .tar.bz2, .tar.xz, .tar.zst and .gz, .bz2, .xz, or .zst files that contains a .tar archive.

1. Browse to the Radiator VNF Manager configuration file and select it.
2. Browse to the package and select it.
3. Press *Run Job Now*.

The job uploads both files to the Radiator VNF Manager disk to `/var/lib/radiatorvnf/incoming/` directory, reads the configuration file it and populates the Radiator VNF Manager internal information. The processed Radiator VNF Manager configuration file is stored to the Radiator VNF Manager `/var/lib/radiatorvnf/incoming/processed_cloudinfos/` directory.

The imported package is unpacked and removed, and it's contents are left to `/var/lib/radiatorvnf/incoming/` directory for further processing by jobs like [12 Setup OpenStack hosts](#) and [20 Update Radiator configuration](#).

11 Create OpenStack hosts

The screenshot displays the '11 Create hosts' job configuration in the Radiator VNF Manager. The interface includes a sidebar with navigation options: DASHBOARD, JOBS, HOSTS, ACTIVITY, and PROJECT SETTINGS. The main content area shows the job title '11 Create hosts' and the instruction 'Create Radiator VNF virtual hosts'. A configuration field contains the ID 'da9a85a9-f4d4-4e75-bf4b-85eed7545da'. Below this, there is a 'Follow execution' section with a 'Log Output' dropdown and a 'Run Job Now' button. The 'Radiator VNF cloud' is set to 'fixedline', with a note to 'Select the Radiator VNF cloud to target operation'. A 'Nodes' section shows 'Change the Target Nodes (1)'. At the bottom, an 'Activity' table lists five successful executions with their timestamps, durations, and cloud IDs.

Execution ID	Timestamp	Duration	By	Job Name	Cloud ID	Host Count
#7	03/20/2023 5:15 PM Today at 5:15 PM	0 minutes	by vnfadmin	11 Create hosts	cloudid: Vowifi	11
#6	03/20/2023 5:13 PM Today at 5:13 PM	3 minutes	by vnfadmin	11 Create hosts	cloudid: IoT	11
#5	03/20/2023 5:02 PM Today at 5:02 PM	2 minutes	by vnfadmin	11 Create hosts	cloudid: M2M	11
#4	03/20/2023 4:59 PM Today at 4:59 PM	2 minutes	by vnfadmin	11 Create hosts	cloudid: fixedline	11
#3	03/20/2023 4:56 PM Today at 4:56 PM	3 minutes	by vnfadmin	11 Create hosts	cloudid: fixedline	11

11 Create OpenStack hosts

1. Select the cloud (OpenStack project) to which the Radiator VNF hosts are created.
2. Press *Run Job Now*.

The job creates the Radiator VNF hosts to the OpenStack project as defined in the selected cloud's configuration. All hosts per cloud are created automatically in one run. New hosts can be added later by uploading a new Radiator VNF Manager configuration file and package defining the new Radiator VNF hosts.

NOTE: Do not remove hosts from the Radiator VNF Manager configuration file unless they have been destroyed via Radiator VNF Manager [30 Destroy hosts](#) job. Each Radiator VNF Manager configuration file run adds new information or updates existing information, but does not remove information.

12 Setup OpenStack hosts

12 Setup hosts

Setup Radiator VNF hosts configuration

405edddf-2bc8-4019-88a0-eaeab68822bd

Follow execution **Log Output** Run Job Now

Radiator VNF cloud: VoWiFi
Select the Radiator VNF cloud to target operation

Radiator VNF hosts: VoWiFi-VoWiFi-vnf-host-VoWiFi
Select the Radiator VNF hosts to target operation

Nodes: `$(option.radiatorvnfhosts)`
The Node filters will be applied when the job is run.

Stats	Activity
4 Executions	any time Save Filter... Auto refresh Bulk Delete
03/20/2023 5:25 PM Today at 5:25 PM	2 minutes by vnfadmin 12 Setup hosts cloudid: VoWiFi radiatorvnfhosts: VoWiFi-VoWiFi-vnf-host #11
03/20/2023 5:23 PM Today at 5:23 PM	2 minutes by vnfadmin 12 Setup hosts cloudid: M2M radiatorvnfhosts: Sales-VNFM-M2M-vnf-host-#10
03/20/2023 5:21 PM Today at 5:21 PM	2 minutes by vnfadmin 12 Setup hosts cloudid: IoT radiatorvnfhosts: Sales-IoT-vnf-host-dbhos #9
03/20/2023 5:18 PM Today at 5:18 PM	2 minutes by vnfadmin 12 Setup hosts cloudid: fixedline radiatorvnfhosts: fixedline-vnf-host #8

12 Setup OpenStack hosts

1. Select the cloud (OpenStack project) to see available (created) hosts.
2. Select or deselect the hosts.
3. Press *Run Job Now*.

The job installs Radiator and Radiator Radius::UtilXS library and deploys the Radiator configuration to the Radiator VNF host if the Radiator VNF Manager configuration file option *radiator_installed* was true. In addition, any *enhancements* defined in the Radiator VNF Manager configuration file are processed. See chapter *Radiator VNF Manager configuration file* in

[Deployment and configuration guide for Radiator VNF Manager](#) for more information about the options.

If the *radiator_installed* is true but there are no Radiator configuration files available, this operation will fail. To upload the needed Radiator configuration files run [10 Upload configuration package](#) job.

13 Start Radiator instances

The screenshot shows the '13 Start Radiator instances' configuration page. At the top, there's a dropdown for 'Radiator VNF Jobs' and a user profile icon. The main title is '13 Start Radiator instances' with an 'Action' dropdown. Below it, the instruction is 'Start selected Radiator instances on Radiator VNF hosts'. A job ID field contains 'bcaf2f55-78fc-4c9e-9b12-4dae9e6dce72' with a trash icon. A 'Definition' button is on the right. The 'Follow execution' section has a 'Log Output' dropdown and a green 'Run Job Now' button. Under 'Radiator VNF cloud', a dropdown is set to 'IoT' with the instruction 'Select the Radiator VNF cloud to target operation'. Under 'Radiator instances', three checkboxes are checked: 'radiator@acct', 'radiator@auth', and 'radiator@lb', with the instruction 'Select the Radiator instances on Radiator VNF hosts to target operation'. The 'Nodes' field contains a placeholder '\$(option.radiator.instances)' and a note 'The Node filters will be applied when the job is run.' At the bottom, there's a 'Stats' tab (active) and an 'Activity' tab. The stats show '0 EXECUTIONS' and '- AVG DURATION'.

13 Start Radiator instances

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Select or deselect the instances.
3. Press *Run Job Now*.

This job will start the selected Radiator instances.

14 Stop Radiator instances

The screenshot shows the '14 Stop Radiator instances' configuration page. At the top, there's a dropdown for 'Radiator VNF Jobs' and a user profile icon. The main title is '14 Stop Radiator instances' with an 'Action' dropdown. Below it, the instruction is 'Stop selected Radiator instances on Radiator VNF hosts'. A job ID field contains '2c4de2c6-610d-4069-bdfe-881235109958' with a trash icon. A 'Definition' button is on the right. The 'Follow execution' section has a 'Log Output' dropdown and a green 'Run Job Now' button. Under 'Radiator VNF cloud', a dropdown is set to 'fixedline' with the instruction 'Select the Radiator VNF cloud to target operation'. Under 'Radiator instances', two checkboxes are checked: 'radiator@rr1' and 'radiator@rr2', with the instruction 'Select the Radiator instances on Radiator VNF hosts to target operation'. The 'Nodes' field contains a placeholder '\$(option.radiator.instances)' and a note 'The Node filters will be applied when the job is run.' At the bottom, there's a 'Stats' tab (active) and an 'Activity' tab. The stats show '0 EXECUTIONS' and '- AVG DURATION'.

14 Stop Radiator instances

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Select or deselect the instances.
3. Press *Run Job Now*.

This job will stop the selected Radiator instances.

15 Restart Radiator instances

The screenshot shows the '15 Restart Radiator instances' job configuration page in the Radiator VNF Manager. The page title is '15 Restart Radiator instances' and the subtitle is 'Restart selected Radiator instances on Radiator VNF hosts'. The job ID is '68d5dcb0-5e6c-41f1-aaa1-9e38d878d7cc'. The 'Radiator VNF cloud' is set to 'VoWiFi'. Under 'Radiator instances', 'radiator@vwwf2' is selected. The 'Nodes' field is set to '\${option.radiatorinstances}'. A 'Run Job Now' button is visible. The bottom section shows '0 EXECUTIONS' and '- AVG DURATION'.

15 Restart Radiator instances

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Select or deselect the instances.
3. Press *Run Job Now*.

This job will restart the selected Radiator instances.

20 Update Radiator configuration

20 Update Radiator configuration

Update Radiator configuration on selected Radiator instances

419bf714-14fb-4bbc-8c5d-4be724c3cf4e

Follow execution **Log Output**

Run Job Now

Radiator VNF cloud

Select the Radiator VNF cloud to target operation

Radiator instances radiator@rr1 radiator@rr2

Select the Radiator instances on Radiator VNF hosts to target operation

Nodes `$(option.radiator.instances)`

The Node filters will be applied when the job is run.

Stats Activity

0 EXECUTIONS - AVG DURATION

20 Update Radiator configuration

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Select or deselect the instances.
3. Press *Run Job Now*.

This job will update the Radiator configuration on the selected Radiator instances. Before the Radiator configuration can be updated, the Radiator configuration file must be uploaded to the Radiator VNF Manager with [10 Upload configuration package](#) job.

NOTE: The job will restart all selected Radiator instances.

21 Label Radiator configuration

21 Label Radiator configuration

Tag and name Radiator configuration on Radiator VNF Manager across selected Radiator instances

d75e231a-001b-435f-ae46-66835d5cde3a

Follow execution **Log Output** Run Job Now

Radiator VNF cloud: IoT
Select the Radiator VNF cloud to target operation

Tag to use: before-v2-dep|
Define tag to use in Git repositories for the selected hosts

Radiator instances: radiator@acct
 radiator@auth
 radiator@lb
Select the Radiator instances on Radiator VNF hosts to target operation

Nodes: `$(option.radiatorInstances)`
The Node filters will be applied when the job is run.

Stats **Activity**

0 EXECUTIONS - AVG DURATION

21 Label Radiator configuration

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Enter the tag name.
3. Select or deselect the instances.
4. Press *Run Job Now*.

This job will label the currently active Radiator configuration as known to the Radiator VNF Manager with the given custom tag. The tag must be unique across all clouds' Radiator configuration repositories managed by the Radiator VNF Manager and well formed (details available in <https://git-scm.com/docs/git-check-ref-format>).

22 Switch Radiator configuration

22 Switch Radiator configuration

Switch or rollback to previously labeled Radiator configuration across selected Radiator instances

1f4c2e63-914d-4df7-84b1-4aa79769ebc3

Follow execution **Log Output** Run Job Now

Radiator VNF cloud **IoT**
Select the Radiator VNF cloud to target operation

Show automatically generated tags **False**
Select true to show automatically generated tags

Select tag **before-v2-depl**
Select a label/tag from the list where to switch the Radiator configuration

Radiator instances radiator@acct
 radiator@auth
 radiator@lb
Select Radiator instances where configuration will be switched

Nodes `$(option.radiator.instances)`
The Node filters will be applied when the job is run.

Stats Activity

0 EXECUTIONS - AVG DURATION

22 Switch Radiator configuration with custom tag

22 Switch Radiator configuration

Switch or rollback to previously labeled Radiator configuration across selected Radiator instances

1f4c2e63-914d-4df7-84b1-4aa79769ebc3

Follow execution **Log Output** Run Job Now

Radiator VNF cloud **fixedline**
Select the Radiator VNF cloud to target operation

Show automatically generated tags **True**
Select true to show automatically generated tags

Select tag **2023-03-20T160405**
Select a label/tag from the list where to switch the Radiator configuration

Radiator instances radiator@rr1
 radiator@rr2
Select Radiator instances where configuration will be switched

Nodes `$(option.radiator.instances)`
The Node filters will be applied when the job is run.

Stats Activity

0 EXECUTIONS - AVG DURATION

22 Switch Radiator configuration with automatically generated tag

1. Select the cloud (OpenStack project) to see available Radiator instances (setup has been performed).
2. Select if you want to see custom tags or automatically generated ones.

3. Select the tag.
4. Select the instances.
5. Press *Run Job Now*.

NOTE: The job will only show available tags and Radiator instances that have the selected tags. If no tags exist, the job will show **Failed loading remote option values** and **No values to choose from.** for Radiator instances.

This job will switch (rollback) to previously labeled Radiator configuration available across the selected Radiator instances.

23 Update hosts

The screenshot shows the '23 Update hosts' configuration page in the Radiator VNF Manager. The page title is '23 Update hosts' and the subtitle is 'Run software update on selected Radiator VNF hosts'. A job ID '074b3a2e-d31f-4426-be85-9382e7251faa' is displayed. The interface includes a 'Follow execution' section with a 'Log Output' dropdown and a 'Run Job Now' button. Below this, there are configuration options for 'Radiator VNF cloud' (set to 'M2M') and 'Radiator VNF hosts' (with two hosts selected: 'Sales-VNFM-M2M-vnf-host-M2Mhost1' and 'Sales-VNFM-M2M-vnf-host-M2Mhost2'). A 'Nodes' section shows a placeholder for node filters: '\$(option.radiatorvnfhosts)'. At the bottom, there is a 'Stats' section showing '0 EXECUTIONS' and 'AVG DURATION'.

23 Update hosts

1. Select the cloud (OpenStack project) to see available (created) hosts.
2. Select the hosts.
3. Press *Run Job Now*.

This job will update the selected Radiator VNF hosts. If the selected host has Radiator installed, this operation does not update it nor Radiator Radius::UtilXS add-on library. Radiator instances are not restarted by this job.

30 Destroy hosts

30 Destroy hosts

1. Select the cloud (OpenStack project) to see available (created) hosts.
2. Select the hosts.
3. Press *Run Job Now*.

This job will destroy the selected Radiator VNF hosts and the Radiator instances deployed on the host.

Running [11 Create OpenStack hosts](#) will not recreated the host unless configuration file containing the host is uploaded via [10 Upload configuration file](#) or [10 Upload configuration package](#) job.

40 Show configuration

40 Show configuration

1. Select the cloud (OpenStack project) to see uploaded configuration info.

2. Press *Run Job Now*.

This job will show the uploaded combined Radiator VNF Manager configuration for the selected cloud. The configuration is shown according to what Radiator VNF Manager knows, that is the shown configuration is not necessarily yet deployed to the hosts, but it has been uploaded to the Radiator VNF Manager.

Jobs to manage Radiator VNF Manager

00 Import certificates to Radiator VNF Manager

The screenshot shows the configuration page for the job '00 Import certificates'. The job ID is 'eddc855e-424d-4584-ba1b-15ab2f7bc059'. The configuration includes three fields: 'Import server certificate' (file path: server-crt.pem), 'Import private key' (file path: server-key.pem), and 'Private key passphrase' (masked). A 'Run Job Now' button is present. The 'Stats' tab shows 0 executions and no average duration.

00 Import certificates to Radiator VNF Manager

Create server certificate file and certificate key file in PEM format. The server certificate file may include intermediate certificates in addition to a server certificate, in such case the order must be server certificate first and then intermediate certificates.

1. Browse to the server certificate file and select it.
2. Browse to the server key file and select it.
3. Enter the server key file passphrase if it has one, input "" if key does not have passphrase.
4. Press *Run Job Now*.

The job uploads the files to the Radiator VNF Manager `/var/lib/radiatorvnf/certificates` directory and processes the certificate files to proper locations under `/etc` directory.

NOTE: As a last step this job will restart the web server to apply the new certificates. Refresh the web page once the job is finished.

01 Export Radiator VNF Manager data

The screenshot shows the '01 Export' job configuration in the Radiator VNF Manager Jobs interface. The job title is '01 Export' and the description is 'Export Radiator VNF Manager data'. The job ID is 'dfab4245-90b0-4337-8d40-9722e59d9123'. The 'Follow execution' dropdown is set to 'Log Output'. A green 'Run Job Now' button is visible. The 'Stats' tab shows '0 EXECUTIONS' and an 'AVG DURATION' field.

01 Export Radiator VNF Manager data

1. Press *Run Job Now*.

NOTE: When exporting the data due to replacing the Radiator VNF Manager, run [Commission Radiator VNF Manager](#) before the current Radiator VNF Manager is removed. This will ensure the Radiator VNF hosts internal firewall accepts the new Radiator VNF Manager after importing the package.

The job exports the Radiator VNF Manager configuration regarding the Radiator VNF hosts and Radiator instances and some Radiator VNF Manager specific configuration.

NOTE: The job does not export LDAP authentication specific details. If the export package is imported to a new Radiator VNF Manager which is then taken into use, the LDAP authentication must be configured again with [20 Configure LDAP authentication to Radiator VNF Manager](#) job.

02 Import Radiator VNF Manager exported data

The screenshot shows the '02 Import' job configuration in the Radiator VNF Manager Jobs interface. The job title is '02 Import' and the description is 'Import Radiator VNF Manager export package'. The job ID is 'd1bdb50c-64f4-4f8c-98ee-8d73cc7527c5'. The 'Import file' section shows a 'Browse...' button and the text 'No file selected.' and 'Radiator VNF Flex export package to import'. A green 'Run Job Now' button is visible. The 'Stats' tab shows '0 EXECUTIONS' and an 'AVG DURATION' field.

02 Import Radiator VNF Manager exported data

NOTE: Exported data can only be imported to an empty Radiator VNF Manager. Empty Radiator VNF Manager means deployed and ready-to-use Radiator VNF Manager where none of the jobs have been run. See chapters *Radiator VNF Manager deployment* and *Radiator VNF Manager set up* in [Deployment and configuration guide for Radiator VNF Manager](#) on how to deploy and set up Radiator VNF Manager.

1. Browse to the Radiator VNF Manager export package and select it.
2. Press *Run Job Now*.

The job uploads the export package to the Radiator VNF Manager disk, unpacks it and processes all the data available. The exported package and any temporary files created while unpacking are removed automatically by the job. Once the import succeeds, the Radiator VNF hosts can be managed from the newly imported Radiator VNF Manager, provided that the [Commission Radiator VNF Manager](#) job was run to allow it.

NOTE: The import operation will most likely fail if the [Commission Radiator VNF Manager](#) job has not been run to allow the imported Radiator VNF Manager to manage the existing Radiator VNF hosts. If this happens, simply remove the newly imported Radiator VNF Manager and follow the instructions on the [Deployment and configuration guide for Radiator VNF Manager](#) chapter *Radiator VNF Manager upgrade process* to perform successful import and subsequent tasks.

After verifying successful operation with Radiator VNF hosts from the imported Radiator VNF Manager, run [Decommission Radiator VNF Manager](#) to ensure the Radiator VNF hosts firewall does not have anymore the obsolete Radiator VNF Manager IP details.

03 Export Radiator VNF Manager rootCA

03 Export Radiator VNF Manager rootCA

1. Press *Run Job Now*.

The job exports the Radiator VNF Manager self signed certificate's root CA so it can be imported to for example browser to remove the warnings shown about untrusted self signed certificates.

04 Commission Radiator VNF Manager

04 Commission Radiator VNF Manager

1. Select the cloud (OpenStack project) to see available (created) hosts.
2. Select the hosts.
3. Enter the IP addresses that will be added to the selected Radiator VNF hosts internal firewall.
4. Press *Run Job Now*.

The job enables SSH access in the Radiator VNF host internal firewall from the specified Managed IP addresses. The job will print the current active internal firewall configuration as last step of the execution to allow visibility for the current rules. Managed IP addresses can be with or without CIDR. Multiple IP addresses can be specified with comma.

NOTE: Defining 0.0.0.0/0 as Managed IP addresses will lift the SSH restriction and allow Radiator VNF host to accept SSH from anywhere, thus allowing any Radiator VNF Manager regardless of the IP address to manage the host.

05 Decommission Radiator VNF Manager

The screenshot displays the configuration page for a job titled "05 Decommission Radiator VNF Manager". The job ID is "893a468a-6472-4124-a990-901813af74d1". The configuration includes:

- Radiator VNF cloud:** A dropdown menu set to "fixedline".
- Radiator VNF hosts:** A list of checkboxes where "fixedline-vnf-host-develDB" and "fixedline-vnf-host-testing_DB" are selected.
- Managed IP addresses:** A text input field containing "10.17.10.17/32".
- Nodes:** A field containing the template "\${option.radiatorvnfhosts}".

At the bottom, there is a "Stats" section showing "0 EXECUTIONS" and "AVG DURATION".

05 Decommission Radiator VNF Manager

1. Select the cloud (OpenStack project) to see available (created) hosts.
2. Select the hosts.
3. Enter the IP addresses that will be removed from the selected Radiator VNF hosts internal firewall.
4. Press *Run Job Now*.

The job disables SSH access in the Radiator VNF host internal firewall from the specified Managed IP addresses. The job will print the current active internal firewall configuration as last step of the execution to allow visibility for the current rules. Managed IP addresses can be with or without CIDR. Multiple IP addresses can be specified with comma.

NOTE: Before removing any IP addresses, run [Commission Radiator VNF Manager](#) to guarantee that some Radiator VNF Manager is able to manage the hosts.

10 Define proxy for Radiator VNF Manager

The screenshot shows the 'Radiator VNF Manager Jobs' interface. At the top, there is a dropdown menu for 'Radiator VNF Manager Jobs' and a user profile icon. The main heading is '10 Define proxy for Radiator VNF Manager'. Below this, there is a sub-heading 'Set Radiator VNF Manager to use proxy for Internet connection'. A text input field contains the ID 'c9d8c235-6ad4-422f-919a-459455c4d8ef'. To the right of this field are 'Action' and 'Definition' buttons. Below the ID field, there is a 'Follow execution' section with a 'Log Output' dropdown and a 'Run Job Now' button. The 'Proxy DNS/IP' field is set to 'proxy.example.com' with a sub-label 'DNS name or IP address of the proxy Radiator VNF Manager should use'. The 'Proxy Port' field is set to '8088' with a sub-label 'Port of the proxy Radiator VNF Manager should use'. At the bottom, there is a 'Stats' section with a '0 EXECUTIONS' and '- AVG DURATION'.

10 Define proxy for Radiator VNF Manager

1. Enter the proxy DNS or IP address.
2. Enter the proxy port.
3. Press *Run Job Now*.

The job will configure Radiator VNF Manager itself to use specific proxy with specific port.

20 Configure LDAP authentication to Radiator VNF Manager

20 Configure LDAP authentication

Configure LDAP authentication to Radiator VNF Manager

ef143cf1-dd8b-4ee3-9e8e-760b0cd5f001

Follow execution Log Output Run Job Now

LDAP URI

 LDAPS URI. For example ldaps://ldaps.example.com:636

LDAP bind DN

 The DN used to search the LDAP. For example cn=adminuser,ou=people,dc=example,dc=com

LDAP bind password

 The password of the bind DN

LDAP CA file exists
 true
 Select True if certificate CA file is needed and provide the file on the below option

LDAP CA certificates

 The file containing CA certificates for the LDAP when LDAPS is used

LDAP search base

 The LDAP search base when looking for entries

LDAP schema

 The Schema Type in use on the LDAP server. Schema affects for example what default attribute names are looked for, like group membership can be listed by name or DN. Possible values are rfc2307, rfc2307bis, IPA and AD

LDAP filter

 Filter criteria who are allowed to access. For example limiting access to the "allowedusers" group: memberOf=cn=allowedusers,ou=Groups,dc=example,dc=com

LDAP SSH public key

 LDAP authentication can be used with SSH access also, if the user's SSH public key is available in LDAP. Specify the LDAP attribute that contains the user's SSH public key, for example: nsSshPublicKey

LDAP groups for administrator

 List of LDAP groups, separated by pipe, where authenticated users belong that should have administrative access to Radiator VNF Manager. For example group1|group2|group3

LDAP groups for users

 List of LDAP groups, separated by pipe, where authenticated users belong that should have user access to Radiator VNF Manager. For example group1|group2|group3

20 Configure LDAP authentication to Radiator VNF Manager

1. Enter the LDAP URI. Only LDAPS is supported.
2. Enter the DN used to search the LDAP.
3. Enter LDAP bind password.
4. Select if the LDAP CA certificate is available for upload. When selecting *true*, the file must be selected in next option.
5. Browse to the LDAP CA certificate file and select it. Optional if *false* in previous step.
6. Enter the LDAP search base.
7. Select the LDAP server Schema type. Default is **rfc2307**. Optional.
8. Enter the LDAP filter.
9. Enter the LDAP attribute where the SSH public key is available. Optional.
10. Enter the LDAP groups for administrator access. Multiple groups can be specified with pipe as separator. Optional.
11. Enter the LDAP groups for user access. Multiple groups can be specified with pipe as separator. Optional.
12. Press *Run Job Now*.

NOTE: If no LDAP groups is specified, the authenticated user is not able to execute any jobs due to lack of permissions.

The job will configure LDAP authentication to Radiator VNF Manager GUI and optionally also for SSH access. For the Radiator VNF Manager GUI, the LDAP authentication overwrites the plain username/password authentication which means it is no longer available. For the SSH, the LDAP authentication is additional authentication, the previously available SSH authentication is not affected.

NOTE: It is not possible to revert from the LDAP authentication back to username/password authentication. Instead the LDAP authentication is not part of the export package, so if there is a need to return to the basic authentication it can be done by exporting the current configuration with [01 Export Radiator VNF Manager data](#) and importing the export package to new Radiator VNF Manager with [02 Import Radiator VNF Manager exported data](#).