

Cloudify 5.1.1 Release Notes

December 31, 2020

Cloudify 5.1.1 is a minor release containing new features, fixes, and security updates.

v5.1.1 can be deployed as a new installation, as an in-place update over a 5.1.0 Cloudify manager, or as an upgrade version for any supported previous Cloudify release. See the upgrade section below for more details.

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New functionality and corrections

Plugin improvements

- vCloud Director (VCD) plugin
 - The new vCloud Director plugin is now available, supporting vCloud 9.7 API 32.0.
 - vApp create, delete - all resources - CPU, core per socket, RAM, networks, NICs, recipe, virtual DC, IP allocation, etc.
 - ISO media image upload, eject, delete.
- AWS Plugin
 - Added support for AWS Pipeline.
- vSphere plugin
 - Added max_wait_time parameter to the _wait_for_task function.

Cloudify Management Console

Tabs containers can now be used multiple times on the same page and may be combined with other widgets. This completes the tabs functionality and allows complete flexibility when designing your pages and views.

White labeling

Adjusting the Cloudify UI to your organization requirements is easier with additional white-labeling capabilities:

- Widgets help description may be retrieved from a custom location.
- Composer white labeling can now be set through a customization file.
- UI localization (easy strings replacement) via localization string files is now available and covers key strings for white labeling of the user interface.

Agents

- Python 3 based CentOS/RHEL 7.x agent is available upon request. The default for CentOS/RHEL 7.x remains Python 2.7 agent.
- The Agents and CLI modules are included in the Manager license. EULA approval step was removed from the installer.

Architecture

- LDAP based authentication can now be applied over Cloudify managers populated with local users. Once enabled, local passwords will no longer be operational and users will be automatically matched based on AD username.
- Hostname based certificates can now be used when setting TLS for the Cloudify cluster communication. To support that, the HAProxy is removed from the cluster topology (acted as the DB proxy), and the manager now has a list of DB hosts rather than a single proxy address.

Security

- 3rd party packages updated to include the latest fixes
 - Node-forge updated to 0.10.0 resolving [CVE-2020-7720](#)
 - BI updated to 1.2.3 resolving [CVE-2020-8244](#)
 - Dot-prop updated to 4.2.1 resolving [CVE-2020-8116](#)
 - yargs-parser updated to 13.1.2 resolving [GHSA-p9pc-299p-vxgp](#)
 - Psutil updated to 5.6.6 resolving [CVE-2019-18874](#)
 - Pyyaml updated to 4.2b1 resolving [CVE-2017-18342](#)
 - Plutil updated to 5.6.6 resolving [CVE-2019-18874](#)
 - SQLAlchemy updated to 1.3.0 resolving [CVE-2019-7548](#)
 - Unicorn updated to 19.5.0 resolving [CVE-2018-1000164](#)
 - Json updated to 2.3.0 resolving [CVE-2020-10663](#)
 - Rake updated to 12.3.3 resolving [CVE-2020-8130](#)
 - rubyzip updated to 1.2.2 resolving [CVE-2019-16892](#)
 - Ffi updated to 1.9.24 resolving [CVE-2018-1000201](#)
 - Request updated to 2.20.0 resolving [CVE-2018-18074](#)
 - Cryptography updated to 2.3 resolving [CVE-2018-10903](#)
 - Semantic UI React (SUIR) updated to version 2.0.1 containing all the latest security fixes.
- Handled 5 low severity vulnerabilities detected in npm audit of the Composer component, all related to the node-fetch package.
- Handled 4 low severity vulnerabilities detected in npm audit of the Stage component, related to the node-fetch package.

Other Corrections & Fixes

- RD-718: Corrected status reporter to support certificates signed by different CAs for the different Cloudify modules.
- RD-685: Patroni startup check service failed to exit on cluster setup (container)
- RD-629: Some services start with the wrong service name after a certificate replacement command is performed.
- RD-587: upon drill down from the Sites Map widget in the dashboard to the deployments page the Site filter is applied but not reflected in the UI.
- RD-525: Running a Snapshot restore on a system with a different password than the snapshot one can now be performed.
- RD-505: Composer access via Edge browser failed in some cases. The Composer link URL is now generated in a browser-independent way.
- RD-504: Typo correction in the maintenance mode page.
- RD-492: Corrected file connectors leak, leading to management console unavailability in some scenarios.
- RD-444: the update-plugin-imports command was corrected and now supports offline mode.

Deploying Cloudify 5.1.1

v5.1.1 can be deployed as a [new installation](#), as an [in-place update over a 5.1.0 Cloudify manager](#), or as an [upgrade version for any supported previous Cloudify release](#).

Upgrading from 5.1.0

Before the upgrade

As a best practice, we recommend taking a snapshot of the system prior to the update. Read [this page](#) for more details.

NOTE!

If your 5.1.0 Cloudify cluster was deployed using the Cloudify Cluster Manager (which is the recommended approach), You can simplify the update process to 5.1.1 by running it through the Cluster Manager.

Below you can find the procedures for either using the Cluster Manager, or a manual flow.

Tip: the upgrade steps require yum installation of the 5.1.1 RPM. This can be done either by downloading the rpm package to the local Cloudify nodes and directing the command to the rpm path or by referencing the URL of the package. The second option requires live connection to the package path. Here are usage examples for both:

```
# Downloading the RPM to the current directory
curl -O
http://repository.cloudifysource.org/cloudify/5.1.1/ga-release/cloudify-manager-inst
all-5.1.1-ga.el7.x86_64.rpm
# Installing the downloaded RPM
sudo yum install -y cloudify-manager-install-5.1.1-ga.el7.x86_64.rpm
```

```
# Installing the RPM directly
sudo yum install -y
http://repository.cloudifysource.org/cloudify/5.1.1/ga-release/cloudify-manager-inst
all-5.1.1-ga.el7.x86_64.rpm
```

Upgrading Cloudify All-In-One

Update steps:

1. Install the new 5.1.1 cloudify-manager-install RPM, by using the command:
`sudo yum install -y <5.1.1 RPM>`
2. To start the upgrade run the command
`cfy_manager upgrade`
3. If Cloudify agents are used in your deployments, run
`cfy agents install`
4. When opening the Cloudify Management Console after the upgrade, you might see “This page is empty”, this happens because of cached data. To solve this, press CTRL + Shift + R.

Upgrading a Cloudify Compact Cluster (3 nodes)

If the initial cluster installation was done using the Cloudify Cluster Manager, follow this simplified process.

Updating a Cloudify compact cluster leveraging the Cloudify Cluster Manager

You can use the Cloudify Cluster Manager tool to upgrade a compact cluster:

Upgrade your Cloudify Cluster Manager by running

```
sudo yum install -y
http://repository.cloudifysource.org/cloudify/cloudify-cluster-manager/1.0.5/ga-release/cloudify-cluster-manager-1.0.5-ga.el7.x86\_64.rpm
```

On the host that has Cloudify Cluster Manager installed, run `cfy_cluster_manager upgrade`.

Optional Arguments:

--config-path The completed cluster configuration file path. Default:

```
./cfy_cluster_config.yaml
```

--upgrade-rpm Path to a v5.1.1 cloudify-manager-install RPM. This can be either a local or remote path.

Default:

```
http://repository.cloudifysource.org/cloudify/5.1.1/ga-release/cloudify-manager-install-5.1.1-ga.el7.x86\_64.rpm
```

-v, --verbose Show verbose output

Running this command will automatically run the upgrade procedure on the cluster.

If the Cluster was manually deployed, please follow this procedure instead:

Manually updating a Cloudfify compact cluster

1. Install the new 5.1.1 cloudfify-manager-install RPM on all 3 nodes of the cluster, by using the command:
`sudo yum install -y <5.1.1 RPM>`
Repeat this step on all 3 nodes.

2. On each of the cluster nodes, run `cfy_manager upgrade -c <path to DB config>`.
Do it one after the other, not in parallel.

Tip: If you used the cloudfify-cluster-manager tool to generate the Cloudfify cluster, the path to the DB config file is `/etc/cloudfify/postgresql-<node number>_config.yaml`. If the cluster was manually installed, please direct the command to the path of the file you generated.

3. On each of the cluster nodes, run `cfy_manager upgrade -c <path to rabbitmq config>`.
Do it one after the other, not in parallel.

Tip: If you used the cloudfify-cluster-manager tool to generate the Cloudfify cluster, the path to the RabbitMQ config file is `/etc/cloudfify/rabbitmq-<node number>_config.yaml`. If the cluster was manually installed, please direct the command to the path of the file you generated.

4. On each one of the cluster nodes, run `cfy_manager upgrade -c <path to manager config>`.
Do it one after the other, not in parallel.

Tip: If you used the cloudfify-cluster-manager tool to generate the Cloudfify cluster, the path to the manager config file is `/etc/cloudfify/manager-<node number>_config.yaml`. If the cluster was manually installed, please direct the command to the path of the file you generated.

5. If Cloudfify agents are used in your deployments, run the following command from **just one** of the cluster nodes:
`cfy agents install`

6. When opening the Cloudfify Management Console after the upgrade, you might see “This page is empty”, this happens because of cached data. To solve this, press CTRL + Shift + R.

Upgrading a Cloudfify Fully Distributed Cluster (9+ nodes)

If the initial cluster installation was done using the Cloudfify Cluster Manager, follow this simplified process.

Updating a Cloudify Fully Distributed Cluster leveraging the Cloudify Cluster Manager

You can use the Cloudify Cluster Manager tool to upgrade a fully distributed cluster:

Upgrade your Cloudify Cluster Manager by running

```
sudo yum install -y
http://repository.cloudifysource.org/cloudify/cloudify-cluster-manager/1.0.5/ga-release/cloudify-cluster-manager-1.0.5-ga.el7.x86\_64.rpm
```

On the host that has Cloudify Cluster Manager installed, run `cfy_cluster_manager upgrade`.

Optional Arguments:

--config-path The completed cluster configuration file path. Default:

```
./cfy_cluster_config.yaml
```

--upgrade-rpm Path to a v5.1.1 cloudify-manager-install RPM. This can be either a local or remote path.

Default:

```
http://repository.cloudifysource.org/cloudify/5.1.1/ga-release/cloudify-manager-install-5.1.1-ga.el7.x86\_64.rpm
```

-v, --verbose Show verbose output

Running this command will automatically run the upgrade procedure on the cluster.

If the Cluster was manually deployed, please follow this procedure instead:

Manually updating a Fully Distributed Cluster

Update steps:

1. Install the new 5.1.1 cloudify-manager-install RPM on all the cluster nodes, by using the command:

```
sudo yum install -y <5.1.1 RPM>
```

Repeat this step on all 9 nodes.
2. On all three database nodes run `cfy_manager upgrade`
Do it one after the other, not in parallel.
3. On all three RabbitMQ nodes run `cfy_manager upgrade`
Do it one after the other, not in parallel.

4. On all manager nodes, run `cfy_manager upgrade`
Do it one after the other, not in parallel.
5. If Cloudify agents are used in your deployments, run the following command from **just one** of the manager nodes:
`cfy agents install`
7. When opening the Cloudify Management Console after the upgrade, you might see “This page is empty”, this happens because of cached data. To solve this, press CTRL + Shift + R.

Upgrading From previous versions (4.x - 5.0.5) to 5.1.1

The upgrade flow to version 5.1.1 is different from upgrades performed for previous versions. This is due to the Python 3 migration introduced in 5.1 which requires updating existing plugins code. **Please review the [5.1 upgrade procedure](#) carefully and consult with the Cloudify support team to assure a smooth and successful upgrade.**

Note! Upgrading to 5.1.1 is supported from the following versions: v4.3.3, v4.4, v4.5, v4.5.5, v4.6, v5.0.5, 5.1.0.

5.1.1 new installation

- To deploy a single - All-In-One manager, please follow the [AIO manager installation guide](#).
 - To deploy a highly available Compact Cluster - a distributed cluster of 3 nodes - please refer to the [3 nodes cluster installation guide](#).
 - To deploy a highly available Fully Distributed Cluster - a distributed cluster of 9 nodes - please refer to the [9 nodes cluster installation guide](#).
- NOTE! You can simplify the cluster deployment and automate the provisioning by leveraging the [Cloudify Cluster Manager Package](#).**

Download Cloudify 5.1.1

Manager install:

- RPM - [cloudify-manager-install-5.1.1ga.rpm](#)
- OpenStack image - [cloudify-manager-5.1.1ga.qcow2](#)
- Docker containers
 - All-in-one manager - [Cloudify manager aio](#)

- Manager - [Cloudify manager worker](#)
- Database - [Cloudify postgresql](#)
- Messaging queue - [Cloudify rabbitmq](#)

Premium CLI packages:

- RPM (CentOS/RHEL) - [Cloudify cli centos \(.rpm\)](#)
- Debian - [Cloudify cli debian \(.deb\)](#)
- Windows - [Cloudify cli Windows \(.exe\)](#)

Support

Support Discontinuance

With the official end of life for CentOS 6.x on November 30th, 2020, starting Cloudify 5.1.1 CentOS 6 agent will no longer be supported (nor provided in the package).

Supported versions

Listed below are the support discontinuance dates for the recent Cloudify versions. As of these dates, the respective versions will no longer be supported under the standard Cloudify support agreement.

Version	Support Discontinuance Date
Cloudify Premium & Community Editions v4.6.x	Apr 17th, 2021
Cloudify Premium & Community Editions v5.0.5	Feb 3rd, 2022
Cloudify Premium & Community Editions v5.1.0	Oct 19, 2022