

Dell EMC Ready Bundle for Red Hat OpenStack Platform

Documentation Index

Version 10.0.1



Dell EMC Converged Platforms and Solutions

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Notes, Cautions, and Warnings



A **Note** indicates important information that helps you make better use of your system.



A **Caution** indicates potential damage to hardware or loss of data if instructions are not followed.



A **Warning** indicates a potential for property damage, personal injury, or death.

This document is for informational purposes only and may contain typographical errors and technical inaccuracies. The content is provided as is, without express or implied warranties of any kind.

Chapter 1

Overview

Topics:

- [Using the Index](#)

This index presents a series of ordered roadmaps for documents and tools used to deploy:

- The Dell EMC Ready Bundle for Red Hat OpenStack Platform

Using the Index

This index enables you to quickly find the solution(s) that you wish to deploy. Each solution corresponds to a chapter. Within those chapters you will find:

- Solution prerequisites and notes
- Lists of documents and tools that are used to deploy the solution

The documents and tools are presented in the order in which they are to be used.

Chapter

2

Dell EMC PowerEdge R-Series Architecture Solution

Topics:

- [Documents and Tools](#)

The [Dell EMC Ready Bundle for Red Hat OpenStack Platform PowerEdge R-Series Architecture Guide](#) lays out the complete architecture for deploying OpenStack Newton with Red Hat OpenStack Platform Director onto Dell EMC PowerEdge R-Series hardware.

Documents and Tools

Table 1: Dell EMC PowerEdge R-Series Architecture Solution Documents and Tools on page 9 lists all documents and tooling required to deploy the **base** Dell EMC PowerEdge R-Series Architecture Solution. For **enhanced** solutions documentation and tools, see:

- *Red Hat CloudForms - OpenShift Integration Solution* on page 12
- *Pivotal Cloud Foundry Solution* on page 14
- *Hadoop on Red Hat OpenStack Platform Solution* on page 16
- *Performance Monitoring and Analytics Solution* on page 18

All documents can be downloaded at the Tech Center here: <http://en.community.dell.com/techcenter/cloud/wiki/12047.dell-red-hat-openstack-cloud-solutions>



Note: Some archive files may be presented in both .tgz and .zip compressed formats. Choose the package that best suits your environment. For customers performing a self-installation, these files are available on request from Dell. Please contact your account representative, or email openstack@dell.com for instructions.

Table 1: Dell EMC PowerEdge R-Series Architecture Solution Documents and Tools

Usage Order	Document/Tool
1	<u>Dell EMC Ready Bundle for Red Hat OpenStack Platform Release Notes - Version 10.0.1</u>
2	<u>Dell EMC Ready Bundle for Red Hat OpenStack Platform Dell EMC PowerEdge R-Series Architecture Guide - Version 10.0.1</u>
3	<u>Dell EMC Ready Bundle for Red Hat OpenStack Platform Dell EMC PowerEdge R-Series Hardware Deployment Guide - Version 10.0.1</u>
4	Solution tooling - (JetPack) Manual deployment - JetPack-manual-10.0.1.tgz Automated deployment - JetPack-automation-10.0.1.tgz See <i>Note</i> above on how to acquire these archives.
5	<u>Dell EMC Ready Bundle for Red Hat OpenStack Platform Software Deployment Guide - Version 10.0.1</u>
6	<u>Dell EMC Ready Bundle for Red Hat OpenStack Platform Adding and Removing Compute and Storage Nodes - Version 10.0.1</u>

Chapter

3

Dell EMC PowerEdge FX Series Architecture Solution

Topics:

- [Documents and Tools](#)

The [Dell EMC Ready Bundle for Red Hat OpenStack Platform PowerEdge FX Series Architecture Guide](#) lays out the complete architecture for deploying OpenStack Newton with Red Hat OpenStack Platform Director onto PowerEdge FX hardware.

Documents and Tools

Table 2: PowerEdge FX Architecture Solution Documents and Tools on page 11 lists all documents and tooling required to deploy the **base** Dell EMC PowerEdge FX Architecture Solution. For **enhanced** solutions documentation and tools, see:

- [Red Hat CloudForms - OpenShift Integration Solution](#) on page 12
- [Pivotal Cloud Foundry Solution](#) on page 14
- [Performance Monitoring and Analytics Solution](#) on page 18

All documents can be downloaded at the Tech Center here: <http://en.community.dell.com/techcenter/cloud/wiki/12047.dell-red-hat-openstack-cloud-solutions>



Note: Some archive files may be presented in both *.tgz* and *.zip* compressed formats. Choose the package that best suits your environment. For customers performing a self-installation, these files are available on request from Dell. Please contact your account representative, or email openstack@dell.com for instructions.

Table 2: PowerEdge FX Architecture Solution Documents and Tools

Usage Order	Document/Tool
1	Dell EMC Ready Bundle for Red Hat OpenStack Platform Release Notes - Version 10.0.1
2	Dell EMC Ready Bundle for Red Hat OpenStack Platform Dell EMC PowerEdge FX Architecture Guide - Version 10.0.1
3	Dell EMC Ready Bundle for Red Hat OpenStack Platform Dell EMC PowerEdge FX Hardware Deployment Guide - Version 10.0.1
4	Solution tooling - (JetPack) Automated deployment - JetPack-automation-10.0.1.tgz See <i>Note</i> above on how to acquire these archives.
5	Dell EMC Ready Bundle for Red Hat OpenStack Platform Software Deployment Guide - Version 10.0.1

Chapter

4

Red Hat CloudForms - OpenShift Integration Solution

Topics:

- [Documents and Tools](#)

Red Hat CloudForms is a cloud management platform for hybrid and multi-cloud environments. Managing a complex, hybrid IT environment can require multiple management tools, redundant policy implementations, and extra staff to handle the operations. Red Hat CloudForms simplifies this, providing unified management and operations in a hybrid environment. As your IT infrastructure progresses from traditional virtualization toward an Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS) model, CloudForms evolves, protecting your investments and providing consistent user experience and functionality.

Red Hat OpenShift Container Platform 3.4 is a Platform As A Service (PaaS) product. Its developer-centric approach enables developers to create and deploy applications with more predictability, greater ease, and less operator intervention. It manages deployments and provides application scalability services. In the data center, OpenShift Container Platform 3.4 is deployed on Dell EMC Ready Bundle for Red Hat OpenStack Platform and Red Hat Enterprise Linux Server 7.3. It is comprised of: application containers powered by Docker, and orchestration and management provided by Kubernetes.

Documents and Tools

Table 3: Red Hat CloudForms - OpenShift Container Platform Integration Solution Documents and Tools on page 13 lists all documents and tooling required to deploy the Dell EMC Red Hat CloudForms Integration Solution.



Note: Some archive files may be presented in both `.tgz` and `.zip` compressed formats. Choose the package that best suits your environment.

Table 3: Red Hat CloudForms - OpenShift Container Platform Integration Solution Documents and Tools

Usage Order	Document/Tool
1	Dell EMC PowerEdge R-Series — See Documents and Tools on page 9 Dell EMC PowerEdge FX Series — See Documents and Tools on page 11
2	Dell EMC Ready Bundle for Red Hat OpenStack Platform Deploying and Integrating CloudForms 4.2 - Version 10.0.1
3	Dell EMC Ready Bundle for Red Hat OpenStack Platform Deploying OpenShift Container Platform 3.4 - Version 10.0.1

Chapter

5

Pivotal Cloud Foundry Solution

Topics:

- [*Documents and Tools*](#)

Pivotal Cloud Foundry 1.11 is a Platform as a Service (PaaS) product. Its developer-centric approach enables developers to create and deploy applications with more predictability, greater ease, and less operator intervention. It manages deployments and provides application scalability services.

Documents and Tools

Table 4: Pivotal Cloud Foundry Integration Solution Documents and Tools on page 15 lists all documents and tooling required to deploy the Dell EMC Pivotal Cloud Foundry Solution.



Note: Some archive files may be presented in both *.tgz* and *.zip* compressed formats. Choose the package that best suits your environment.

Table 4: Pivotal Cloud Foundry Integration Solution Documents and Tools

Usage Order	Document/Tool
1	Dell EMC PowerEdge R-Series — See Documents and Tools on page 9 Dell EMC PowerEdge FX Series — See Documents and Tools on page 11
2	Dell EMC Ready Bundle for Red Hat OpenStack Platform Deploying Cloud Foundry 1.11 - Version 10.0.1

Chapter

6

Hadoop on Red Hat OpenStack Platform Solution

Topics:

- [Documents and Tools](#)

Hadoop is an Apache project being built and used by a global community of contributors, using the Java programming language. Yahoo!, has been the largest contributor to this project, and uses Apache Hadoop extensively across its businesses. Core committers on the Hadoop project include employees from Cloudera, eBay, Facebook, Getopt, Hortonworks, Huawei, IBM, InMobi, INRIA, LinkedIn, MapR, Microsoft, Pivotal, Twitter, UC Berkeley, VMware, WANDisco, and Yahoo!, with contributions from many more individuals and organizations.

This solution includes the recommended servers and OpenStack configuration procedures for a Hadoop workload in the Dell EMC Ready Bundle for Red Hat OpenStack Platform. With these recommendations, Hadoop performance is expected to be close to a bare-metal Hadoop solution.

Documents and Tools

Table 5: Hadoop on Red Hat OpenStack Platform Solution Documents and Tools on page 17 lists all documents and tooling required to deploy the Dell EMC Hadoop on Red Hat OpenStack Platform Solution. *This solution has been certified on the Dell EMC PowerEdge R-Series architecture only.*



Note: Some archive files may be presented in both `.tgz` and `.zip` compressed formats. Choose the package that best suits your environment.

Table 5: Hadoop on Red Hat OpenStack Platform Solution Documents and Tools

Usage Order	Document/Tool
1	Dell EMC PowerEdge R-Series — See Documents and Tools on page 9
2	Dell EMC Ready Bundle for Red Hat OpenStack Platform Hadoop Solution Deployment Guide

Chapter

7

Performance Monitoring and Analytics Solution

Topics:

- [Documents and Tools](#)

This solution adds performance monitoring capability into the Dell EMC Ready Bundle for Red Hat OpenStack Platform. This Performance Monitoring and Analytics solution is used internally by Dell EMC and therefore verified to function appropriately.

Documents and Tools

Table 6: Performance Monitoring and Analytics Solution Documents and Tools on page 19 lists all documents and tooling required to deploy the Dell EMC Performance Monitoring and Analytics on Red Hat OpenStack Platform Solution.



Note: Some archive files may be presented in both *.tgz* and *.zip* compressed formats. Choose the package that best suits your environment.

Table 6: Performance Monitoring and Analytics Solution Documents and Tools

Usage Order	Document/Tool
1	Dell EMC PowerEdge R-Series — See Documents and Tools on page 9 Dell EMC PowerEdge FX Series — See Documents and Tools on page 11
2	Dell EMC Ready Bundle for Red Hat OpenStack Platform Performance Monitoring and Analytics Installation Guide

Appendix

A

References

Topics:

- [To Learn More](#)

Additional information can be obtained at <http://www.dell.com/en-us/work/learn/openstack-cloud> or by e-mailing openstack@dell.com.

If you need additional services or implementation help, please contact your Dell EMC sales representative.

To Learn More

For more information on the Dell EMC Ready Bundle for Red Hat OpenStack Platform visit <http://www.dell.com/learn/us/en/04/solutions/red-hat-openstack>.

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