Pivotal Command Center

Version 2.1.1

Release Notes

Rev: A02

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1 Welcome to Pivotal Command Center

Pivotal Command Center (PCC) is a multi-tier graphical web application that allows you to configure, deploy, monitor, and manage your Pivotal HD clusters. PCC enables administrators to view aggregated and non-aggregated system metrics data as well as Hadoop specific metrics for a selected cluster. Users are also able analyze and gain insights on their cluster by drilling down into specific services or categories of nodes. Metrics are provided on how a cluster is performing in real-time and trending over time.

Pivotal Command Center also provides detailed monitoring capabilities for MapReduce Jobs as well as information on specific jobs and tasks. YARN (MapReduce 2.0) applications can also be monitored and basic monitoring of running HAWQ queries are shown if HAWQ is installed on the cluster.

HAWQ is a parallel SQL query engine that combines the merits of the Greenplum Database Massively Parallel Processing (MPP) relational database engine and the Hadoop parallel processing framework.

> ⚠ Pivotal Command Center 2.1.1 has been tested with Pivotal HD Enterprise 1.1.1

1.1 Requirements

See the *Pivotal Command Center 2.1 User Guide* for complete list of requirements.
There are no new requirements associated with this release.

2 What's New

As well as general performance enhancements and bug fixes, this release includes the following new features and functionality:

Security Enhancements

- The default password for PCC is now `Gpadmin1` (case-sensitive). Note that the default username remains the same: `gpadmin`
- New password rules: As of this release, passwords are case-sensitive and must be at least 8 letters long and contain 1 upper-case letter and 1 number.
- If you upgrade to 2.1.1, your old password (default: `gpadmin`) is maintained. Only fresh installs enforce the new rules and use the new default password.
- Passwords are now required for sensitive operations such as adding new users.

Backup and Restore

- You can now backup and restore PCC via the command line. See the latest *Pivotal Command Center User Guide* for details.

Rebalance HDFS

- There is a new **Rebalance** option under the HDFS **Action** menu on the Dashboard. Also included is a **View Rebalancer Log** action, which displays the log file for any cluster rebalance operations you have performed.

Cluster Wizard: Range Expansion

- You can now specify hosts using ranges. For example `host[1-5].yourdomain.com`. They can also be expressed in multiple ranges, for example `host[1-3].subdomain[1-2].yourdomain.com`. Any hosts expressed in ranges are expanded during host verification. Hosts that do not exist within a specified range will be ignored, so you can specify a wide range and only those hosts that are available within that range will be added.
- You can also use ranges when mapping roles to hosts. In this case, the ranges are expanded immediately in the text field.

Cluster Wizard: Validation

- A new Validation page now appears after the Cluster Configuration page during cluster deployment. If the configuration has any errors they will be displayed here; otherwise you will see post-deployment instructions.

Add/Remove Slaves

- The Topology page now has a **Topology Action** menu. Use this menu to add or remove slave nodes. Details are in the latest *Pivotal Command Center User Guide*.

> ⚠ A node is considered a slave if it contains the following services: `datanode`, `hbase-regionserver`, `yarn-nodemanager`.

HA Status

- You can now see via the HDFS Status on the Dashboard whether High Availability (HA) has been enabled for a cluster. If HA is enabled, you will see the status of two NameNodes.

Install/Uninstall Improvements

- Uninstall operation improved.
- Commander script checks all the status of all services before restarting them.

3 Resolved Issues in Pivotal Command Center

This section lists issues that have been resolved in Pivotal Command Center since release 2.1.

> ⚠ For resolved issues relating to the installation and any non-UI functionality of Command Center, see the Pivotal HD Release Notes.

Issue	Description
CC-3185	Command Center UI displayed incorrect status during HA failover.
CC-3184	When a user uninstalled a cluster, the Command Center UI falsely showed a message that says GPHD Manager is down if the uninstall process took longer than 60 seconds.

4 Known Issues in Pivotal Command Center

This section lists the known issues in Pivotal Command Center 2.1.1. A work-around is provided where applicable.

> ⚠ For known issues relating to the installation and any non-UI functionality of Command Center, see the Pivotal HD Release Notes

Issue	Description
CC-3339	The ability to start/stop HAWQ via the PCC UI is non-functional. **Workaround**: Use the PCC CLI to start / stop HAWQ. See the *Pivotal HD Enterprise 1.1 Installation and Administrator Guide* for specific commands.
HD-8493	Unable to configure cluster if the root password contains certain special characters, for example: $
CC-3305	If a running job is killed, the PCC UI MapReduce Slot Utilization Graph shows incorrect information.

CC-3274	The installation will fail if the shell is using a non-UTF8 locale.
	
	Workaround: Run the following commands in the shell before installing PCC:
	
	`export LC_CTYPE="en_US.UTF-8"`
	`export LC_ALL=en_US.UTF-8`

CC-3083	Command Center does not show any data for graphs related to DataNode due to hostname mismatch. **Workaround**: Change `/etc/sysconfig/network` on all cluster nodes to use Fully Qualified Domain Names (FQDN).

CC-1989	Upgraded Command Center is not displaying some metrics graphs.
	
	Workaround: Check the status of `nmon`:
	
	# service nmon status
	
	If the status anything other than `running`, stop and restart `nmon` as follows:
	
	`# service nmon stop`
	
	`# service nmon start`

Issue	Description
HD-6715	After you upgrading PCC, you are unable to start/stop clusters with invalid hostnames. This is because there is now a check for invalid characters in cluster names. **Workaround**: Reconfigure the cluster with a different, valid name, then restart the custer.
N/A	Pivotal Command Center 2.1.n only supports Pivotal HD 1.1.n. It does not support Greenplum HD.
N/A	Pivotal Command Center and Pivotal HD must have the same OS.
N/A	Pivotal Command Center hostnames can only contain lower case letters.
CC-1972	HBASE did not start after user stop/start HDFS and YARN. This is expected behavior, in this case, HBASE requires a manual restart.
N/A	`bundle: command not found` error message appears after attempting to run the install script. **Workaround**: Check if `/usr/local/bin/bundle` exists, if it doesn't, build it by running the following command: `gem install bundler`

5 Versioning and Compatibility

NEEDS UPDATING

Product	Version	OS/Browser
Pivotal HD	1.1.1	RedHat 64-bit: 6.2, 6.4 CentOS 64-bit: 6.2, 6.4
Pivotal Command Center	2.1.1	RedHat 64-bit: 6.2, 6.4 CentOS 64-bit: 6.2, 6.4 Firefox 21, 22 Chrome Version 28.0.1500.95 IE 9, 10
Pivotal DataLoader	2.0.4	RedHat 64-bit: 6.2, 6.4 CentOS 64-bit: 6.2, 6.4
Pivotal USS	0.5	N/A
HAWQ *	1.1.4	RedHat 64-bit: 6.2, 6.4 CentOS 64-bit: 6.2, 6.4
PXF *	2.1.1	RedHat 64-bit: 6.2, 6.4 CentOS 64-bit: 6.2, 6.4

* Distributed with Pivotal ADS 1.1.4

6 Pivotal Command Center Documentation

The following Pivotal Command Center and related documentation is available in PDF format on our website at www.gopivotal.com.

HTML versions of our documentation is available here: docs.gopivotal.com/pivotalhd/

Additionally, you can still access product documentation from EMC's Support Zone.

Title	Revision
Pivotal Command Center 2.1.1 Release Notes (this document)	A02
Pivotal Command Center 2.1 User Guide	A02
Pivotal HD Enterprise 1.1 Installation and Administrator Guide	A03
Pivotal HD DataLoader 2.0 Installation and User Guide	A06
Pivotal HD 1.1 Stack and Tool Reference Guide	A02
Pivotal HAWQ 1.1 Administrator Guide	A08
Pivotal HAWQ 1.1 Installation Guide	A11
Pivotal Extension Framework Installation and User Guide	A02