

Cloudpath Enrollment System

Command Reference

Software Release 5.0 December 2016

Summary: This document describes the command line interface commands available for Cloudpath from the VMware client console or an SSH login, and the specifications for logging into the command line interface. Each command table provides a description, parameters, if needed, and an example command. **Document Type:** Reference **Audience:** Network Administrator



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Cloudpath Command Reference

Overview

This document describes the commands that are available to manage a Cloudpath system.

After the initial setup, an administrator can log into the system using SSH on port 8022 and use the command line interface to execute Cloudpath service commands.

Note >>

You need a service password to access the command line interface. The service password is set during the initial configuration of the system.

The following sections describe the command, syntax, parameter, and provides examples for using the Cloudpath command line interface.

Cloudpath Commands

You can access the Cloudpath command line interface using SSH on port 8022 or 22. Log in to the service account (*cpn_service*) and enter the service password.

Tip >>

The default SSH port number is 8022, but can be changed to port 22 on the Cloudpath *Administration > System > System Services* page.

After a successful login to the service account, the command-line configuration utility prompt (#) displays. Enter **?** to view the list of available commands.

Tip >>

From the command-line configuration utility, enter the **console** command to access the Linux shell. From the Linux shell, enter the **config** command to access the command-line configuration utility.

Command List

config commands console command diag commands maintenance commands

replication commands

show commands

support commands

system commands

config commands

The **config** commands allow you to change the configuration of the system.

| Command | Description | Parameters and Examples |
|----------------------------------|---|--|
| config | From the Linux shell, this command provides access to the command line configuration utility. | No parameters. [<serviceacctlogin@<hostname>]\$ config</serviceacctlogin@<hostname> |
| config admin-access allow-all | Clears restrictions to the administrative functionality so that an administrator can access the Cloudpath Admin UI from any IP address. | No parameters. config admin-access allow-all |
| config admin-access restrict | Restricts which IP addresses have administrative access to the Cloudpath Admin UI. | [Comma separated list of IP addresses/CIDR] config admin-access restrict 172.16.4.20, 172.16.5.18 or config admin-access restrict 172.16.4.20/24 |
| config fips-crypto | Enable or disable use of FIPS 140-2 cryptography. | <pre>[Enable or Disable] [Requires the service password] # config fips-crypto enable [sudo] password for cpn_service: enterservicepwd</pre> |
| config fips-crypto state | Display whether FIPS 140-2 cryptography is enabled. | No parameters. config fips-crypto state |

TABLE 1. config commands

TABLE 1. config commands

| Command | Description | Parameters and Examples |
|--------------------------------------|---|--|
| config hostname | Sets the hostname. | [This system's network name (FQDN)] |
| | | config hostname test22.company.net |
| config hostname- | Request by IP address are not | No parameters |
| restricted allow-all | blocked. | config hostname-restricted allow-all |
| config hostname- | Requests that do not match the | No parameters |
| restricted restrict | hostname are blocked. | config hostname-restricted restrict |
| config https enable | Sets whether the Apache | [The HTTPs port to use] |
| | server should be run as HTTP or HTTPS. | config https enable 55 |
| config https disable | Sets whether the Apache | No parameters |
| | server should be run as HTTP or HTTPS. | config https disable |
| config https- | Uses the system's hostname | No parameters |
| servername default | (FQDN). | config https-servername default |
| config https- servername override | Set the HTTPS server name. This is typically used when | [This system's network name] |
| Servername overnae | operating behind a load balancer. | config https-servername test22.company.net |
| config network DHCP | Configures whether you want DHCP to assign network IP | [<i>true</i> to use DHCP, <i>false</i> to use STATIC IP addresses] |
| | addresses. | config network DHCP true |
| | | This command causes the system to toggle the eth0 and loopback interfaces. |
| config network | Restarts the network after | No parameters. |
| restart | making configuration changes to DHCP settings. | config network restart |
| config network STATIC dns | Configures the STATIC IP addresses for the DNS server. | [IP address of the DNS server] |
| | addresses for the DNS server. | config network STATIC dns 172.16.4.202 |

TABLE 1. config commands

| Command | Description | Parameters and Examples |
|-----------------------------|---|---|
| config network STATIC ip | Configures the STATIC IP addresses for the system's eth0 interface, subnet mask, and gateway. | [IP address, subnet mask, and gateway for the eth0 interface] config network STATIC ip 172.16.6.35 255.255.252.0 172.16.4.1 |
| config ntp | Sets the NTP server | [IP address of the NTP server] config ntp 172.16.2.106 |
| config ntp sync-now | Forces an ntpdate to the configured NTP server. | [hostname for shared db] config ntp sync-now |
| config proxy set | Sets the HTTP proxy. Requires a reboot. The HTTP port and HTTPS port must be the same. This is the port number for the HTTP proxy tunnel. The [proxy-bypass-hosts] parameter (optional) is a comma-separated list of hosts that should bypass the proxy. Use config clear-proxy to remove the configuration. | [HTTP hostname] [HTTP port] [HTTPS hostname] [HTTPS port] [proxy- bypass-hosts] config proxy hostA 80 hostB 80 hostC,hostD |
| config proxy remove | Removes the HTTP proxy | No parameters config proxy remove |
| config ssh enable | Enables SSH access. The default port is 8022, or you can select port 22. | [SSH port] config ssh enable or config ssh enable 22 |
| config ssh disable | Disables SSH access. | [SSH port] config ssh disable |
| config sslv3 allow | Permits SSLv3 protocol on HTTPS connections. | No parmaters config sslv3 allow |

| Command | Description | Parameters and Examples |
|--------------------|-------------------------------|---|
| config sslv3 block | Prevents SSLv3 protocol on | No parameters |
| | HTTPS connections. | config sslv3 block |
| config timezone | Sets the timezone to be used. | [Zone name] |
| | | config timezone |
| | | This command displays a list of acceptable timezones. |
| | | When prompted, enter the desired timezone as shown. |
| | | America/Denver |
| | | Alternately, you can enter the correct timezone as part of the command. |
| | | config timezone America/Denver |

TABLE 1. config commands

console command

TABLE 2. console command

| Command | Description |
|---------|--|
| console | Provides access to the Linux shell (command line). |

diag commands

The diag commands provide diagnostic tests for network connectivity.

TABLE 3. diag commands

| Command | Description | Parameters and Examples |
|-----------------|------------------------------|-------------------------------------|
| diag arp-table | Displays arp table. | No parameters. |
| | | diag arp-table |
| diag dns-lookup | Performs a DNS lookup. | [IP address of the host to resolve] |
| | | diag dns-lookup 172.16.4.64 |
| diag interfaces | Displays network interfaces. | No parameters. |
| | | diag interfaces |
| diag ping | Sends ICMP IPv4 messages to | [IP address of the host] |
| | network hosts. | diag ping 172.16.2.1 |

| Command | Description | Parameters and Examples |
|---------------------|----------------------------------|-------------------------|
| diag routing-table | Displays routing table. | No parameters. |
| | | diag routing-table |
| diag rpm-version | Displays the current version for | No parameters. |
| | the rpms. | diag rpm-version |
| diag schema-version | Displays the status of database | No parameters. |
| | updates | diag schema-version |

TABLE 3. diag commands

maintenance commands

The maintenance commands import or export the Cloudpath database.

| Command | Description | Parameters and Examples |
|-------------------------------------|---|---|
| maintenance backup create | Create a backup file (zipped tar.gz) of the Cloudpath database and SCP it to a remote server. | [IP address or hostname of the remote server] [Port number] [Remote username] [Path to file location on the remote system] |
| | | <pre>maintenance backup create 172.16.4.20 22 username / home/db/file</pre> |
| maintenance backup restore mount | Restore a backup from a locally mounted drive | No parameters. maintenance backup restore mount |
| maintenance backup restore scp | Restore a backup file from a remote server via SCP. | [IP address or hostname of the remote server] [Port number] [Remote username] [Path to file location on the remote system] maintenance backup restore scp 172.16.4.20 22 username /home/db/file |

TABLE 4. maintenance commands

| Command | Description | Parameters and Examples |
|--|---|---|
| maintenance backup schedule mount | Creates a recurring backup via a locally mounted drive. Note the different syntax examples for cifs and nfs drive types. | [Username for remote drive] [Path to mount] [Path within mount to backup directory] [Type of drive (cifs or nfs)] [true to merge changes into full backup, false to not merge] |
| | | Syntax for cifs: |
| | | <pre># maintenance backup schedule mount admin \\\\\\172.128.4.20\\backu p\\test servername-cifs cifs true</pre> |
| | | Syntax for nfs: |
| | | <pre># maintenance backup schedule mount '' 172.128.4.20:/backup/ servername-nfs nfs true</pre> |
| maintenance backup schedule scp | Creates a recurring backup via SCP to a remote server | [IP address or hostname of the remote server] [Remote port number] [Remote username] [Path to the remote system to place the backup file] [Pattern for the cron schedule] |
| | | <pre>maintenance backup schedule scp 172.16.4.20 22 username /path/to /file 0 0 * * 3</pre> |
| | | (Note the space between minute, hour, day, month schedule parameters.) |
| | | For more information about cron schedule parameters, refer to Linux documentation. |
| maintenance backup unschedule mount | Removes the previously set up cron job for copying the system database to a remote server via mounted (CIFS) drive. | No parameters. maintenance backup unschedule mount |

TABLE 4. maintenance commands

| Command | Description | Parameters and Examples |
|--------------------------------------|---|--|
| maintenance backup unschedule scp | Removes the previously set up cron job for copying the system database to a remote server via SCP. | No parameters. maintenance backup unscheduled scp |
| maintenance cannibalize | Extract the configuration from a remote system and overwrite this system. The new system must have the same network settings as the old system, from which the database was exported. The Cloudpath uses the SSH port configured in the new system to | [IP address or hostname of the remote server] maintenance cannibalize 172.16.4.20 |
| | transfer the database files. | |

TABLE 4. maintenance commands

replication commands

The replication commands are designed for members of the support team to use for troubleshooting. Customers would typically not be required to run these commands unless requested by the support team.

Note >>

In most cases, gathering log data through the Cloudpath Admin UI, Collect Replication Logs button, is sufficient for troubleshooting purposes.

| Command | Description | Parameters and Examples |
|------------------------|---|---|
| replication force- | Forces the removal of the | No parameters. |
| cleanup | replication setup. | replication force-cleanup |
| replication replicator | Perform an operation on the replication server. | [start][stop][restart][status][offline][on line] |
| | | replication replicator restart |
| | | or |
| | | replication replicator status |
| replication show- | Displays the state of the | No parameters. |
| cluster | cluster. | replication show-cluster |

TABLE 5. replication commands

| Command | Description | Parameters and Examples |
|----------------------------------|--|---|
| replication show-log | Show log. | No parameters. |
| | | replication show-log |
| replication trepctl | Performs an operation on a service (ex. alpha, bravo, charlie). | <pre>[FQDN of the server node][service name][status/online/offline] replication trepct1 test23.company.net alpha status or replication trepct1 test23.company.net bravo offline</pre> |
| replication validate- cluster | Displays whether replication can be set up on this server. Note: This command should only be used before replication is set up. | No parameters. replication validate-cluster |

TABLE 5. replication commands

show commands

The **show** commands display the current configuration.

TABLE 6. show commands

| Command | Description |
|-------------------------|--|
| show config | Shows currently operating configuration. |
| show date | Shows current date. |
| show logs | Shows application and server logs. |
| show logs apache-access | Shows contents of Apache server access logs. |
| show logs apache-error | Shows contents of Apache server error logs. |
| show logs application | Shows contents of JBoss logs. |
| show logs config | Shows contents of config log. |
| show proxy | Shows HTTP proxy information. |
| show timezone | Shows currently configured timezone. |

support commands

The **support** commands enable or disable the support tunnel.

| TABLE 7. Support commanus | | |
|---|--|--|
| Command | Description | |
| support activate-ui-recovery | Activates a temporary password, which allows you to log into the Cloudpath Admin UI with the <i>recovery</i> username. This command requires the <i>service</i> password. | |
| | The recovery user credentials are only valid for 5 minutes. | |
| support database login | Allows you to log into the database. The password for this command is only available to support staff. | |
| support database reset-schema | Resets the status of the last database schema version. | |
| support database schema-version | Lists the database schema version. | |
| support database shrink | Depending on the size of the database, this operation may take some time to complete. | |
| support database view-size | Displays the amount of data n the database. | |
| support https restore certificate | Resets HTTPS to self-signed certificate. | |
| support https restore ciphers-and-protocols | Resets https to default SSL ciphers and protocol. | |
| support support-tunnel enable | Start support tunnel on port 8022. | |
| support support-tunnel disable | Stop support tunnel. | |
| support system apply-patches | Applies patches for the current version. The system will reboot. | |
| support system benchmark | Perform CPU and disk IO tests. | |
| support system clean-disk | The Cloudpath runs a clean-disk script on a schedule. This command allows an administrator to clean up the jboss.log manually. | |

TABLE 7. support commands

system commands

The system commands control system operations

Note >>

If the boot password requirement has been set, you must enter a password to complete these commands.

TABLE 8. system commands

| Command | Description |
|-----------------|--|
| system reboot | Reboots system. |
| system restart | Restarts the JBoss and Apache servers. |
| system shutdown | Shuts down the system. |
| | This command requires VMware access to boot the system. |
| system status | Lists the status of key services (web server, firewall, NTP, RADIUS, etc.) |

Recovery

Administrative UI Recovery

If you are locked out of the Cloudpath Admin UI, log in via SSH and use the activate-ui-recovery command from the service account. This activates a temporary password for a short time period, which allows you to log into the Cloudpath Admin UI and set up a new Administrator account, or reset a password for an existing account.

Service Account Recovery

If you are locked out of the service account, you can log in via SSH to a *Recovery* account.

Note >>

You must contact Cloudpath Networks Support to obtain a recovery password.

To receive a recovery password for the service account, you must provide the System Identifier and current Version on your system.

How To Find Your System Identifier

- 1. Log into the Cloudpath Admin UI.
- 2. Go to Support > Licensing.

3. The System Identifier is listed in the License Server section.

FIGURE 1. System Identifier

| nsing Information | | Refresh |
|----------------------|--|---------|
| License Type: | C Trial | |
| | Active trial through 08/29/2020. | |
| System Utilization | | |
| Active Certificates: | 428 Currently Active | |
| | 666 Issued In Last 30 Days | |
| | 666 Issued In Last 60 Days | |
| | 666 Issued In Last 90 Days | |
| | 666 Issued In Last Vear | |
| AD/LDAP Users: | 14 Total | |
| SMS Count: | 4 This Year | |
| Email Count: | 12 This Year | |
| Statistics: | Users, Authentications, Certificates, MAC Registrations, Notifications | |
| License Server | | |
| License Server: | https://bvt.cloudpath.net | |
| Link Established: | Yes, since 04/30/2014 11:47 MDT Advanced | |
| | {000000-25807680-155F-663F-ED32-EFA168121688-485AB938-DC08-DB25-553D} | |
| Notices | | |
| Open Source Notices: | This product contains components covered by various open source licenses. These licenses, inclu the software components, are available at http://www.cloudpath.net/opensource | ding |
| | This product includes software developed by the Apache Software Foundation (http://www.apache.org/). | |
| Patent Notice: | Protected by one or more of the following patents: 9.032,0499, 9,003,507, 9,137,234, 9,137,23 8,843,741, and 9,037,849. Contact support for additional patents. | 5, |
| | | |

How To Find Your Current Cloudpath Version

The Cloudpath version is displayed in two locations.

1. Go to Administration > System > System Services > Web Server component. The current build is listed in the Version field.

FIGURE 2. Current Cloudpath Version System Services

| System Services | 5 | | |
|-----------------|---------------|---|--|
| | | | |
| | Web Se | erver 🥒 | |
| Web Ser | rver Status: | Running (0) | |
| Us | sing HTTPS: | Yes, ports 80 and 443. Disable | |
| | Version: | 5.0.3198 | |
| | Actions: | Restart Www Restart App | |
| Web Server | r Certificate | | |
| Comr | mon Name: | *.cloudpath.net Reapply | |
| Iss | suer Name: | Go Daddy Secure Certificate Authority - G2 | |
| | Validity: | 20150512 through 20180622 | |
| | Actions: | Upload WWW Certificate Delete WWW Certificate | |

- 2. The Cloudpath version is displayed in the lower left corner of the Admin UI, and is visible on all pages.
- FIGURE 3. Current Cloudpath Version Lower Left

