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Pulse One Appliance Command Reference Guide

The information in this document is current as of the date on the title page.

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Preface

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Document Conventions
The document conventions describe text formatting conventions, command syntax conventions, and important notice formats used in Pulse Secure technical documentation.

Text Formatting Conventions
Text formatting conventions such as boldface, italic, or Courier font may be used in the flow of the text to highlight specific words or phrases.

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bold text</strong></td>
<td>Identifies command names</td>
</tr>
<tr>
<td></td>
<td>Identifies keywords and operands</td>
</tr>
<tr>
<td></td>
<td>Identifies the names of user-manipulated GUI elements</td>
</tr>
<tr>
<td></td>
<td>Identifies text to enter at the GUI</td>
</tr>
<tr>
<td><em>italic text</em></td>
<td>Identifies emphasis</td>
</tr>
<tr>
<td></td>
<td>Identifies variables</td>
</tr>
<tr>
<td></td>
<td>Identifies document titles</td>
</tr>
<tr>
<td><strong>Courier Font</strong></td>
<td>Identifies command output</td>
</tr>
<tr>
<td></td>
<td>Identifies command syntax examples</td>
</tr>
</tbody>
</table>

Command Syntax Conventions
Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>bold text</strong></td>
<td>Identifies command names, keywords, and command options.</td>
</tr>
<tr>
<td><em>italic text</em></td>
<td>Identifies a variable.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Syntax components displayed within square brackets are optional.</td>
</tr>
<tr>
<td></td>
<td>Default responses to system prompts are enclosed in square brackets.</td>
</tr>
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</table>
Notes and Warnings

Note, Attention, and Caution statements might be used in this document.

**Note:** A Note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

**ATTENTION**
An Attention statement indicates a stronger note, for example, to alert you when traffic might be interrupted or the device might reboot.

**CAUTION**
A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.

Requesting Technical Support

Technical product support is available through the Pulse Secure Global Support Center (PSGSC). If you have a support contract, file a ticket with PSGSC.

- Product warranties—For product warranty information, visit [https://support.pulsesecure.net/product-service-policies/](https://support.pulsesecure.net/product-service-policies/)

Self-Help Online Tools and Resources

For quick and easy problem resolution, Pulse Secure provides an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: [https://support.pulsesecure.net](https://support.pulsesecure.net)
- Search for known bugs: [https://support.pulsesecure.net](https://support.pulsesecure.net)
- Find product documentation: [https://www.pulsesecure.net/techpubs](https://www.pulsesecure.net/techpubs)
- Download the latest versions of software and review release notes: [https://support.pulsesecure.net](https://support.pulsesecure.net)
- Open a case online in the CSC Case Management tool: https://support.pulsesecure.net
- To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: https://support.pulsesecure.net

For important product notices, technical articles, and to ask advice:

- Search the Pulse Secure Knowledge Center for technical bulletins and security advisories: https://kb.pulsesecure.net
- Ask questions and find solutions at the Pulse Community online forum: http://kb.pulsesecure.net

**Opening a Case with PSGSC**

You can open a case with PSGSC on the Web or by telephone.

- Use the Case Management tool in the PSGSC at https://support.pulsesecure.net.
- Call 1-844 751 7629 (Toll Free, US).

For international or direct-dial options in countries without toll-free numbers, see https://support.pulsesecure.net/support/support-contacts/

**Reporting Documentation Issues**

To report any errors or inaccuracies in Pulse Secure technical documentation, or to make suggestions for future improvement, please send your comments to: techpubs-comments@pulsesecure.net. Include a full description of your issue or suggestion and the document(s) to which it relates.
Introduction

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- The CLI Command Tree .............................................................................. 6

Using the Command-Line Interface
This section assumes you have already performed the initial setup of Pulse One. For detailed information, see the Pulse One Appliance Getting Started Guide.

To connect the CLI:

1. You can connect to the CLI using one of the following options:
   - An ASCII terminal or emulator that can connect to the serial console. It must have the following settings: 9600 baud, 8 bits, no parity, 1 stop bit, and no flow control.
   - A computer with an SSH client that is connected to the appliance Primary port (in rare cases, you might connect through the Auxiliary port).

2. At the system prompt enter the following command if the appliance resolves to your local DNS:

   ssh admin@host.domain

   Otherwise, at the system prompt enter the following command:

   ssh admin@ipaddress

3. When prompted, enter the administrator password. This is the password you set during the initial configuration process.
The CLI Command Tree

Every terminal/leaf node on the following tree represents a CLI command.
(continued)

network
  ├─ arp
  ├─ dns
  ├─ hostname
  └─ interface
    ├─ external
    ├─ internal
    └─ management
  └─ ip
    ├─ route
    ├─ add
    ├─ delete
    └─ show
  └─ nslookup
  └─ ping
    └─ show
  └─ traceroute

ntp
  ├─ pool
  ├─ remove
  ├─ server
  └─ show

pl
  ├─ domain
  │   ├─ admins
  │   │   └─ list
  │   └─ list
  │       ├─ property
  │       │   └─ list
  │       └─ reset
  │           └─ set
  │               ├─ provision
  │               └─ whitelist
  │                   ├─ add ip
  │                   └─ reset
  │                       └─ show
  │               └─ log-aggregator
  │                   └─ nfs
  │                       └─ settings
  │                           └─ show
  │                               └─ targets
  │                                   ├─ add
  │                                   └─ list
  │                                       └─ remove
  │                                           └─ mssp
  │                                               └─ provision
  └─ (continued)
pws
  └─ config
      ├─ refresh-app-icons
      └─ reset
          └─ ios-certificate
      └─ set
          ├─ esa
          ├─ ios-mdm-push-certificate
          ├─ ios-pulse-secure-app-push-certificate
          └─ msa
      └─ show
          ├─ esa
          └─ msa
  └─ email-domain
      ├─ add
      ├─ delete
      └─ list
  └─ pws-config (deprecated)
      ├─ refresh-app-icons (deprecated)
      └─ reset
          └─ ios-certificate (deprecated)
      └─ set
          ├─ esa (deprecated)
          └─ show
              └─ esa (deprecated)
  └─ services
      ├─ logs
      └─ restart
          └─ start
              └─ status
                  └─ stop
  └─ smtp
      └─ set
      └─ show

(continued)
(continued)

```
  system
   ├─ backup
   │   ├─ export
   │   └─ import
   │
   ├─ banner
   │   ├─ remove
   │   ├─ set
   │   └─ show
   │
   └─ debug

  destroy
   ├─ data
   │
   ├─ index
   │
   ├─ log-indexer
   │
   ├─ managed-appliance-configs
   │
   ├─ service-logs
   │
   └─ system-config

  provision

  reboot

  security
   ├─ fips
   │
   └─ show

  session-settings
   ├─ set
   │
   └─ show

  shutdown

  snapshot

  storage
   ├─ add
   │
   └─ show

  upgrade

  version
```
Command Reference

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- CLI Commands ........................................................... 11

Introduction
This chapter lists and describes all Pulse One Command-Line Interface (CLI) commands.

The following information is provided for each command:

- Description of the command.
- The usage (syntax) for the command.
- The options that are available.
- The arguments (marked as optional where appropriate) that are available.
- One or more examples of command use, with context descriptions where required.

Note: For an alphabetical list of User-Mode commands, see the Contents page of this book.

CLI Commands
This section is a command reference for all CLI commands.
account create
Creates a CLI admin account.

Usage
    account create [OPTIONS] USERNAME

Options
    --help
        Displays the help text for this command.

Arguments
    USERNAME
        The user for which you want to make a CLI admin account.

Examples

    *** list users ***
    Pulse One > account list
    users:
    - admin
    - young

    *** add new account ***
    Pulse One > account create example
    Password:
    Confirm Password:
    Created user example

    *** confirm addition ***
    Pulse One > account list
    users:
    - admin
    - young
    - example
account delete
Deletes the CLI admin account.

Usage

    account delete [OPTIONS] USERNAME

Options

    --help

    Displays the help text for this command.

Arguments

    USERNAME

    The CLI admin account that you want to delete.

Examples

    *** list users ***
    Pulse One > account list
    - users:
    - admin
    - test
    - example

    *** delete account ***
    Pulse One > account delete example
    Type DELETE to confirm: DELETE
    User 'example' deleted.

    *** confirm deletion ***
    Pulse One > account list
    users:
    - admin
    - test
account list
Lists all existing admin CLI accounts.

Usage
account list [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** list cli admin users ***
Pulse One > account list
users:
- admin
- test
- example
account password change
Changes the password for a CLI admin account.

Usage
account password change [OPTIONS]

Options
   --help
       Displays the help text for this command.

Arguments
   None.

Examples
   Pulse One > account password change
   Current password:
   Password:
   Confirm Password:

   You can connect to SSH at xx.xx.xx.xx:pp
   Press <ENTER> to log in to Pulse One

   Login below:
   Username: admin
   Password:

   Logged in as admin
   Last login at 2018-06-06T09:45:04Z via console
   Pulse One >
account password reset
Resets the password (assigns a temporary password) for a CLI admin account.

Usage
   account password reset [OPTIONS]

Options
   --help
       Displays the help text for this command.

Arguments
   None.

Examples
   *** list current cli admin users ***
   Pulse One > account list
   users:
   - admin
   - young
   - example

   *** change password for “example” cli admin user ***
   Pulse One > account password reset
   Enter the user whose password needs to be reset: example
   Type RESET to confirm: RESET
   Temporary password for user 'example'
   N3yXa6Jb
cluster add
This command should only be performed on the Active node of a proposed Pulse One cluster. The command generates a cluster join token, and then outputs the command that must be run on the Passive node so that it forms a cluster with the Active node.

**Note:** The Active node requires a configured internal interface.

**Note:** The cluster join token is valid until the token is regenerated by issuing another `cluster add` command.

**Usage**
```
cluster add [OPTIONS] ADDRESS
```

**Options**
--help
Displays the help text for this command.

**Arguments**
ADDRESS

The IPv4 address of the proposed Passive node for the cluster.

**Examples**
```bash
*** log into Active node xx.xx.xx.xx to add Passive node yy.yy.yy.yy ***
Pulse One > cluster add yy.yy.yy.yy
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...
  (interface messages)
* Starting networking ...
  (interface messages)
* Starting chronyd ...
* Starting NFS sm-notify ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
* Stopping racoon ... [ ok ]
* Flushing policy entries ... [ ok ]
* Loading ipsec policies from /etc/ipsec.conf.
* Starting racoon ... [ ok ]
```
To cluster yy.yy.yy.yy as a passive Pulse One appliance with this active appliance, configure networking on the passive appliance and run the following command on it:
```
cluster join xx.xx.xx.xx 70yqww0k
```
**Note:** In this example, the cluster join token is “70yqww0k”.

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cluster config
Configures automatic failover for a two-node Active/Passive Pulse One cluster.

Usage
cluster config [OPTIONS]

Options
--help
Displays the help text for this command.

-f, --auto-failover INTEGER
Configures the auto failover timeout (in minutes).
When this is set to 0, automatic failover is disabled. This is the default setting.

Arguments
None.

Examples
Pulse One > cluster config -f 2
auto_failover: true
auto_failover_timeout: 2 minutes
**cluster demote**
Demotes the current node to standalone.

This is required to perform a manual failover, or to de-cluster an Active/Passive pair of nodes.

**Note:** When de-clustering Active/Passive nodes, you must demote the Passive node before the Active node.

**Note:** This command resets the internal interface of the node.

**Usage**
```
cluster demote [OPTIONS]
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
None.

**Examples**
*** these examples show declustering of an Active/Passive pair ***
*** log into Passive node yy.yy.yy.yy, then check synchronisation ***
Pulse One > cluster status
auto_failover: false
cluster:
  active_node: xx.xx.xx.xx
  nodes:
  - xx.xx.xx.xx
  - yy.yy.yy.yy
node:
  id: 02f42ceae73c48afbff7e601020644aa
  ip: yy.yy.yy.yy
  mode: passive
systems:
  null: null
data-store:
  details:
  - Waiting for master to send event
  - 0 seconds behind master
  errors: null
  status: In Sync

file-store:
  details:
  - file-store instance on yy.yy.yy.yy:27017 is currently SECONDARY
  - file-store instance on xx.xx.xx.xx:27017 is currently PRIMARY
  errors: null
  status: In Sync
*** demote Passive node yy.yy.yy.yy to standalone

Pulse One > cluster demote

Demoting node to standalone cluster node...

Stopping uno_file-store_1 ... done
Removing uno_file-store_1 ... done
Stopping uno_log-indexer_1 ... done
Removing uno_log-indexer_1 ... done
Stopping uno_index_1 ... done
Removing uno_index_1 ... done
Stopping uno_data-store_1 ... done
Removing uno_data-store_1 ... done

* Stopping racoon ... [ ok ]
* Flushing policy entries ... [ ok ]
* Loading ipsec policies from /etc/ipsec.conf.
* Starting racoon ... [ ok ]

Creating and starting 2 ... done
Creating and starting 3 ... done
Creating and starting 4 ... done

* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...
* eth1 ... [ ok ]
* lo ... [ ok ]
* eth4 ... [ !!! ]
* eth0 ... [ !!! ]
* Starting networking ...
* lo ... [ ok ]
* eth4 ... [ ok ]
* eth0 ... [ ok ]

* Starting chronyd ... * Starting NFS sm-notify ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
[ ok ]
*** log into Active node xx.xx.xx.xx, confirm status ***
Pulse One > cluster status
auto_failover: false
cluster:
  active_node: null
  nodes:
  - xx.xx.xx.xx
  - yy.yy.yy.yy
node:
  id: 137a56c7928b48ddac404bf033928866
  ip: xx.xx.xx.xx
  mode: active
systems:
  null: null
  file-store:
    details:
    - file-store instance on xx.xx.xx.xx:27017 is currently PRIMARY
    errors: null
    status: In Sync
index:
  details:
  - Cluster split
  errors:
  - Not In Sync
  status: Errors
log-collector: null
log-indexer:
  details:
  - Cluster split
  errors:
  - Not In Sync
  status: Errors
  (secure channel messages)
  status: Connected
services: null

*** demote an Active node to standalone ***
Pulse One > cluster demote
Have you demoted the passive node? You should do these steps in order:
(1) demote the passive node to standalone
(2) wait for the demote command to finish
(3) demote the active node to standalone
Are you ready to proceed with step (3)?  [y/N]: y

Demoting node to standalone cluster node...
Stopping uno_file-store_1 ... done
Removing uno_file-store_1 ... done
Stopping uno_log-indexer_1 ... done
Removing uno_log-indexer_1 ... done
Stopping uno_log-collector_1 ... done
Removing uno_log-collector_1 ... done
Stopping uno_index_1 ... done
Removing uno_index_1 ... done
Stopping uno_data-store_1 ... done
Removing uno_data-store_1 ... done
  * Stopping racoon ... [ ok ]
  * Flushing policy entries ... [ ok ]
  * Loading ipsec policies from /etc/ipsec.conf.
  * Starting racoon ... [ ok ]
  * WARNING: you are stopping a boot service
  * Unmounting NFS filesystems ... [ ok ]
  * Stopping chronyd ... [ ok ]
  * Stopping networking ...
    * eth1 ... [ ok ]
    * lo ... [ ok ]
    * eth4 ... [ !! ]
    * eth0 ... [ !! ]
  * Starting networking ...
    * lo ... [ ok ]
    * eth4 ... [ ok ]
    * eth0 ... [ ok ]
  * Starting chronyd ... * Starting NFS sm-notify ... [ ok ]
  * Mounting NFS filesystems ... [ ok ]

node:
  id: 137a56c7928b48ddac404bf033928866
  ip: null
  mode: standalone
cluster join
Joins the current node to an existing Active node to form a two-node Active/Passive cluster.

The current node becomes the Passive node in the cluster.

The `cluster join` command requires a cluster join token. This token is generated by first running the `cluster add` command on the Active node, see “cluster add” on page 17.

**Note:** This command will destroy any local data and then sync all data from the Active node.

**Note:** This command does not require Docker images to have been loaded. Instead, Docker images are loaded as they are required.

**Usage**
```
cluster join [OPTIONS] ADDRESS TOKEN
```

**Options**
```
--help
Displays the help text for this command.
```

**Arguments**
```
ADDRESS
IPv4 address of the Active node for the cluster.

TOKEN
The cluster join token generated by the `cluster add` command, see “cluster add” on page 17.
```

**Examples**

*** previous “cluster add” generated cluster join token “70yqww0k” ***

*** log into Passive yy.yy.yy.yy and join to Active xx.xx.xx.xx ***

Pulse One > cluster join xx.xx.xx.xx 70yqww0k
WARNING: This will delete all Pulse One data, resetting the appliance to factory defaults. The data will not be recoverable.
Type "DESTROY" to continue: DESTROY
Resetting data...
Stopping uno_backend_4 ... done
Stopping uno_backend_2 ... done

. (services stop)

Stopping uno_log-indexer_1 ... done
Stopping uno_file-store_1 ... done
Removing uno_backend_4 ... done
Removing uno_backend_2 ... done
Removing uno_backend_3 ... done

   . (Removal of files and directories)
   .
Removing directory /data/log_indexer
Removing directory /data/mongodb
Removing directory /data/mysql
Destroyed.
Joining cluster 10.64.45.175 as a passive node...
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...  
   * lo ... [ ok ]
   * eth4 ... [ ! ]
   * eth0 ... [ ! ]
* Starting networking ...
   * lo ... [ ok ]
   * eth4 ... [ ok ]
   * eth1 ...ip: RTNETLINK answers: File exists
   [ ! ]
   * eth0 ... [ ok ]
* Starting NFS sm-notify ... * Starting chronyd ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
[ ok ]
* Stopping racoon ... [ ok ]
* Flushing policy entries ... [ ok ]
* Loading ipsec policies from /etc/ipsec.conf.
* Starting racoon ... [ ok ]

VPN connexion established
Synchronizing configuration from cluster. This may take a long time depending on the amount of active node data.
node:
   id: 02f42ae73c48afbff7e601020644aa
   ip: yy.yy.yy.yy
   mode: passive
**cluster promote**
Promotes the current standalone node to Active and enables clustering.

**Usage**
```bash
cluster promote [OPTIONS]
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
None.

**Examples**
```
*** promote standalone node xx.xx.xx.xx to Active ***
Pulse One > cluster promote
Promoting node to active cluster node...
Stopping uno_data-store_1 ... done
Removing uno_data-store_1 ... done
Stopping uno_index_1 ... done
Removing uno_index_1 ... done
Stopping uno_file-store_1 ... done
Removing uno_file-store_1 ... done
Stopping uno_log-indexer_1 ... done
Removing uno_log-indexer_1 ... done
Stopping uno_log-collector_1 ... done
Removing uno_log-collector_1 ... done
auto_failover: false
node:
  id: 137a56c7928b48ddac404bf033928866
  ip: xx.xx.xx.xx
  mode: active
```
**cluster status**
Reports the clustering status of the current node.

Where the node is in a cluster (either as Active or Passive), the status of individual services (“systems”) are also displayed, including individual synchronization statuses.

**Usage**
```
cluster status [--watch]
```

**Options**
--help
Displays the help text for this command.

--watch
Watch status live

**Arguments**
None.

**Examples**

*** current node is a standalone node ***
Pulse One > cluster status
node:
  id: 8acc362dab954ed5a9bb17a1608b4708
  ip: null
  mode: standalone

*** current node is an Active node in a clustered pair ***
*** active / passive nodes are shown as xx.xx.xx.xx / yy.yy.yy.yy ***
Pulse One > cluster status
auto_failover: false
cluster:
  active_node: null
  nodes:
  - xx.xx.xx.xx
  - yy.yy.yy.yy
node:
  id: 2e3296806c58418769694d6668ba32ba
  ip: xx.xx.xx.xx
  mode: active
systems:
  null: null
  data-store: null
  file-store:
    details:
    - file-store instance on xx.xx.xx.xx:27017 is currently PRIMARY
    - file-store instance on yy.yy.yy.yy:27017 is currently SECONDARY
  errors: null
  status: In Sync
index:
  details:
  - 'Reported status: green'
  errors: null
  status: In Sync
log-collector: null
log-indexer:
  details:
  - 'Reported status: green'
  errors: null
  status: In Sync
secure-channel:
  details:
  - 'xx.xx.xx.xx yy.yy.yy.yy'
  - "\tesp mode=transport spi=24624562(0x0177bdb2) reqid=0(0x00000000)"
  - "\tE: aes-cbc 438bd137 9ba94ad3 213d01a6 1afelcd0"
  - (secure channel messages)
  - "\tallocated: 297347\thard: 0\tsft: 0"
  - "\tsadb_seq=0\tpid=7209\trefcnt=0"
  status: Disconnected
services: null
domain admins list
Displays a list of the admins for all domains, or a specified domain.

Note: This command is deprecated. Please use "p1 domain admins list" on page 78.
domain list
Displays all provisioned domain names.

Note: This command is deprecated. Please use “p1 domain list” on page 79.
domain-property list
Lists all of the domain properties.

Note: This command is deprecated. Please use “p1 domain property list” on page 80.
domain-property reset
Resets all of the domain properties.

Note: This command is deprecated. Please use “p1 domain property reset” on page 81.
domain-property set
Sets a domain property.

Note: This command is deprecated. Please use “p1 domain property set” on page 82.
email-domain add
Adds an email domain.

Note: This command is deprecated. Please use “pws email-domain add” on page 105.
email-domain delete
Deletes an email domain.

**Note:** This command is deprecated. Please use "pws email-domain delete" on page 106.
email-domain list
Shows all the email domains.

Note: This command is deprecated. Please use “pws email-domain list” on page 107.
help
Shows the top level of the help system.

Usage
help [OPTIONS] [COMMAND]

Options
--help
Displays the help text for this command.

Arguments
COMMAND
The CLI command for which you want to display the help text.

Examples
Pulse One > help
Usage: [OPTIONS] COMMAND [ARGS]...
Pulse One
Options
:  --help Show this message and exit.
Commands:
  account Manage admin accounts
  cluster Manage cluster
  domain Manage domains.
  domain-property Manage domain properties.
  email-domain Manage email domains.
  help Show command help
  https Configure HTTPS SSL/TLS settings
  licenses Manage licenses
  log-aggregator Manage log-aggregator component settings.
  logout Log out
  network Configure network settings
  ntp A command to configure and diagnose problems...
  pl Pulse One Group
  pws Pulse Workspace Group
  pws-config Manage Pulse Workspace configurations.
  services Manage services
  smtp Configure SMTP settings
  system Manage system
https csr
Generates an HTTPS Certificate Signing Request (CSR).

Note: This request must be sent to your certificate authority, which will return a signed certificate to you.

Usage
https csr [OPTIONS]

Options
--help
Displays the help text for this command.

--with-text
Present the CSR in a human-readable format. This is ignored if --pem-only is included.

--pem-only
Present the CSR in a PEM-encoded format.

Arguments
None.

Examples
*** Basic CSR ***
Pulse One > https csr
Please provide information for the certificate for mobile.example.com:
Country Name [ ]: UK
State Or Province Name [ ]: Cambridgeshire
Locality Name [ ]: Cambridge
Organization Name [ ]: Example Ltd
Organizational Unit Name [ ]: Example Dept
The Certificate Signing Request follows. Please select the CSR, copy it, and give it to your Certificate Authority.

-----BEGIN CERTIFICATE REQUEST-----
MIICxDCCAawCAQAwfzELMAkGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5wd3NlbmcuY29tMRIwEAYDVQQHDAlDYW1icmlkZ2UxEzARBgNVBAoMCkRlbW9uIEx0ZC4x
bmcuY29tMRIsdwEAYDVQQHDAlDYW1icmlkZ2UxEzARBgNVBAoMCkRlbW9uIEx0ZC4x
zpIbaOml2ZCBlc3NhZWRzNy5jcmwGCBIIBAcTAgMBA0gccwGCCsGAQUFBzAChlBF
-----END CERTIFICATE REQUEST-----

y6OlJKXoSi2v+QyFtKdvZEMM629jUGIC9fIqlf15bpPjehU4ZKnjRGQQu1UyXFNMIz
MpQQOsHoxKjQXNdJ5sNryRs2cOQs4yjwN3E7b2ujq+WCp1l10y4GH3MQJdon6mEDD
VoQdiLQkVyi1XhXzE5pAPAdRy+hMUhbKLTVCxeyZLncAK3UjjL311Adp8xRqi/6U2
Ob1VqDw1AyxOpfljup0y0gGuDzuBuQhKGBxi0HXETeqA7ZLRgwk1kvw==
-----END CERTIFICATE REQUEST-----
*** Using 'with-text' option ***
Pulse One > https csr --with-text
Please provide information for the certificate for mobile.example.com:
Country Name []: UK
State Or Province Name []: Cambridgeshire
Locality Name []: Cambridge
Organization Name []: Example Ltd
Organizational Unit Name []: Example Dept
The Certificate Signing Request follows. Please select the CSR, copy it, and give it to your Certificate Authority.

Certificate Request:
  Data:
   Version: 0 (0x0)
   Subject: C=UK, CN=mobile.example.com, L=Cambridge, O=Example Ltd,
   ST=Cambridgeshire, OU=Example Dept
   Subject Public Key Info:
     Public Key Algorithm: rsaEncryption
     Public-Key: (2048 bit)
     Modulus:
       00:df:3f:b9:05:07:02:84:b9:23:2c:8a:66:1c:a0:
       . (shortened)
       aa:cb
     Exponent: 65537 (0x10001)
   Attributes:
     a0:00
   Signature Algorithm: sha256WithRSAEncryption
     . (shortened)
     5f:87:0b:22

-----BEGIN CERTIFICATE REQUEST-----
MIICvjCCAdyCAQAwgTELMAkGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5w
bmcuY29tMQ4wDAYDVQQHDAVMdXRvbjESMBAGA1UECgwJRGVtbyBMdGQuMRUwEw
YDVQQIDAxCZWMb3Jkc2hpccmUxERBwNVBAsMCkRlB8gRGVwdC4wggEiMA0GCSqG
. (certificate truncated)

dNzA92L736jt9FhstPMQ9RXvxs+QKnk5zajWnLrGtpz99rz7yO5MxjMwQ9zqkJ
mDeAlm+rMeM3V1n665RvDcM6c6QbDY/eYB0xHSXYwd0HPfCFYNmhU1LctFr
X/2Isq5Fh5vm9RSS5u76Rx4h+7qPKh4ghthD4L+GX4cLl==
-----END CERTIFICATE REQUEST-----
*** Using ‘pem-only’ option ***
Pulse One > https csr --pem-only
Please provide information for the certificate for mobile.example.com:
Country Name []: UK
State Or Province Name []: Cambridgeshire
Locality Name []: Cambridge
Organization Name []: Example Ltd
Organizational Unit Name []: Example Dept
The Certificate Signing Request follows. Please select the CSR, copy it, and give it to your Certificate Authority.

-----BEGIN CERTIFICATE REQUEST-----
MIICwjCCAaoCAQAwTElMAkGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5wbmcuY29tMRkwFwYDVQQDAEMDYW1icmlkZ2UxETAPBgNVBAsMCERlbW8gTHRkMREc
FQYDVQQIDA5DYW1icmlkZ2VzaGlyZTESMBAGA1UECwwJRGVtbyBEZXB0MIIBIjAN.
.(certificate truncated)
.
.tWDJoUNgV/4u1spC/+0s9eTGoLEgt5jgOQpEjuiGkx/5lt+3jYygkBM+89KEps+Xr1sufRe9AEIrsZKjBGW6qznuFxLq2hJrzczY2tcXAYvMPKlaaeEIAI9T2VcgzV+
g5u8p3ly12ap3GuA0HIR0R10VItJTD0Tr0a2d+Evf5rIRP5D9VGd0jejMP0po06XB2Gfn3HmcPNpwNhKurbBsfTkuk3xbzQfiItkwWtyMvfzfdwc16U=
-----END CERTIFICATE REQUEST-----
https set ca-bundle
Sets the HTTPS certificate authority bundle.

**Note:** After this command completes, a restart is required for new settings to go into effect.

**Usage**

```
https set ca-bundle [OPTIONS]
```

**Options**

--help

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > https set ca-bundle
Overwrite existing certificate authority bundle? [y/N]: y
Paste your HTTPS certificate chain in PEM format:
-----BEGIN CERTIFICATE-----
MIIDBTCCAe2gAwIBAgIRALPEq57d1kqnqntc9NgQvwYQwDQYJkoZIhvcNAQELBQAw
HDeaMBgGA1UEAwRBW9iaWxlLnB3c2VuZy5jb20wHhcNMTgwNzE5MDA1MDAxFw0x
MTkwNjE5MDA1MDAxFw0xMTEwMDAwMTAwOQYDVQQDEwJ1dGl0bGUgQ29tcGFuaW5n
MB0GAYDVQQKDBFMdFVzZXJ2ZXIwIjA3MB8GA1UEAxM1Zm9vdXIgQ29tcGFuaW5n
-----END CERTIFICATE-----
```

```
Saved certificate authority bundle.
```

```
NtnFrOJrJxy4qO44RW8k78RmaT7uc1bDA8lDeYo4aZdAQDwwJ17RTIUdd2IkXaX
Qnj+a8+j3D9CbWtR/Vl6EMwtYgxXF6C1UfRCbZpaStCmyN4baRoGKsqL+u+yvfR
SlwCfAzgPiJ/dDLh5K4wy+b9aFR2RzX7b7dw7M/8nrvbGNkMUFJO9oBMm6IO192
UosvaSJTafc9
```

```
-----END CERTIFICATE-----
```

```
Saved certificate authority bundle.
```
https set cert
Sets the HTTPS certificate.

Note: After this command completes, a restart is required for new settings to go into effect.

Usage

https set cert [OPTIONS]

Options

--help

Displays the help text for this command.

Arguments

None.

Examples

Pulse One > https set cert
Overwrite existing certificate? [y/N]: y
Paste your HTTPS certificate in PEM format:
-----BEGIN CERTIFICATE-----
MIIDBTCCAe2gAwIBAgIRALPEq57d1knqntc9NgQvwYQwDQYJKoZIhvcNAQELBQAw
HDEaMBgGA1UEAwwRbW9iaWx1LnB3c2VzY5jb20wHhcNMjgwMTkwMTkwMTkwwCQY
DwIB/wIB/AIBgGAYDVQQLDBFtb2JpbGUucHdzZW5nLmNvbTCCAsIw
  ... (certificate truncated)
  ...
NtnFrOJze4qO44RW8k78RmaT7uc1bDA8IiDeYo4aZdAQDwwJ17RN2UddZ1kXaX
Qnj+a8+j3D9CbWt/R/VIb6EMwtYx6C1UfRCb2paStCmyN4baRoGKsqL+u+yyfR
SlwcFfAzgPiJ/dDLh5K4wy+b9aFR2RzX7b7dw7M/8nrvbGNkMUFJ09oBMm6I0192
UosvaSJTAfc9
-----END CERTIFICATE-----

Saved certificate "mobile.example.com"
https set key
Sets the HTTPS certificate key.

**Note:** After this command completes, a restart is required for new settings to go into effect.

**Usage**

`https set key [OPTIONS]`

**Options**

--help
Displays the help text for this command.

**Arguments**

None.

**Examples**

Pulse One > https set key
Overwriting private key will invalidate and delete current certificate.
Overwrite existing key? [y/N]: y
Paste your HTTPS certificate key in PEM format:

```
-----BEGIN PRIVATE KEY-----
MMIEvQIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQDfP7kFBwKEuSMs^MimYcoLJ2tpjDQMNrwyVP
/EqMppY2HiVrIjkyR9xLhHQNAsgwejDbr/QhN7eLVG^MNvMS/
7g+Dg61P95xM2d42rd8nTEI23vkYwIqb+Bbrd
.
.
FI+H0H52lc7gBAoGAZ/
f9L5k6cYzXzMrEf4oN^MVkJlhmc1bOGRBLB1TOF8buaDuWW9SMQX9VJmzvM4jXb8wuLK+3ALQ8TKvZ2+nQyI^Mg
RLAoF8dO82h4v7IHPHBU3Lcd
ZcmuB9FXcmksGSXOQtDzO+SnpqqBOvSRAUj69e^Mcf36qVK9whM2cX1MuUz+p8Q=-----END PRIVATE KEY-----
```

Saved certificate key.
**https show**

Shows the content of one of the following:

- The certificate.
- The certificate authentication bundle.
- The key.

**Usage**

`https show [OPTIONS] SETTING`

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

```
SETTING
```

The specific element you want to see:

- **cert**: Select this to view the certificate.
- **ca-bundle**: Select this to view the certificate authentication bundle.
- **key**: Select this to view the key.

**Examples**

```
*** view the certificate ***
Pulse One > https show cert
-----BEGIN CERTIFICATE-----
MIIFKTCCBBGgAwIBAgIIT0qMdyB+X8kwDQYJKoZIhvcNAQELBQAwgbQxCzAJBgNV
BAYTA1VTMRAwDgYDVQQIEwpTY290dHNkYWxlMRowGAYDVQgEKExFHb0Rh2GR5LmNb
SwgSN5jLjEtMCsGA1UECxMkaHR0cDovL2Nlc2NlcnRz
  . (certificate truncated)
  .
  .
  +vPfyqOq4jCKwuygbfx9dvTAKq9F+b0kyYucT032s8khTY543E80Q+liUjN5uhKs
  DiHpD++c5sN+qK2X+1Lbgwy2F08FRkNrdK/XsaomeJX/NuJHUL/MAcP4YiSTHp
  im2qyMSB892LbGLtSoxuwFO0MTANvg/e4x/PrBjR5Uah6ujyVjWmbZmeqMKNHA
  E8PdkW1fft9d/F9P7Tw2hbY28w+0WA0A3qDtOM=
-----END CERTIFICATE-----
```
*** view the certificate authentication bundle ***
Pulse One > https show ca-bundle
------BEGIN CERTIFICATE------
MIIE0DCCA7igAwIBAgI8BQA+EBgqhkqiGw0BAQsFADCBgZELMAkGA1UEBhMCVVMx
EDAOBgNVBAYTAlVTMSEwHwYDVQQEExhcDQoGA1UEChMBVGVzdCBUaGUgQ29udGVudCB
TUGVJMRQ0EwHwYDVQQKEwJHZWxpaHRtbDCCASIwDQYJKoZIhvcNAQEFBQADgY0AMIGAB
-----END CERTIFICATE------

*** view the key ***
Pulse One > https show key
------BEGIN CERTIFICATE------
MIIEfTCCA2AwAwIBAgIBADANBgkqhkiG9w0BAQUFADBjMQswCQYDVQQIEwJHZWxpaHRt
bDCCASIwDQYJKoZIhvcNAQEFBQADgY0AMIGAB
-----END CERTIFICATE------

**Pulse Secure, LLC.**

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licenses add

Adds a license key to the system.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**

```
licenses add [OPTIONS] KEY
```

**Options**

`--help`

Displays the help text for this command.

**Arguments**

`KEY`

The license key.

**Examples**

```
*** list current licenses ***
Pulse One > licenses show
- created: '2018-06-15T16:34:45Z'
  type: unity.workspaces.5000u
- created: '2018-06-18T00:50:07Z'
  type: unity.appliances.configdist

*** add a log-aggregator license ***
Pulse One > licenses add P1-ALOG-st4QZLVQ-5p1csqLj
Added license P1-ALOG-st4QZLVQ-5p1csqLj

*** confirm addition of license ***
Pulse One > licenses show
- created: '2018-06-15T16:34:45Z'
  type: unity.workspaces.5000u
- created: '2018-06-18T00:50:07Z'
  type: unity.appliances.configdist
  type: unity.appliances.log_aggregator
```
licenses show
Lists all installed licenses.

Usage
licenses show [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > licenses show
- created: '2018-06-15T16:34:45Z'
  type: unity.workspaces.5000u
- created: '2018-06-18T00:50:07Z'
  type: unity.appliances.configdist
log-aggregator nfs
Sets the NFS parameters for the log-aggregator component.

Note: This command is deprecated. Please use “p1 log-aggregator nfs” on page 88.
log-aggregator settings
Sets the data storage settings for the log-aggregator component.

Note: This command is deprecated. Please use “p1 log-aggregator settings” on page 89.
log-aggregator show
Shows the details of data storage for the log-aggregator component.

Note: This command is deprecated. Please use \texttt{p1 log-aggregator show} on page 90.
log-aggregator targets add
Adds a syslog target that will receive forwarded syslog messages.

Note: This command is deprecated. Please use “p1 log-aggregator targets add” on page 91.
log-aggregator targets list
Shows a list of syslog targets.

Note: This command is deprecated. Please use “p1 log-aggregator targets list” on page 92.
log-aggregator targets remove
Removes a syslog target.

Note: This command is deprecated. Please use “p1 log-aggregator targets remove” on page 93.
logout
Logs out of Pulse One.

Usage
logout [OPTIONS]

Options
   --help
       Displays the help text for this command.

Arguments
   None.

Examples
Pulse One > logout

You can connect to SSH at xx.xx.xx.xx:pp
Press <ENTER> to log in to Pulse One
network arp

The Address Resolution Protocol (ARP) utility. This protocol maps an Internet Protocol address (IP address) to a physical machine address that is recognized in the local network.

The network arp command shows mappings for a specified hostname/IP address in the local network.

Usage

```plaintext
network arp [OPTIONS] [HOST]
```

Options

--help

Displays the help text for this command.

Arguments

HOST

(Optional) A hostname/IP address in the local network. Where no host is specified, all recorded mappings are listed.

Examples

*** Specify a host ***

```plaintext
Pulse One > network arp main.lab.example.net
main.lab.example.net (xx.xx.xx.xx) at hh:hh:hh:hh:hh:hh [ether] on eth4
main.lab.example.net (yy.yy.yy.yy) at jj:jj:jj:jj:jj:jj [ether] on eth0
```

*** No host specified, all entries listed ***

```plaintext
Pulse One > network arp
port1.demo.example.com (zz.zz.zz.zz) at kk:kk:kk:kk:kk:kk [ether] on eth0
host2.demo.example.com (yy.yy.yy.yy) at jj:jj:jj:jj:jj:jj [ether] on host
```
network dns
Configures DNS lookup servers.

Note: After this command completes, a restart is required for new settings to go into effect.

Usage
network dns [OPTIONS]

Options
--help
Displays the help text for this command.

-p, --primary IP
Set primary DNS server address

-s, --secondary IP
Set secondary DNS server address

Arguments
None.

Examples
Pulse One > network dns -p xx.xx.xx.xx -s yy.yy.yy.yy
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ...
  [ ok ]
* Stopping chronyd ...
  [ ok ]
* Stopping networking ...
  * eth4 ...
    [ !! ]
  * lo ...
    [ ok ]
  * eth0 ...
    [ !! ]
* Starting networking ...
  * lo ...
    [ ok ]
  * eth4 ...
    [ ok ]
  * eth0 ...
  ip: RTNETLINK answers: Network unreachable
  ip: RTNETLINK answers: Network unreachable
  [ ok ]
primary: xx.xx.xx.xx
secondary: yy.yy.yy.yy
Pulse One >  * Starting NFS sm-notify ...
  * Starting chronyd ...
    [ ok ]
  * Mounting NFS filesystems ...
    [ ok ]
    [ ok ]
network hostname

Sets the hostname for an appliance node in a clustered pair. This will enable the Active appliance to be identified.

**Note:** This command will force a restart of the appliance.

**Usage**

```bash
network hostname [OPTIONS] HOSTNAME
```

**Options**

```bash
--help
```

Displays the help text for this command.

**Arguments**

```bash
HOSTNAME
```

The required hostname.

**Examples**

Pulse One > network hostname appliance1

* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...
  * eth1 ... [ !! ]
  * lo ... [ ok ]
  * eth4 ... [ !! ]
  * eth0 ... [ !! ]
* Starting networking ...
  * lo ... [ ok ]
  * eth4 ... [ ok ]
  * eth1 ... [ ok ]
  * eth0 ... [ ok ]
* Starting chronyd ... * Starting NFS sm-notify ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
hostname: appliance1
network interface external
Configures the external network interface.

**Note:** After this command completes, a restart is required for new settings to go into effect.

Usage
```
network interface external [OPTIONS]
```

Options

```
--help

Displays the help text for this command.
```

```
-i, --ip IP_ADDRESS

Set IP address.
```

```
-n, --netmask IP_ADDRESS

Set netmask.
```

```
-g, --gateway IP_ADDRESS

Set gateway IP address.
```

```
--dhcp / --no-dhcp

Enable/disable DHCP. This overrides all other settings if enabled.
```

Arguments

None.

Examples

```
Pulse One > network interface external -i xx.xx.xx.xx -n nn.nn.nn.nn
-g gg.gg.gg.gg --no-dhcp

external:
  dhcp: false
  enabled: true
  ip_address: xx.xx.xx.xx
  netmask: nn.nn.nn.nn
```
network interface internal

Configures the internal network interface. This is only required for clustered Pulse One nodes.

**Note:** After this command completes, a restart is required for new settings to go into effect.

**Usage**

```
network interface internal [OPTIONS]
```

**Options**

--help

Displays the help text for this command.

-i, --ip IP

Set IP address of the management network interface.

-n, --netmask IP

Set netmask for the management network interface.

-g, --gateway IP

Set gateway IP address.

**Arguments**

None.

**Examples**

```
Pulse One > network interface internal -i xx.xx.xx.xx -n nn.nn.nn.nn
-g yy.yy.yy.yy
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ... (interface messages)
* Starting networking ...
  * lo ... [ ok ]
  * eth4 ... [ ok ]
  * eth1 ... ip: RTNETLINK answers: File exists [ !! ]
  * eth0 ... [ ok ]
* Starting NFS sm-notify ... * Starting chronyd ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
[ ok ]
internal:
  enabled: true
  ip_address: xx.xx.xx.xx
  netmask: 255.255.0.0
```
network interface management
Configures the management network interface.

**Note:** After this command completes, a restart is required for new settings to go into effect.

**Usage**
```
network interface management [OPTIONS]
```

**Options**

--help

Displays the help text for this command.

-i, --ip IP

Set IP address of the management network interface.

-n, --netmask IP

Set netmask for the management network interface.

-g, --gateway IP

Set gateway IP address.

--dhcp / --no-dhcp

Enable/disable DHCP. This overrides all other settings if enabled.

**Arguments**

None.

**Examples**

```
Pulse One > network interface external -i xx.xx.xx.xx -n nn.nn.nn.nn
-g gg.gg.gg.gg

* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ...
[ ok ]
* Stopping chronyd ...
[ ok ]
* Stopping networking ...
*   eth4 ...
[ !! ]
*   lo ...
[ ok ]
*   eth0 ...
[ !! ]
* Starting networking ...
```
* lo ...  
[ ok ]  
* eth4 ...  
[ ok ]  
* eth0 ...  
ip: RTNETLINK answers: Network unreachable  
ip: RTNETLINK answers: Network unreachable  
[ ok ]  
external:  
dhcp: false  
enabled: true  
ip_address: xx.xx.xx.xx  
etmask: nn.nn.nn.nn

Pulse One > * Starting NFS sm-notify ...  
* Starting chronyd ...  
[ ok ]  
* Mounting NFS filesystems ...  
[ ok ]  
[ ok ]
**network ip route add**

Adds a static route to the system settings.

**Usage**

```
network ip route add [NETWORK | OPTIONS] [via ADDRESS] dev INTERFACE
```

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

**NETWORK**

An IP address and optional CIDR formatted netmask. For example: `192.168.0.0/16`

**ADDRESS**

(Optional) The IP address of the Next hop router (gateway).

**INTERFACE**

(Required) The interface to be used. That is, `internal`, `external` or `management`.

**Examples**

*** list defined static routes ***

```
Pulse One > network ip route show
routes:
  - gateway: xx.xx.xx.xx
    interface: management
    network: yy.yy.yy.yy/nn
```

*** add a static route ***

```
Pulse One > network ip route add aa.aa.aa.aa/nn via bb.bb.bb.bb dev management
WARNING: This will restart the network and may log you out.
Changes to routing configuration may prevent you from logging back in.
Do you wish to add aa.aa.aa.aa/22 ? [y/N]: y
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...
  * eth4 ... [ !! ]
  * lo ... [ ok ]
  * eth0 ... [ !! ]
* Starting networking ...
  * lo ... [ ok ]
  * eth4 ... ip: RTNETLINK answers: Network unreachable
ip: RTNETLINK answers: Network unreachable
[ ok ]
  * eth0 ... [ ok ]
```
* Starting chronyd ... * Starting NFS sm-notify ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
[ ok ]
gateway: bb.bb.bb.bb
interface: management
network: aa.aa.aa.aa/nn

*** confirm addition of static route, new route listed last ***
Pulse One > network ip route show
routes:
- gateway: xx.xx.xx.xx
  interface: management
  network: yy.yy.yy.yy/nn
- gateway: bb.bb.bb.bb
  interface: management
  network: aa.aa.aa.aa/nn
**network ip route delete**

Removes a static route from the system settings.

**Usage**

```
network ip route delete [OPTIONS] NETWORK
```

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

```
NETWORK
```

The IP address of a current static route.

**Examples**

*** list defined static routes ***

```
Pulse One > network ip route show
routes:
- gateway: xx.xx.xx.xx
  interface: management
  network: yy.yy.yy.yy/nn
- gateway: bb.bb.bb.bb
  interface: management
  network: aa.aa.aa.aa/nn
```

*** delete a static route ***

```
Pulse One > network ip route delete yy.yy.yy.yy/nn
WARNING: This will restart the network and may log you out.
Changes to routing configuration may prevent you from logging back in.
Do you wish to delete yy.yy.yy.yy/nn ? [y/N]: y
* WARNING: you are stopping a boot service
* Unmounting NFS filesystems ... [ ok ]
* Stopping chronyd ... [ ok ]
* Stopping networking ...
*   eth4 ... [ ! ! ]
*   lo ... [ ok ]
*   eth0 ... [ ! ! ]
* Starting networking ...
*   lo ... [ ok ]
*   eth4 ... ip: RTNETLINK answers: Network unreachable
  [ ok ]
*   eth0 ... [ ok ]
* Starting NFS sm-notify ...
* Starting chronyd ... [ ok ]
* Mounting NFS filesystems ... [ ok ]
[ ok ]
Deleted.
```
*** confirm deletion of static route ***
Pulse One > network ip route show
routes:
- gateway: xx.xx.xx.xx
  interface: management
  network: yy.yy.yy.yy/nn
network ip route show
Displays the current IP static routes table.

Usage
network ip route show

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** populated IP static routing table ***
Pulse One > network ip route show
routes:
- gateway: xx.xx.xx.xx
  interface: management
  network: yy.yy.yy.yy/nn
- gateway: bb.bb.bb.bb
  interface: management
  network: aa.aa.aa.aa/nn

*** empty IP static routing table ***
Pulse One > network ip route show
routes: []
network nslookup
A DNS lookup utility.

Usage

network nslookup [OPTIONS] HOST DNS_SERVER

Options

--help

Displays the help text for this command.

Arguments

HOST

The host you want to look up.

DNS_SERVER

The DNS server on which you want to search.

Examples

Pulse One > network nslookup xx.xx.xx.xx yy.yy.yy.yy
Server:   yy.yy.yy.yy
Address 1: yy.yy.yy.yy exampledns01.example.com

Name:     xx.xx.xx.xx
Address 1: xx.xx.xx.xx
network ping
A Ping utility. This will either send ten packets, or execute for ten seconds, whichever comes first.

Usage

```
network ping [OPTIONS] IP
```

Options

```
--help
```

Displays the help text for this command.

Arguments

```
IP
```

The IP address you want to ping.

Examples

```
Pulse One > network ping xx.xx.xx.xx
PING xx.xx.xx.xx (xx.xx.xx.xx): 56 data bytes
64 bytes from xx.xx.xx.xx: seq=0 ttl=252 time=6.325 ms
64 bytes from xx.xx.xx.xx: seq=1 ttl=252 time=4.076 ms
64 bytes from xx.xx.xx.xx: seq=2 ttl=252 time=4.040 ms
64 bytes from xx.xx.xx.xx: seq=3 ttl=252 time=3.946 ms
64 bytes from xx.xx.xx.xx: seq=4 ttl=252 time=4.261 ms
64 bytes from xx.xx.xx.xx: seq=5 ttl=252 time=3.908 ms
64 bytes from xx.xx.xx.xx: seq=6 ttl=252 time=4.108 ms
64 bytes from xx.xx.xx.xx: seq=7 ttl=252 time=3.808 ms
64 bytes from xx.xx.xx.xx: seq=8 ttl=252 time=3.733 ms
64 bytes from xx.xx.xx.xx: seq=9 ttl=252 time=3.735 ms

--- xx.xx.xx.xx ping statistics ---
10 packets transmitted, 10 packets received, 0% packet loss
round-trip min/avg/max = 3.733/4.194/6.325 ms
network show
Shows all network settings.

Usage

network show [OPTIONS]

Options

--help
Displays the help text for this command.

Arguments

None.

Examples

*** clustered node ***
Pulse One > network show
default_gateway:
  interface: external
  ip_address: xx.xx.xx.xx
external:
  dhcp: false
  enabled: true
  ip_address: xx.xx.xx.xx
  mac_address: hh:hh:hh:hh:hh:hh
  netmask: 255.255.0.0
internal:
  enabled: true
  ip_address: xx.xx.xx.xx
  mac_address: hh:hh:hh:hh:hh:hh
  netmask: 255.255.0.0
internal_gateway:
  interface: internal
  ip_address: xx.xx.xx.xx
management:
  dhcp: false
  enabled: true
  ip_address: xx.xx.xx.xx
  mac_address: hh:hh:hh:hh:hh:hh
  netmask: 255.255.0.0
management_gateway:
  interface: management
  ip_address: xx.xx.xx.xx

*** standalone node ***
default_gateway:
  interface: external
  ip_address: xx.xx.xx.xx
  dns:
primary: dd.dd.dd.dd
secondary: dd.dd.dd.dd

external:
dhcp: false
enabled: true
ip_address: xx.xx.xx.xx
mac_address: hh:hh:hh:hh:hh:hh
netmask: 255.255.252.0

management:
dhcp: false
enabled: true
ip_address: xx.xx.xx.xx
mac_address: hh:hh:hh:hh:hh:hh
netmask: 255.255.252.0

management_gateway:
interface: management
ip_address: xx.xx.xx.xx
network traceroute
Runs the Traceroute utility for a specified IP address.

Usage
   network traceroute [OPTIONS] IP

Options
   --help
       Displays the help text for this command.

Arguments
   IP
       The IP address you want to ping.

Examples
   Pulse One > network traceroute xx.xx.xx.xx
   traceroute to xx.xx.xx.xx (xx.xx.xx.xx), 30 hops max, 46 byte packets
       1  *  *  *
       2  yy.yy.yy.yy (yy.yy.yy.yy)  1.138 ms  1.284 ms  1.104 ms
       3  zz.zz.zz.zz (zz.zz.zz.zz)  1.345 ms  1.453 ms  1.327 ms
       4  aa.aa.aa.aa (aa.aa.aa.aa) 17.474 ms  3.895 ms  *
ntp pool

Adds or updates the single NTP pool.

Usage

    ntp pool [OPTIONS] LOCATION

Options

    --help

    Displays the help text for this command.

    --enable / --disable

    Enable or disable a pool of NTP servers.

Arguments

    LOCATION

    The NTP pool that you want to add to the NTP configuration.

Examples

    *** show current (empty) NTP configuration ***
    Pulse One > ntp show
    pool: null
    servers: []

    *** add NTP pool ***
    Pulse One > ntp pool pool.ntp.org
    pool:
        enabled: true
        location: pool.ntp.org
    servers: []

    *** disable the new pool ***
    Pulse One > ntp pool pool.ntp.org --disable
    * Stopping chronyd ...
      [ ok ]
    * Starting chronyd ...
      [ ok ]
    ntp:
        pool:
            enabled: false
            location: pool.ntp.org
        servers: []
**ntp remove**

Removes a server or pool from the NTP configuration.

**Note:** There must always be either a pool or a server configured.

**Usage**

```
ntp remove [OPTIONS] [ POOL | SERVER ] LOCATION
```

**Options**

`--help`

Displays the help text for this command.

**Arguments**

- **POOL**
  Specify a pool.

- **SERVER**
  Specify a server.

- **LOCATION**
  The identifier of the server/pool that you want to remove.

**Examples**

```
*** show current NTP configuration ***
Pulse One > ntp show
pool:
  enabled: true
  location: pool.ntp.org
servers:
  - enabled: true
    location: xx.xx.xx.xx
  - enabled: true
    location: yy.yy.yy.yy

*** remove NTP pool ***
Pulse One > ntp remove pool pool.ntp.org
* Stopping chronyd ...
[ ok ]
* Starting chronyd ...
[ ok ]
```
ntp:
  pool: null
  servers:
  - enabled: true
    location: xx.xx.xx.xx
  - enabled: true
    location: yy.yy.yy.yy
*** remove an NTP server ***
Pulse One > ntp remove server yy.yy.yy.yy
  * Stopping chronyd ...
  [ ok ]
  * Starting chronyd ...
  [ ok ]
ntp:
  pool: null
  servers:
  - enabled: true
    location: xx.xx.xx.xx

*** attempt to remove the final server ***
Pulse One > ntp remove server xx.xx.xx.xx
ERROR: An NTP pool or server must be configured.
**ntp server**

Adds or updates an NTP server.

**Usage**

```
ntp server [OPTIONS] LOCATION
```

**Options**

--help

Displays the help text for this command.

--enable / --disable

Enable or disable an NTP server.

**Arguments**

LOCATION

The NTP server that you want to add to the NTP configuration.

**Examples**

*** show current NTP configuration ***
Pulse One > ntp show
pool: null
servers:
  - enabled: true
    location: xx.xx.xx.xx

*** add second NTP server yy.yy.yy.yy ***
Pulse One > ntp server yy.yy.yy.yy
  * Stopping chronyd ...
  [ ok ]
  * Starting chronyd ...
  [ ok ]
ntp:
  pool: null
  servers:
    - enabled: true
      location: xx.xx.xx.xx
    - enabled: true
      location: yy.yy.yy.yy

Pulse One > ntp server xx.xx.xx.xx --disable
  * Stopping chronyd ...
  [ ok ]
  * Starting chronyd ...
  [ ok ]
ntp:
  pool: null
  servers:
    - enabled: true
      location: yy.yy.yy.yy
    - enabled: false
      location: xx.xx.xx.xx
ntp show
Shows all current NTP settings.

Note: Enabled servers are listed before disabled servers.

Usage
    ntp show [OPTIONS]

Options
    --help

Displays the help text for this command.

Arguments
    None.

Examples
    *** single pool, no servers ***
Pulse One > ntp show
pool:
    enabled: true
    location: pool.ntp.org
servers: []

    *** pair of servers, no pool ***
Pulse One > ntp show
pool: null
servers:
    - enabled: true
      location: yy.yy.yy.yy
    - enabled: false
      location: xx.xx.xx.xx
p1 domain admins list
Lists admins, either for all domains or for a specified domain.

Note: This command is disabled under MSSP mode.

Usage

p1 domain admins list [OPTIONS] [DOMAIN]

Options

--help

Displays the help text for this command.

Arguments

DOMAIN

(Optional) Specifies a domain. If not specified, all domains are listed.

Examples

*** list all domains ***
Pulse One > p1 domain admins list
domains:
   mobile.example.com:
      uiadmin:
         email: admin@example.net
         roles:
            - Super Admin

*** list specific domain ***
Pulse One > p1 domain admins list mobile.example.com
domains:
   mobile.example.com:
      uiadmin:
         email: admin@example.net
         roles:
            - Super Admin
p1 domain list
Displays all provisioned domain names.

Note: This command is disabled under MSSP mode.

Usage
p1 domain list [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > p1 domain list
domains:
  - mobile.example.com
p1 domain property list
Shows settings for all domain properties.

Note: This command is disabled under MSSP mode.

Usage
p1 domain property list [OPTIONS]

Options
--help

Displays the help text for this command.

Arguments
None.

Examples
Pulse One > p1 domain property list
Getting domain properties...
domain properties:
- afw_domain_admin_user: null
- afw_enterprise_type: google
- afw_enterprise_id: null
**p1 domain property reset**
Resets all the domain properties.

**Note:** This command is disabled under MSSP mode.

**Usage**
```
p1 domain property reset [OPTIONS]
```

**Options**
- `--help`
  
  Displays the help text for this command.

**Arguments**
None.

**Examples**

```
*** list all domain properties ***
Pulse One > p1 domain property list
Getting domain properties...
domain properties:
  - afw_domain_admin_user: null
  - afw_enterprise_type: google
  - afw_enterprise_id: null

*** reset properties ***
Pulse One > p1 domain property reset
Resetting domain properties...
Done

*** confirm properties are reset ***
Pulse One > p1 domain property list
Getting domain properties...
domain properties:
  - afw_domain_admin_user: null
  - afw_enterprise_type: null
  - afw_enterprise_id: null
```
**p1 domain property set**

Sets a domain property.

**Note:** This command is disabled under MSSP mode.

**Usage**

```
pl domain property set [OPTIONS] DOMAIN_PROPERTY_NAME DOMAIN_PROPERTY
```

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

```
DOMIN_PROPERTY_NAME
```

The domain property that you want to change. The available domain properties are:

- `afw_domain_admin_user`
- `afw_enterprise_type`
- `afw_enterprise_id`

```
DOMIN_PROPERTY
```

The new value for the domain property, either `afw` (Android for Work) or `Google`. Always use `afw` unless directed otherwise.

**Examples**

```bash
*** list all domain properties ***
Pulse One > p1 domain property list
Getting domain properties...
domain properties:
  - afw_domain_admin_user: null
  - afw_enterprise_type: null
  - afw_enterprise_id: null

*** reset properties ***
Pulse One > p1 domain property set afw_enterprise_type google
Setting domain property: afw_enterprise_type to google ...
Done

*** confirm properties are reset ***
Pulse One > p1 domain property list
Getting domain properties...
domain properties:
  - afw_domain_admin_user: null
  - afw_enterprise_type: google
  - afw_enterprise_id: null
```
**p1 domain provision**
Provisions a new Pulse One environment.

**Note:** This command is disabled under MSSP mode.

**Usage**
```
p1 domain provision [OPTIONS] DOMAIN
```

**Options**

```
--help
   Displays the help text for this command.

--admin-username USERNAME
   (Required) Username of the admin user. The default is root.

--admin-email EMAIL
   (Required) Email address of admin.
```

**Arguments**
```
DOMAIN
   The name of the domain you want to provision.
```

**Examples**
```
Pulse One > p1 domain provision mobile.example.com --admin-username user
--admin-email user@example.com

This will overwrite any existing Pulse One configuration. This can not be run on an already provisioned environment. You may need to `destroy` your environment before continuing.
Continue? [y/N]: Y
Set new admin password.
Password:
Confirm Password:
   . (messages)
   . (messages)
Provider domain mobile.example.com created.
Provisioned.
```
**p1 domain whitelist add ip**

Adds an IP address or range to the whitelist from which an admin can log into the Pulse One GUI.

All IP addresses outside the whitelist are then blocked from accessing Pulse One.

**Note:** Whitelisting IP addresses/ranges is disabled by default. It is enabled when you add the first IP address/range to the whitelist, which must include your current IP address. After you have added your first whitelist item, all other IP addresses/ranges are automatically blacklisted. You can then continue to add all other required IP addresses/ranges until you have added all IP addresses/ranges from which admins can log in.

To reset all whitelist entries, use the “p1 domain whitelist reset” on page 86.

**Note:** You can only add countries to the whitelist from the Pulse One GUI.

**Usage**

```
p1 domain whitelist add ip [OPTIONS] IP_ADDRESS
```

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

```
IP_ADDRESS
```

The IP address or range that you want to add to the whitelist, with an optional CIDR-formatted netmask. For example, 192.168.0.0/16.

**Examples**

*** add a specific whitelisted ip address or range ***

Pulse One > p1 domain whitelist add ip 192.168.0.0/16
Pulse One >

*** show all whitelisted entries ***

Pulse One > pl domain whitelist show
Getting whitelist configurations...

Whitelisted Countries: null
Whitelisted IPs: 192.168.0.0/16
p1 domain whitelist reset
Resets whitelist of IP addresses and countries from which an admin can log into the Pulse One GUI.

To add an item to the whitelist, see “p1 domain whitelist add ip” on page 85.

Usage
p1 domain whitelist reset [OPTIONS] [DOMAIN]

Options
--help

Displays the help text for this command.

Arguments
DOMAIN

(Optional) The name of a single domain you want to remove from the whitelist. If this option is not specified, the whitelist is emptied.

Examples

*** reset a specific whitelisted domain ***
Pulse One > p1 domain whitelist reset example.demo.com
WARNING: This will remove <message>. Do you wish to continue? [y/N]: y
Pulse One >

*** reset all whitelisted domains ***
Pulse One > p1 domain whitelist reset
WARNING: This will remove all IP address and country restrictions from all domains, allowing admins to log in from any IP address/country. Do you wish to continue? [y/N] y
Pulse One >
p1 domain whitelist show
Displays a whitelist of IP addresses and countries from which an admin can log into the Pulse One GUI.

To add an item to the whitelist, see “p1 domain whitelist add ip” on page 85.

Usage
p1 domain whitelist show [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** empty whitelist ***
Pulse One > p1 domain whitelist show
Getting whitelist configurations...

Whitelisted Countries: null
Whitelisted IPs: null

*** populated whitelist ***
Pulse One > p1 domain whitelist show
Getting whitelist configurations...

Whitelisted Countries: null
Whitelisted IPs: xx.xx.xx.xx/mm
p1 log-aggregator nfs
Sets the NFS parameters for the log-aggregator component.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**

```
p1 log-aggregator nfs [OPTIONS]
```

**Options**

```
--help
  Displays the help text for this command.
--enable / --disable
  Enable or disable NFS data storage.
-v, --volume VOLUME
  Specify NFS volume in the form remote_host:remote_dir. This is required for the --enable option.
-o, --options OPTIONS
  Specify NFS options, as a comma-separated list. Available options match those that are described on the mount_nfs manual (man) page.
```

**Arguments**

None.

**Examples**

```
*** enable NFS ***
Pulse One > p1 log-aggregator nfs --enable -v example:/home
This will delete all existing appliance logs. All services will be stopped if currently running.
Continue? [y/N]: y
Stopping uno_data-store_1 ... done
Stopping uno_index_1 ... done
  . (service messages)
  .
Stopping uno_ui-assets_1 ... done
Stopping uno_cache_1 ... done
  keep_days: 3
nfs:
  options: vers=3,nolock,retry=1,rw
  volume: example:/home
  type: nfs
```
p1 log-aggregator settings
Sets data storage settings for the log-aggregator component.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**
```
p1 log-aggregator settings [OPTIONS]
```

**Options**
```
--help

Displays the help text for this command.

-d, --keep-days RETENTION_POLICY

(Required) Specify the number of days any given log will be kept in the index.

--tls / --no-tls

Enables or disables TLS on syslog input.
```

**Arguments**
None.

**Examples**
```
*** set keep_days ***
Pulse One > p1 log-aggregator settings -d 28
Changing retention policy could lead to loss of data.
Continue? [y/N]: y
keep_days: 28
tls: false

*** set TLS to true ***
Pulse One > p1 log-aggregator settings --tls
keep_days: 28
tls: true
```
p1 log-aggregator show
Shows details of data storage for the log-aggregator component.

Usage
   p1 log-aggregator show [OPTIONS]

Options
   --help
       Displays the help text for this command.

Arguments
   None.

Examples
   Pulse One > p1 log-aggregator show
disk usage: 520b
settings:
   keep_days: 28
   nfs:
      options: vers=3,nolock,retry=1,rw
      volume: example:/home
type: nfs
status: Enabled
p1 log-aggregator targets add

Adds a syslog target that will receive forwarded syslog messages.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**

```
p1 log-aggregator targets add [OPTIONS] HOST
```

**Options**

```
--help
Displays the help text for this command.

-p, --port INTEGER
The host's syslog connection port

--tls / --no-tls
Enable TLS when sending logs
```

**Arguments**

```
HOST
```

The target host that you want to add.

**Examples**

*** check current targets (empty) ***
Pulse One > p1 log-aggregator targets list
{}

*** add a target ***
Pulse One > p1 log-aggregator targets add -p 333 --no-tls xx.xx.xx.xx
xx.xx.xx.xx:333:
  host: xx.xx.xx.xx
  port: 333
  tls: false

*** confirm the addition ***
Pulse One > p1 log-aggregator targets list
xx.xx.xx.xx:333:
  host: xx.xx.xx.xx
  port: 333
  tls: false
p1 log-aggregator targets list
Displays a list of syslog targets.

Usage
p1 log-aggregator targets list [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** the list is empty ***
Pulse One > p1 log-aggregator targets list
{}

*** one target in the list ***
Pulse One > p1 log-aggregator targets list
10.11.12.13:333:
  host: 10.11.12.13
  port: 333
  tls: false
p1 log-aggregator targets remove
Removes a syslog target.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**
```
p1 log-aggregator targets remove [OPTIONS] HOST:PORT
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
```
HOST:PORT
```
Specify a syslog target to remove.

**Examples**
```
*** check current targets ***
Pulse One > p1 log-aggregator targets list
xx.xx.xx.xx:333:
  host: xx.xx.xx.xx
  port: 333
  tls: false

*** delete a target ***
Pulse One > p1 log-aggregator targets remove -p 333 --no-tls xx.xx.xx.xx
Deleted.

*** confirm the deletion (now empty) ***
Pulse One > p1 log-aggregator targets list
{}
```
p1 mssp provision
Provisions an MSSP management domain.

Note: This command is enabled by a valid MSSP license.

Usage
p1 mssp provision [OPTIONS] DOMAIN

Options
--help
Displays the help text for this command.

--admin-username USERNAME
(Required) Username of admin.

--admin-email EMAIL
(Required) Email address of admin.

Arguments
DOMAIN
The name of the MSSP domain you want to provision.

Examples
Pulse One > p1 mssp provision demo.example.com --admin-username admin
     --admin-email admin@example.com
This will overwrite any existing Pulse One configuration. This can not be run on an already provisioned environment. You may need to `destroy` your environment before continuing.
Continue? [y/N]: y
Set new admin password.
Password:
Confirm Password:
Stopping uno_ui-assets_1 ... done
Stopping uno_cache_1 ... done
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Stopping uno_file-store_1 ... done
Removing uno_ui-assets_1 ... done
Removing uno_cache_1 ... done
Removing uno_index_1 ... done
Removing uno_data-store_1 ... done
Removing uno_file-store_1 ... done
Creating identity domain...
Provider domain demo.example.com created.
Provisioned.
**pws config refresh-app-icons**
Refreshes the workspace application icons on the current node.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**
```
pws config refresh-app-icons [OPTIONS]
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
None.

**Examples**
```
Pulse One > pws config refresh-app-icons
Refreshing app icons...
Done
```
pws config reset ios-certificate
Regenerates the iOS MDM root certificate.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage
pws config reset ios-certificate [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > pws config reset ios-certificate
WARNING: This regenerates the iOS MDM root certificate. Existing MDM device certificates issued to iOS devices will be invalidated and iOS devices will need to re-enroll to get policy updates.

Type "RESET" to continue: RESET

Regenerating iOS MDM root certificate...
Regenerated iOS MDM root certificate.
pws config set esa
Sets the Google ESA Credentials.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage

pws config set esa [OPTIONS]

Options

--help

Displays the help text for this command.

Arguments

None.

Examples

Pulse One > pws config set esa
Please enter a valid Google ESA Credential:
{"auth_uri": "https://accounts.google.com/o/oauth2/auth",
"private_key": "-----BEGIN PRIVATE KEY-----
\nMIIEvgIBADANBgkqhkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQCNDflIP010hEvt\n\nIf03JNyM73t17n0Vx
xUAJPwXPeToSjBocN5ndJU4r6RDo0N85Ep07512LktG\n\nAjj6Ruck10PN+PASG2eWXP1ROVy1PVeLAE6C
4J8mouseCLwbN2hXkA/f9HkNxooFQY\n\n1fGjHaZb740R20j8Q
. (esa credentials truncated)

6PdPdwd7KwBDbD9KkI+050bG4AGPnVvMr/
L2tAaGGAoHnBThumPG8GPQqo6S0I\n\nYeBePd17QYR+g4D4AwVd328iuAuQ3oYyNTbHR+u3AiVvK14GU6CwabhWH
YAb6ycjm\n\nYF/\nP2EANbLbUScEnH3M3IejMgyWGRqjHk0sFdb8EqLqV6EvVRQpVUS/US+\n\nna+RV/
qShycsdF1dJL19M1G\n\n-----END PRIVATE KEY-----\n",
"client_email": "account-4@pulse-dev-1125.iam.gserviceaccount.com",
"private_key_id": "473a9452343c1de313b925535b165b151d592",
"client_id": "105626901240200099628",
"token_uri": "https://accounts.google.com/o/oauth2/token",
"client_x509_cert_url": "https://www.googleapis.com/robot/v1/metadata/x509/ account-4%40pulse-dev-1125.iam.gserviceaccount.com",
"type": "service_account",
"auth_provider_x509_cert_url": "https://www.googleapis.com/oauth2/v1/certs"

Setting Google ESA Credentials...

Credentials:
auth_provider_x509_cert_url: https://www.googleapis.com/oauth2/v1/certs
auth_url: https://accounts.google.com/o/oauth2/auth
client_email: account-4@pulse-dev-1125.iam.gserviceaccount.com
client_id: '105626901240200099628'
client_x509_cert_url: https://www.googleapis.com/robot/v1/metadata/x509/ account-4%40pulse-dev-1125.iam.gserviceaccount.com
private_key_id: 473a94a52343c31de3b0d925535b165b15b1d592
token_uri: https://accounts.google.com/o/oauth2/token
type: service_account

PEM contents hidden for security. Verify with hashes below:

MD5 for the private key: 604bf518c6fa68872956261e661ad6
MD5 for the whole Credential string: 34f4cc1194d79facf25cb662517e3ae
SHA256 for the private key:
a4067666430c507e3f75e4845fe0745ef477a99623b9abdd3f018cfe8b446f70
SHA256 for the whole Credential string:
729d06ea69f86ebfafa1f17875bfae195eab50eb685db600b0d3a4d41c152451
pws config set ios-mdm-push-certificate
Updates the iOS MSM push certificate. This certificate is used to create a certificate signing request (CSR) for the iOS MDM certificate.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage

```
pws config set ios-mdm-push-certificate [OPTIONS]
```

Options

```
--help
```
Displays the help text for this command.

Arguments

None.

Examples

```
Pulse One > pws config set ios-mdm-push-certificate
The iOS MDM push certificate is provided by Pulse Secure and the iOS MDM push key can not be changed. Overwrite existing iOS MDM push certificate? [y/N]: y
Paste your iOS MDM push certificate in PEM format:
-----BEGIN CERTIFICATE-----^MMIIEuzCCA60gAwIBAgIBAjANBgkqhkiG9w0BAQUFADBiMQswCQYDVQQGEwJVUzET^MMBEGA1UEChMKQXBwbGwGSw5jljEmMCQGA1UECxMdQXBwbGwGQ2VydGlmaWNhdGVv^MbiBBdXR0b3JpdHxkxJpIAUBgNVBAMTDUFwcGxlIFJvbiBhZGRtcwCzJCEl0IiBDRBExIjAAMBMGCSqGSIb3DQEBAQUAMMBEGA1UEChMKQXBwbGwGSw5jljEmMCQGA1UECxMdQXBwbGwGQ2VydGlmaWNhdGVv^MbiBBdXR0b3JpdHxkxJpIAUBgNVBAMTDUFwcGxlIFJvbiBhZGRtcwCzJCEl0IiBDRBExIjAAMBMGCSqGSIb3DQEBAQUA
-----END CERTIFICATE-----
```

Hash values for the iOS MDM Push Certificate string:

```
MD5: 17cf4528db9833e19a47c8fad0f63fdf
SHA256: efe0f65a7049d4a711dd3e38231a66c1c850b18fdaef49f4a84511ca4d2c4264
```
pws config set ios-pulse-secure-app-push-certificate

Updates the iOS Pulse Client push notification certificate.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Usage**
```
pws config set ios-pulse-secure-app-push-certificate [OPTIONS]
```

**Options**
- `--help`
  
  Displays the help text for this command.

**Arguments**
None.

**Examples**
```
Pulse One > pws config set ios-pulse-secure-app-push-certificate
The iOS Pulse Secure Client App Push Notification certificate needs to be provided by Pulse Secure. Update current certificate? [y/N]: y
Paste your iOS Pulse push certificate in PEM format:
-----BEGIN CERTIFICATE-----
MIIGSzCCBTOgAwIBAgIIVIUbJAMgGQMA0GCSqGSIb3DQEBBQUAMAwGCSqGSIb3DQEB
BQAwKQMB8GA1UEAwwLZ29sb3IgQ2Fya2kuYyBoYXZ0aW5nU2VzdG9yeSBHcnJheSBS
b29yaXZlMB4XDTIyMzE4MTgyMzUyMTEYMDYwMTYyMDE5MjIwMDQ4NyZBMRMw

-----END CERTIFICATE-----
```

```
Hash values for the iOS Client Push Certificate string:
   MD5: fa31afc1a1b2c33bcd448f28f7ddf9a2
   SHA256: a19cfdc3a4483b3682a22a2c167c63f2f521d41f21ea1b2c378cc4483691d8b5
```
pws config set msa
Sets the Google MSA Credentials.

Note: This command is enabled by a valid MSSP license and requires a valid PWS license.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage
pws config set msa [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > pws config set msa
Please enter a valid Google MSA Credential:
{"auth_uri": "https://accounts.google.com/o/oauth2/auth",
"private_key": "-----BEGIN PRIVATE KEY-----
\nMIIEwAIBADANBgkqhkiG9w0BAQEFAAOFADBMEFBApFBydNOc9M\n\nFTga5alqOs0v2Rilw
n6k6RlF3bx0Kk0k+iTeQxBr9/
kcglzE+n3wcp0Vw4Mg2K\n\nL16f2q4tRLSEzqvTDjJuUp0rusxim32nDdM1VHkdd8LvtJ20v05iHf6WgBcIS
\nQ+/rTwm21TfQkJWj3A

(creds truncated)

n1VQyoFU+D1cz1C60+7HWAJw3o5pD2NOHxKgQ4pECgYEAtLu3tNghH/
28i0++\nnkEYwkFCOHBn1JUw62IsGF+2CrP1GMwG/qjPu2wizUynwS/
TYC+z92PlkRC36M\n2RF+trd2hS61G/Ts1BEz4e+B1vOxQgJ5FXUnXx8TRnsfGRRcmaOv/eWc1bWsPa\n
KKF2HcoX9H4InpN6JHv2A6C8k=\n"client_email": "account-1@pws-dev.iam.gserviceaccount.com", "private_key_id": "5dd885f510b85a0665c1706dcab61c89a01e56",
"client_id": "102471803974255694602",
"auth_provider_x509_cert_url": "https://www.googleapis.com/oauth2/v1/certs"

Setting Google MSA Credentials...
Credentials:
  auth_provider_x509_cert_url: https://www.googleapis.com/oauth2/v1/certs
  auth_uri: https://accounts.google.com/o/oauth2/auth
  client_email: account-1@pws-dev.iam.gserviceaccount.com
  client_id: '102471083974256594602'
  client_x509_cert_url: https://www.googleapis.com/robot/v1/metadata/x509/account-1%40pws-dev.iam.gserviceaccount.com
  private_key_id: 5dd8b5951c10b85a0665c1706dcab61c89a01e56
  token_uri: https://accounts.google.com/o/oauth2/token
  type: service_account

PEM contents hidden for security. Verify with hashes below:
  MD5 for the private key: f3d74622228629061bf41c2d9616925
  MD5 for the whole Credential string: a0a1038a695017fde74f7f6ccd2bad8a
  SHA256 for the private key:
    48535f0e85443bb3ac42db548cb947567a369148379c8a703a71cb404e3f9621
  SHA256 for the whole Credential string:
    607d0713ebc6837186111d5ed2ae1decb05ba6459a8fd758d8e5208b9dc485
pws config show esa
Shows Workspace ESA information.

Usage
pws config show esa [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > pws config show esa
Credentials:
  auth_provider_x509_cert_url: https://www.googleapis.com/oauth2/v1/certs
  auth_uri: https://accounts.google.com/o/oauth2/auth
  client_email: wb882f19b668ec52ef12b76169@pfwp-ulesecureandroidmdmtest2.google.com.iam.gserviceaccount.com
  client_id: '108955911278235671297'
  client_x509_cert_url: https://www.googleapis.com/robot/v1/metadata/x509/wb882f19b668ec52ef12b76169%40pfwp-ulesecureandroidmdmtest2.google.com.iam.gserviceaccount.com
  private_key_id: 4ce2f68b79df03027d1e0157b29181dc81
  project_id: google.com:pfwp-ulsesecureandroidmdmtest2
  token_uri: https://accounts.google.com/o/oauth2/token
  type: service_account

PEM contents hidden for security. Verify with hashes below:
  MD5 for the private key: 431eff630d49180e1447a4f856e2
  MD5 for the whole Credential string: ad074eb71e1686bc40153794a7e
  SHA256 for the private key:
    36c293c8b3fed64dc0c5d21df1d83b46a59882c0bf6c648b837755952
  SHA256 for the whole Credential string:
    8c29d9463883b6add6bed5ad2ba6d6f93d9cad301c2240d5e902259e22c6
pws config show msa
Shows Workspace MSA information.

**Note:** This command is enabled by a valid MSSP license and requires a valid PWS license.

**Usage**
```
pws config show msa [OPTIONS]
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
None.

**Examples**
Pulse One > pws config show msa

**Credentials:**
- `auth_provider_x509_cert_url`: https://www.googleapis.com/oauth2/v1/certs
- `auth_uri`: https://accounts.google.com/o/oauth2/auth
- `client_email`: account-1@pws-dev.iam.gserviceaccount.com
- `client_id`: '102471083974256594602'
- `client_x509_cert_url`: https://www.googleapis.com/robot/v1/metadata/x509/account-1%40pws-dev.iam.gserviceaccount.com
- `private_key_id`: 5dd8b5951c10b85a0665c1706dcab61c89a01e56
- `token_uri`: https://accounts.google.com/o/oauth2/token
- `type`: service_account

PEM contents hidden for security. Verify with hashes below:
- MD5 for the private key: f3d746222228629061bf41c2d9616925
- MD5 for the whole Credential string: a0a1038a695017fde74f7f6ccd2bad8a
- SHA256 for the private key: 48535f0e85443bb3ac42db548cb947567a369148379c8a703a71cb404e3f9621
- SHA256 for the whole Credential string: 607d0713ebc6837186111dfd5ed2ae1decb05ba6459a8fd758d8e5208b9dc485
**pws email-domain add**
Adds an email domain.

**Note:** After this command completes, perform a services restart to put new settings into effect.

**Note:** This command is disabled under MSSP mode.

**Usage**
```
pws email-domain add [OPTIONS] EMAIL_DOMAIN_NAME
```

**Options**
```
--help
```
Displays the help text for this command.

**Arguments**
```
EMAIL_DOMAIN_NAME
```
The email domain that you want to add.

**Examples**

*** list all email domains ***
```
Pulse One > pws email-domain list
Getting email domains...
No email domain found.
```

*** add a new domain ***
```
Pulse One > pws email-domain add yahoo.co.uk
Adding email domain yahoo.co.uk...
Done.
```

*** confirm the addition ***
```
Pulse One > pws email-domain list
Getting email domains...
email domains:
  - yahoo.co.uk
```
pws email-domain delete
Deletes an email domain.

Note: After this command completes, perform a services restart to put new settings into effect.

Note: This command is disabled under MSSP mode.

Usage

    pws email-domain delete [OPTIONS] EMAIL_DOMAIN_NAME

Options

    --help

    Displays the help text for this command.

Arguments

    EMAIL_DOMAIN_NAME

    The email domain that you want to delete.

Examples

    *** list all email domains ***
    Pulse One > pws email-domain list
    Getting email domains...
    email domains:
    - yahoo.co.uk

    *** delete an email domain ***
    Pulse One > pws email-domain delete yahoo.co.uk
    Deleting email domain yahoo.co.uk...
    Done.

    *** confirm the deletion ***
    Pulse One > pws email-domain list
    Getting email domains...
    No email domain found.
pws email-domain list
Shows all the email domains.

Note: This command is disabled under MSSP mode.

Usage
pws email-domain list [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > pws email-domain list
Getting email domains...
email domains:
  - yahoo.com
  - yahoo.co.uk
  - gmail.com
pws-config refresh-app-icons
Refreshes the workspace app icons on the current node.

Note: This command is deprecated. Please use “pws config refresh-app-icons” on page 95.
pws-config reset ios-certificate
Regenerates the iOS MDM root certificate.

Note: This command is deprecated. Please use “pws config reset ios-certificate” on page 96.
pws-config set esa
Sets the Google ESA Credentials.

**Note:** This command is deprecated. Please use “pws config set esa” on page 97.
pws-config show esa
Shows the Workspace ESA information.

Note: This command is deprecated. Please use “pws config show esa” on page 103.
services logs
Displays logs for application services.

Usage
services logs [OPTIONS] [SERVICE]

Options
--help
Displays the help text for this command.

--tail INTEGER
Number of log lines to show per service.

--follow / --no-follow
Follow logs as they are updated.

Arguments
SERVICE
(Optional) The required app service.

• To list available services for this argument, refer to “services status” on page 115.
• If no SERVICE is specified, all app services are included.
• By default, only app services are included. To view all services, specify ALL.

Examples
*** list logs, limited to most recent 5 entries ***
Pulse One > services logs --tail 3 --no-follow
Attaching to api_1, backend_1, backend_2, backend_3, backend_4, backend_5,
backend_6, backend_7, backend_8, cellsecrpc_1, console_1, file-store_1,
portal_1, proxy_1, pws-api_1, ui-assets_1
pws-api_1    | spawned uWSGI worker 3 (pid: 16, cores: 1)
pws-api_1    | spawned uWSGI worker 4 (pid: 17, cores: 1)
pws-api_1    | spawned uWSGI worker 5 (pid: 18, cores: 1)
api_1        | 2018/06/18 12:53:02 [notice] 1#0: start worker process 13
api_1        | 2018/06/18 12:53:02 [notice] 1#0: start worker process 14
api_1        | 2018/06/18 12:53:02 [notice] 1#0: start worker process 15
  . (logs)
  .
ui-assets_1  | Starting nginx with CORS origin * (.*)
ui-assets_1  | Starting nginx with CORS origin * (.*)
ui-assets_1  | Starting nginx with CORS origin * (.*)
services restart
Restarts one or more services.
By default, all services are restarted. To restart individual service(s), specify the SERVICE argument.

Usage
services restart [OPTIONS] [SERVICE]...

Options
--help
Displays the help text for this command.

Arguments
SERVICE
(Optional) The required service.
• If no SERVICE is specified, all services are included.
• If you want to specify one or more specific services, include each.

Examples
*** restart all services ***
Pulse One > services restart
Restarting...
Starting with version "1902"...
Started.
Restarted.

*** restarting a specific service ***
Pulse One > services restart
services start
Starts all services.

Usage
   services start [OPTIONS]

Options
   --help
       Displays the help text for this command.

Arguments
   None.

Examples
   Pulse One > services start
   Starting with version "1902"
   Started.
services status
Displays the status of all services.

Usage
services status [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** services up ***
Pulse One > services status
   Name      State
------------------
   api          Up
   backbeat     Up
   backend      Up
   backend      Up
   backend      Up
   backend      Up
   backend      Up
   backend      Up
   backend      Up
   backend      Up
   cache        Up
   cellsecrpc   Up
   console      Up
   data-store   Up
   file-store   Up
   index        Up
   portal       Up
   proxy        Up
   pws-api      Up
   ui-assets    Up
*** services down ***
Pulse One > services status

<table>
<thead>
<tr>
<th>Name</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>api</td>
<td>Stopped</td>
</tr>
<tr>
<td>backbeat</td>
<td>Stopped</td>
</tr>
<tr>
<td>backend</td>
<td>Stopped</td>
</tr>
<tr>
<td>backend</td>
<td>Stopped</td>
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<tr>
<td>backend</td>
<td>Stopped</td>
</tr>
<tr>
<td>cache</td>
<td>Stopped</td>
</tr>
<tr>
<td>cellsecrpc</td>
<td>Stopped</td>
</tr>
<tr>
<td>console</td>
<td>Stopped</td>
</tr>
<tr>
<td>data-store</td>
<td>Stopped</td>
</tr>
<tr>
<td>file-store</td>
<td>Stopped</td>
</tr>
<tr>
<td>index</td>
<td>Stopped</td>
</tr>
<tr>
<td>portal</td>
<td>Stopped</td>
</tr>
<tr>
<td>proxy</td>
<td>Stopped</td>
</tr>
<tr>
<td>pws-api</td>
<td>Stopped</td>
</tr>
<tr>
<td>ui-assets</td>
<td>Stopped</td>
</tr>
</tbody>
</table>
services stop
Stops all services.

Usage

services stop [OPTIONS]

Options

--help
Displays the help text for this command.

Arguments

None.

Examples

Pulse One > services stop
Stopping...
Stopping uno_backbeat_1 ... done
Stopping uno_api_1 ... done
Stopping uno_pws-api_1 ... done
Stopping uno_cellsecrpc_1 ... done
Stopping uno_portal_1 ... done
Stopping uno_proxy_1 ... done
Stopping uno_file-store_1 ... done
Stopping uno_backend_8 ... done
Stopping uno_backend_5 ... done
Stopping uno_backend_2 ... done
Stopping uno_backend_7 ... done
Stopping uno_backend_6 ... done
Stopping uno_backend_3 ... done
Stopping uno_backend_4 ... done
Stopping uno_backend_1 ... done
Stopping uno_console_1 ... done
Stopping uno_ui-assets_1 ... done
Stopping uno_cache_1 ... done
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Stopped.
smtp set
Modifies the current SMTP configuration.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage
smtp set [OPTIONS]

Options
--help
Displays the help text for this command.

-s, --server ADDRESS
Sets the SMTP server IP or hostname.

-p, --port PORT
Sets the SMTP server port number.

-t, --tls
(Optional) Enables SSL/TLS.
To disable TLS, use the --no-tls option.

-u, --username USERNAME
(Optional) Sets the SMTP username. This is only required when SMTP expects a username.
To remove the username from the configuration, use the --no-username option.

--password
(Optional) Indicates that a password is required. The system prompts for a password.
This is only required when SMTP expects a password.
To remove the password from the configuration, use the --no-password option.

--sender EMAIL
Defines the email address of default sender for all messages.

--no-username
(Optional) Removes SMTP username from the configuration.

--no-password
(Optional) Removes SMTP password from the configuration.
--no-tls

(Optional) Disables TLS in the configuration.

**Arguments**

None.

**Examples**

*** show current smtp settings ***
Pulse One > smtp show
password: '********'
port: 587
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: false
username: noreply@unitydev.io

*** reset the port from 587 to 590 ***
Pulse One > smtp set -p 590
password: '********'
port: 590
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: false
username: noreply@unitydev.io

*** enable TLS ***
Pulse One > smtp set --tls
password: '********'
port: 590
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: true
username: noreply@unitydev.io

*** remove username ***
Pulse One > smtp set --no-username
password: '********'
port: 590
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: true
username: null

*** reinstate username and port ***
Pulse One > smtp set -u noreply@unitydev.io -p 587
password: '********'
port: 587
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: true
username: noreply@unitydev.io
smtp show
Displays current SMTP settings.

Usage
smtp show [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > smtp show
password: '********'
port: 587
sender_email: noreply@unitydev.io
server: smtp.mailgun.org
ssl_tls: false
username: noreply@unitydev.io
**system backup export**

Exports an archive of system settings as a GZIP TAR (.tgz) file. This uses a specified interface.

**Note:** You can choose to exclude syslog data if required.

During the process, the following message is displayed:

```
MD5: 10e3f47281a8a5c494df8dca7d3c5ddd
Press Ctrl-C when finished.
```

When this message appears, do not press `CTRL + C`.


Save the backup file to an accessible location.

Once the file save completes, return to the CLI and press `CTRL + C` to complete the export process.

**Note:** If you press `CTRL + C` before the download completes, the web browser will close, and you will have to start the system backup export process again.

**Usage**

```
system backup export [OPTIONS]
```

**Options**

```
-e, --exclude [syslog]
    Exclude syslog data from backup

-i, --interface INTERFACE
    INTERFACE can be either external or management. The specified interface is used when downloading the system settings. If unspecified, the management interface is used by default.

--help
    Displays the help text for this command.
```

**Arguments**

None.
Examples

*** initiate the export ***
Pulse One > system backup export -i external
Services will be stopped before initiating backup. Continue? [y/N]: y

Services will be stopped before initiating backup. Continue? [y/N]: y
Stopping uno_log-collector_1 ... done
Stopping uno_api_1 ... done

. (system messages: closing services)
.
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Starting backup...
Storing to backup [-------------------------------] 0%
Storing to backup [-------------------------------] 1%

. (system messages: percentage completion)
.
Storing to backup [################################################-] 98%
Storing to backup [################################################-] 99%

Download ready at http://10.64.196.97:8000/backup/download
MD5: 10e3f47281a1b2c394df8dca7d3c5ddd
Press Ctrl-C when finished.

*** in a browser, access xx.xx.xx.xx:8000/backup/download and save the file ***

*** then, complete the export process in the CLI by clicking CTRL + C ***

^C
system backup import
Imports an archive and restores the system using a specified interface.

When the process starts, the following message is displayed:

Upload your backup archive here:
URL: http://xx.xx.xx.xx:8000/backup
Press Ctrl-C when finished.

When this message appears, do not press CTRL + C.
Using the controls on the web page, upload the backup file you want to restore.
Once the backup file upload completes, return to the CLI and press CTRL + C to continue the import process.

Note: If you press CTRL + C before the upload completes, the web browser will close, and you will have to start the system backup import process again.

Note: After this command completes, perform a services restart to put new settings into effect.

Usage
system backup import [OPTIONS]

Options

-i, --interface INTERFACE

INTERFACE can be either external or management. The specified interface is used when importing the system settings. If unspecified, the management interface is used by default.

--help

Displays the help text for this command.

Arguments

None.

Examples

*** initiate the import of a backup ***
Pulse One > system backup import Pulse One > system backup import -i management
Upload your backup archive here:
URL: http://10.96.16.157:8000/backup
Press Ctrl-C when finished.

*** in a browser, access xx.xx.xx.xx:8000/backup and upload the backup ***

*** continue the process by clicking CTRL + C ***
^C
WARNING: This will replace all Pulse One data and configuration restoring the appliance from backup. The data and configuration will not be recoverable.
Type "DESTROY" to continue: DESTROY

Restore backup from backup-2019-04-04T14_01_43Z.tar.gz
  (MD5: 7d84ff6a1b2c3d4abb507d5c3ffe972) now? [y/N]: y
Removing directory /data/tmp/upload/0
Removing directory /data/tmp/upload/1
Removing directory /data/tmp/upload/2
Removing file /app/conf/users.yml
Removing directory /app/conf/conf.d
Removing directory /app/conf/unity
Restoring from backup [####################################] 100%

*** system then reboots ***
system banner remove
Removes a configured login banner.

Usage
system banner remove [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** show current banner ***
Pulse One > system banner show
Pulse Secure PULSE ONE Appliance
(c) 2018, Pulse Secure LLC.

*** remove banner ***
Pulse One > system banner remove
Banner removed.

*** confirm deletion ***
Pulse One > system banner show
No banner set.
**system banner set**
Sets a login banner.

**Usage**

```
  system banner set [OPTIONS]
```

**Options**

```
  --help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system banner set
Enter or paste the banner message followed by two blank lines:
Pulse Secure PULSE ONE Appliance
(c) 2018, Pulse Secure LLC.

Banner saved.
```
system banner show
Displays the configured login banner.

Usage
system banner show [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
*** no banner ***
Pulse One > system banner show
No banner set.

*** banner set ***
Pulse One > system banner show
Pulse Secure PULSE ONE Appliance
(c) 2018, Pulse Secure LLC.
system debug
Launches the debug shell. This operation requires assistance from Pulse One Tech support.

Usage
system debug [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > system debug

This operation requires assistance from Pulse One Tech support.
Do you wish to proceed? [y/N]: y

(debug messages)
**system destroy data**

Resets all data to factory defaults.

**Usage**

```
system destroy data [OPTIONS]
```

**Options**

```
--help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system destroy data
WARNING: This will delete all Pulse One data, resetting the appliance to factory
defaults. The data will not be recoverable.

Type "DESTROY" to continue: DESTROY

Resetting data...
Stopping uno_log-collector_1 ... done
Stopping uno_log-indexer_1 ... done
Stopping uno_file-store_1 ... done
Removing uno_log-collector_1 ... done
Removing uno_log-indexer_1 ... done
.
.
.
Removing uno_data-store_1 ... done
Removing network default
Removing file /data/elasticsearch/elasticsearch/nodes/0/_state/global-5.st
Removing file /data/elasticsearch/elasticsearch/nodes/0/indices/
cust___mobile_4c49992c/_state/state-2.st
.
.
.
Removing directory /data/mongodb
Removing directory /data/mysql

Destroyed.
```
system destroy index
Deletes all statistics and profiler data.

Note: This command will stop all services on the Pulse One appliance. You must restart any required services manually after the command completes, see “services start” on page 114.

Usage
system destroy index [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > system destroy index
WARNING: This will delete all index service data. The data will not be recoverable.
Type "DESTROY" to continue: DESTROY
Stopping uno_log-collector_1 ...
Stopping uno_log-indexer_1 ...
.
.
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Resetting data...
Removing uno_index_1 ... done
Removing file /data/elasticsearch/elasticsearch/nodes/0/indices/cust___p1_f2ac9527/1/index/_0.cfe
Removing file /data/elasticsearch/elasticsearch/nodes/0/indices/cust___p1_f2ac9527/1/index/_0.cfs
.
.
Removing directory /data/elasticsearch/elasticsearch/nodes
Removing directory /data/elasticsearch/elasticsearch
system destroy log-indexer

Deletes all received syslog data.

Note: This command will stop all services on the Pulse One appliance. You must restart any required services manually after the command completes, see “services start” on page 114.

Usage

system destroy log-indexer [OPTIONS]

Options

--help

Displays the help text for this command.

Arguments

None.

Examples

Pulse One > system destroy log-indexer
WARNING: This will delete all log-indexer service data. The data will not be recoverable.
Type "DESTROY" to continue: DESTROY
Stopping uno_log-collector_1 ...
Stopping uno_api_1 ...
Stopping uno_pws-api_1 ... done
.
  . (system messages: stopping services)
  .
Stopping uno_cache_1 ... done
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Resetting data...
Removing uno_log-collector_1 ... done
Removing uno_log-indexer_1 ... done
.
  . (system messages: removing files and directories)
  .
Removing directory /data/log_indexer/graylog-prod
Removing directory /data/log_indexer/log
system destroy managed-appliance-configs

Deletes all PCS and PPS configurations.

Usage

   system destroy managed-appliance-configs [OPTIONS]

Options

   --help

       Displays the help text for this command.

Arguments

   None.

Examples

   Pulse One > system destroy managed-appliance-configs

   Pulse One will forget the configuration data it has received from Pulse Connect Secure and Pulse Policy Secure appliances. It will soon get fresh data from the appliances, but history will be lost. Use this command if, after a Pulse One cluster failover, viewing or publishing PCS/PPS configuration leads to unexplained error messages.

   Continue? [y/N]: Y

   .
   . (system messages: appliance removals)
   .

   Destroyed.
system destroy service-logs

Deletes all service logs.

Note: This command will stop all services on the Pulse One appliance. After completion, any services that were running when the command was used will be restarted automatically.

Usage

    system destroy service-logs [OPTIONS]

Options

    --help

    Displays the help text for this command.

Arguments

    None.

Examples

    Pulse One > system destroy service-logs
    Are you sure you want to delete all service logs? This will temporarily stop all services. [y/N]: y
    Stopping uno_backend_1 ...
    Stopping uno_backend_4 ...
    . (system messages: stopping services)
    .
    Stopping uno_cache_1 ... done
    Stopping uno_data-store_1 ... done
    Removing uno_backend_1 ...
    Removing uno_backend_4 ...
    . (system messages: removing files and directories)
    .
    Removing uno_cache_1 ... done
    Removing uno_data-store_1 ... done
    Creating and starting 2 ... done
    Creating and starting 3 ... done
    . (system messages: creating and starting services)
    .
    Creating and starting 7 ... done
    Creating and starting 8 ... done
**system destroy system-config**
Resets the appliance to factory defaults.

**Usage**

```
   system destroy system-config [OPTIONS]
```

**Options**

```
    --help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system destroy system-config
WARNING: This will delete all Pulse One data and configuration, resetting the appliance
to factory defaults. The data and configuration will not be recoverable.
Type "DESTROY" to continue: DESTROY

Resetting data...
Stopping uno_ui-assets_1 ... done
Stopping uno_data-store_1 ... done
Stopping uno_cache_1 ... done
Stopping uno_index_1 ... done
Removing uno_ui-assets_1 ... done
Removing uno_data-store_1 ... done
Removing uno_cache_1 ... done
Removing uno_index_1 ... done
Removing network default
Removing file /data/elasticsearch/elasticsearch/nodes/0/_state/global-0.st
Removing file /data/elasticsearch/elasticsearch/nodes/0/node.lock
   . (File/directory removal messages)
   .
Removing directory /app/conf/conf.d
Removing directory /app/conf/unity

Destroyed.

Press <ENTER> to continue and log out.
```
**system provision**
Provisions a new Pulse One environment.

**Note:** This command is deprecated. Please use “p1 domain provision” on page 84.
system reboot
Reboots the system.

Usage
system reboot [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
Pulse One > system reboot
Reboot now? [y/N]: y
Rebooting now...
system security fips
Enables or disables FIPS mode. If no option is specified, FIPS is disabled by default.

Usage
system security fips [OPTIONS]

Options
--help
Displays the help text for this command.
--enable
Enables server FIPS mode.
--disable
Disables server FIPS mode.

Arguments
None.

Examples
*** enable FIPS ***
Pulse One > system security fips --enable
Enabling FIPS mode will stop all services and log you out.
Continue? [y/N]: y
<system reboots>

*** disable FIPS ***
Pulse One > system security fips --disable
Disabling FIPS mode will stop all services and log you out.
Continue? [y/N]: y
<system reboots>

*** specify no option ***
Pulse One > system security fips
FIPS mode already DISABLED.
system security show
Displays security-related configuration.

Usage
system security show [OPTIONS]

Options
--help
Displays the help text for this command.

Arguments
None.

Examples
 Pulse One > system security show
 FIPS Mode: false
 Version: Pulse One version 2.0
**system session-settings set**
Sets CLI login security settings.

**Usage**
```
system session-settings set [OPTIONS]
```

**Options**
- **--help**
  Displays the help text for this command.
- **-i, --idle-timeout IDLE_TIMEOUT**
  Set seconds to wait before logging out an idle session.
- **-l, --login-timeout LOGIN_TIMEOUT**
  Set seconds to wait before timing out login attempt.
- **-m, --max-auth-attempts AUTH_ATTEMPTS**
  Set number of failed login attempts before client is disconnected.

**Arguments**
None.

**Examples**
```
*** display current settings ***
Pulse One > system session-settings show
idle_timeout: 300
login_timeout: 30
max_auth_attempts: 3

*** set idle_timeout ***
Pulse One > system session-settings set -i 250
idle_timeout: 250
login_timeout: 30
max_auth_attempts: 3
```
**system session-settings show**
Shows CLI login security settings.

**Usage**

```
system session-settings show [OPTIONS]
```

**Options**

--help

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system session-settings show
idle_timeout: 300
login_timeout: 30
max_auth_attempts: 3
```
**system shutdown**

Halts the system and shuts it down.

**Usage**

```
   system shutdown [OPTIONS]
```

**Options**

```
   --help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system shutdown
Shut down now? [y/N]: Y
Shutting down now...
```
**system snapshot**
Takes a snapshot of application logs and system information as a GZIP TAR (.tgz) file, using a specified interface.

During the process, a message similar to the following is displayed:

```
MD5: 73c0973a126352559b0be388c8ebc605
Press Ctrl-C when finished.
```

When this message appears, do not press *CTRL + C*.


Save the snapshot file to an accessible location.

Once the file save completes, return to the CLI and press *CTRL + C* to complete the snapshot process.

**Note:** If you press *CTRL + C* before the download completes, the web browser will close, and you will have to start the system snapshot process again.

**Usage**
```
system snapshot [OPTIONS]
```

**Options**
```
-i, --interface INTERFACE
```

INTERFACE can be set to either *external* or *management*. This interface is used when downloading the snapshot. If unspecified, the *management* interface is used as a default.

```
--help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**
```
Pulse One > system snapshot -i management
Services will be stopped before initiating snapshot. Continue? [y/N]: y
Stopping uno_log-collector_1 ... done
Stopping uno_api_1 ... done
.
.
(System messages: stopping services)
.
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
```
Starting snapshot...
Adding etc to snapshot-2019-04-04T14:37:43Z.tar.gz
Adding etc/fstab.old to snapshot-2019-04-04T14:37:43Z.tar.gz
   . (System messages: adding to backup)
   .
MD5: fe3bc60d1f1220a19604af1108445389
Press Ctrl-C when finished.

*** in a browser, save the file from xx.xx.xx.xx:8000/backup/download ***

*** then, complete the export process in the CLI by clicking CTRL + C ***
^C
You may restart services with `services restart`.

*** restart services ***
Pulse One > services restart
Restarting...
Starting with version "1902"...
Started.
Restarted.
Pulse One >
system storage add
This command enables unallocated data storage to be added to the data volume used by Pulse One services.

When used, the command displays a list of unallocated data storage volumes.

The user then selects one of these volumes, and it is added to the data volume for Pulse One services.

**Note:** This command is only supported on Virtual Machine implementations of Pulse One.

**Note:** From Pulse One v2.0.1834 onwards, an LVM data storage system is used. If Pulse One has been upgraded to v2.0.1834, the first use of system storage add will force the existing data storage system to convert to an LVM data storage system. To avoid data loss, you must perform a system backup export before you use system storage add, and then perform a system backup import after system storage add completes.

**Note:** These listed volumes must be previously created using standard ESX procedures.

**Usage**

```
  system storage add [OPTIONS]
```

**Options**

```
  --help
```

Displays the help text for this command.

**Arguments**

None.

**Examples**

``````
*** display current allocated storage ***
Pulse One > system storage show
Volumes       Filesystem     Size     Used    Available  Use%  Mounted on
System        /dev/md1       1.9G     265.8M  1.6G       14%   /
Applications  /dev/md2       39.2G    4.9G    32.3G      13%   /app
Data Storage  /dev/vg0/data  906.7G   408.4M  860.3G     0%    /data
data-store    405.71M
file-store    2.54G
index         1007.8M
log-collector 1.03M
log-indexer   695.55M
tmp           52B
```
*** list available data storage volumes and add it ***
Pulse One > system storage add

Disk       Size
-------------------
/dev/sdc   4.00 GiB
/dev/sdd   5.00 GiB
/dev/sde   3.00 GiB

Type name of disk you would like to add [/dev/sdc]: /dev/sde
Expanding storage with selected disk /dev/sde...
Storage expanded.
You may restart services with `services restart`.

*** restart services ***
Pulse One > services restart

Restarting...
Stopping uno_log-collector_1 ... done
Stopping uno_api_1 ... done
Stopping uno_pws-api_1 ... done
Stopping uno_backbeat_1 ... done
Stopping uno_file-api_1 ... done
Stopping uno_cellsecrpc_1 ... done
Stopping uno_portal_1 ... done
Stopping uno_proxy_1 ... done
Stopping uno_log-indexer_1 ... done
Stopping uno_file-store_1 ... done
Stopping uno_backend_4 ... done
Stopping uno_backend_2 ... done
Stopping uno_backend_3 ... done
Stopping uno_backend_1 ... done
Stopping uno_console_1 ... done
Stopping uno_ui-assets_1 ... done
Stopping uno_cache_1 ... done
Stopping uno_index_1 ... done
Stopping uno_data-store_1 ... done
Starting with version "1902"...
Started.
Restarted.

*** show updated storage information ***
*** NOTE - the USED value may drop after services restart ***
Pulse One > system storage show

<table>
<thead>
<tr>
<th>Volumes</th>
<th>Filesystem</th>
<th>Size</th>
<th>Used</th>
<th>Available</th>
<th>Use%</th>
<th>Mounted on</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>/dev/md1</td>
<td>1.9G</td>
<td>265.8M</td>
<td>1.6G</td>
<td>14%</td>
<td>/</td>
</tr>
<tr>
<td>Applications</td>
<td>/dev/md2</td>
<td>39.2G</td>
<td>4.9G</td>
<td>32.3G</td>
<td>13%</td>
<td>/app</td>
</tr>
<tr>
<td>Data Storage</td>
<td>/dev/vg0/data</td>
<td>909.7G</td>
<td>408.4M</td>
<td>863.3G</td>
<td>0%</td>
<td>/data</td>
</tr>
<tr>
<td>data-store</td>
<td></td>
<td>405.71M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>file-store</td>
<td></td>
<td>2.54G</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>index</td>
<td></td>
<td>1007.8M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>log-collector</td>
<td></td>
<td>1.03M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>log-indexer</td>
<td></td>
<td>695.55M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tmp</td>
<td></td>
<td>52B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**system storage show**
Displays system storage information for Pulse One.

**Usage**
```
system storage show [OPTIONS]
```

**Options**

--help

Displays the help text for this command.

**Arguments**

None.

**Examples**

```
Pulse One > system storage show

Volumes          Filesystem         Size      Used Available  Use%     Mounted on
System           /dev/md1           1.9G      321.5M          1.5G     17% /
Applications     /dev/md2           39.2G     9.3G            27.9G    25% /app
Data Storage     /dev/vg0/data      903.8G    4.7G            853.2G   1% /data
    data-store  405.71M
    file-store  2.54G
    index       1007.8M
    log-collector  1.03M
    log-indexer  695.55M
    tmp         52B
```
system upgrade
Upgrades Pulse One.

**Note:** Pulse Secure recommends that you perform a backup of your current system before proceeding with an upgrade, see “system backup export” on page 121.

**Usage**
There are two forms of this command, depending on your starting software version.

- When you start from a Pulse One release before v2.0.1902, you must use:
  ```
  system upgrade [OPTIONS] URL HASH
  ```
  This method uses the CLI only, and is the one used at all earlier releases.
  **Note:** For this method, an external web server is required to host the upgrade package.

- When you start from a Pulse One release v2.0.1902 or later you can choose a method:
  - To perform the upgrade using the CLI only, use:
    ```
    system upgrade cli [OPTIONS]
    ```
    **Note:** For this method, an external web server is required to host the upgrade package.
  - To perform the upgrade using a hybrid of CLI and browser, use:
    ```
    system upgrade [OPTIONS]
    ```
    **Note:** No external web server is required to use this method. Refer to the Pulse One Getting Started Guide for the full procedure.

**Options**

- **--help**
  Displays the help text for this command.

- **-i, --interface INTERFACE**
  **Note:** This option cannot be used on a CLI-only method.
  Network interface through which to upload the upgrade bundle. Can be *internal*, *external* or *management*.
Arguments

URL

The URL for the upgrade file.

HASH

The hash value for the upgrade file, in either MD5 or SHA256 format.

Examples

*** Upgrade from a release before v2.0.1902 ***
Pulse One > system upgrade https://example.com/upgrade/file
431eff630d49180e1447a4f856e2
WARNING: Please ensure that backup has been performed (`system backup export` command). Data and configuration changes cannot be reverted after upgrade. Type "UPGRADE" to continue:UPGRADE

<upgrade messages>

*** Upgrade from release v2.0.1902 or later using the CLI only ***
Pulse One > system upgrade cli https://example.com/upgrade/file2
5ac23b102d34a670c341abe0ff01
WARNING: Please ensure that backup has been performed (`system backup export` command). Data and configuration changes cannot be reverted after upgrade. Type "UPGRADE" to continue:UPGRADE

<upgrade messages>
**system version**
Display Pulse One version info.

**Usage**
```
system version [OPTIONS]
```

**Options**
--help
Displays the help text for this command.

**Arguments**
None.

**Examples**
```
Pulse One > system version
Pulse One: 2.0.1902
unitycom: 1902-31
```