



# Pulse One Appliance Command Reference Guide

Supporting Pulse One Appliance 2.0.1904

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*Pulse One Appliance Command Reference Guide*

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# Preface

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- **Document Conventions** ..... 1
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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.

Format	Description
<b>bold text</b>	Identifies command names
	Identifies keywords and operands
	Identifies the names of user-manipulated GUI elements
	Identifies text to enter at the GUI
<i>italic text</i>	Identifies emphasis
	Identifies variables
	Identifies document titles
Courier Font	Identifies command output
	Identifies command syntax examples

## Command Syntax Conventions

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

Convention	Description
<b>bold text</b>	Identifies command names, keywords, and command options.
<i>italic text</i>	Identifies a variable.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.

Convention	Description
{ <b>x</b>   <b>y</b>   <b>z</b> }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
<b>x</b>   <b>y</b>	A vertical bar separates mutually exclusive elements.
< >	Non-printing characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, member[member...].
\	Indicates a “soft” line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

## 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://www.pulsesecure.net/support/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://www.pulsesecure.net/support>
- Search for known bugs: <https://www.pulsesecure.net/support>
- Find product documentation: <https://www.pulsesecure.net/techpubs>



- Download the latest versions of software and review release notes: <https://www.pulsesecure.net/support>
- Open a case online in the CSC Case Management tool: <https://www.pulsesecure.net/support>
- To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://www.pulsesecure.net/support>

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://www.pulsesecure.net/support>.
- Call 1-844 751 7629 (Toll Free, US).

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



# 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.

```
├─ account
│  ├── create
│  ├── delete
│  ├── list
│  └─ password
│     ├── change
│     └─ reset
├─ cluster
│  ├── add
│  ├── config
│  ├── demote
│  ├── join
│  ├── promote
│  └─ status
├─ domain (deprecated)
│  ├── admins
│  │  └─ list (deprecated)
│  └─ list (deprecated)
├─ domain-property (deprecated)
│  ├── list (deprecated)
│  ├── reset (deprecated)
│  └─ set (deprecated)
├─ email-domain (deprecated)
│  ├── add (deprecated)
│  ├── delete (deprecated)
│  └─ list (deprecated)
├─ help
├─ https
│  ├── csr
│  ├── set
│  │  ├── ca-bundle
│  │  ├── cert
│  │  └─ key
│  └─ show
├─ licenses
│  ├── add
│  └─ show
├─ log-aggregator (deprecated)
│  ├── nfs (deprecated)
│  ├── settings (deprecated)
│  ├── show (deprecated)
│  └─ targets
│     ├── add (deprecated)
│     ├── list (deprecated)
│     └─ remove (deprecated)
├─ logout
└─ (continued)
```

(continued)

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

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

p1
├── domain
│   ├── admins
│   │   └── list
│   ├── list
│   ├── property
│   │   ├── list
│   │   ├── reset
│   │   └── set
│   ├── provision
│   └── whitelist
│       └── reset
├── log-aggregator
│   ├── nfs
│   ├── settings
│   ├── show
│   └── targets
│       ├── add
│       ├── list
│       └── remove
└── mssp
    └── provision
```

(continued)

(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

```
*** 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".

## 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
```

```
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 messages)
  status: Connected
services: null

*** 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 ]
node:
  id: 02f42ceae73c48afbff7e601020644aa
  ip: null
  mode: standalone
```

```
*** 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
  data-store: 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 ]
[ 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: 02f42ae73c48afbfff7e601020644aa
  ip: YY.YY.YY.YY
  mode: passive
```

## cluster promote

Promotes the current standalone node to Active and enables clustering.

### Usage

```
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 1afe1cd0"
      - .
      - . (secure channel messages)
      - .
      - "\tallocated: 297347\tthard: 0\tsoft: 0"
      - "\tsadb_seq=0 pid=7209 refcnt=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 103.

## email-domain delete

Deletes an email domain.

**Note:** This command is deprecated. Please use [“pws email-domain delete” on page 104](#).



## email-domain list

Shows all the email domains.

**Note:** This command is deprecated. Please use [“pws email-domain list” on page 105](#).

## 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...
  p1               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-----
MIICxDCCAawCAQAwfzELMAkGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5wd3N1
bmcuY29tMRIwEAYDVQQHDA1DYW1icmlkZ2UxEzARBgNVBAoMCKRlbW9uIEExOZC4x
zpIbaOmMlZcCbAzrZxNwK74ksR16j8I3+d9qlcktmik8qTLyhBNheI1/9H+agLr5
.
. (certificate truncated)
.
y6Q1JXosi2v+QyFtKdvZEMM629jUGIc9fIqf15bpPjehU4ZKnjRGQQulUyXFNMIz
MpQ00sHbxKqJ0QXndJsNyRwZcJQs4yjwN3E7bZujQ+WCplI0y4GH3MQJdon6mEDD
VoQDiLQkVy1iXhXzEtPAdRy+hMUhbKLTVcxEyZLnckAK3UjjL3I1Adp8xRqi/6U2
Ob1VqDw1Ayx0Fljup0y0gGuDZuBuQhKGBxi0HXETeqA7ZLRqbk1kvw==
-----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:
    b2:76:b6:98:c3:40:c3:6b:c3:25:4f:fc:4a:8c:a6:
    .
    . (shortened)
    .
    6a:89:df:89:0c:e2:67:94:2d:2f:76:52:50:80:d4:
    d9:ee:4d:5f:0d:ae:ef:74:9d:29:a0:6a:96:6c:f6:
    aa:cb
  Exponent: 65537 (0x10001)

```

Attributes:

a0:00

Signature Algorithm: sha256WithRSAEncryption

```

81:d9:7f:f3:e8:8f:4c:be:32:7b:cf:84:2a:4e:ba:93:d5:d9:
82:65:d4:22:ae:55:0f:b1:68:d0:39:b6:1e:45:d1:60:b1:32:
.
. (shortened)
.
94:b7:2d:16:bb:4e:5f:fd:88:b2:ae:45:87:9b:e6:f5:44:92:
e6:ee:fa:47:1e:21:fb:ba:85:2a:18:78:82:d8:43:e0:bf:86:
5f:87:0b:22

```

-----BEGIN CERTIFICATE REQUEST-----

```

MIICvjCCAaYCAQAweTELMakGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5wd3Nl
bmcuY29tMQ4wDAYDVQQHDAVmdXRvbjESMBAGA1UECgwJRGVtbyBMdGQuMRUwEwYD
VQQIDAxZWRmb3Jkc2hpcmUxEzARBgNVBAsMCkRlbW8gRGVwdC4wggeiMA0GCSqG

```

. (certificate truncated)

```

dNzA92L736Jt9FhstPMQ9RXvx+s+QKInk5zajWnLrGtpz99rz7yO5MxjMwQ9zqkJ
mDeAlm+rMeM3VlWno66RVkDwCm6CQbDY/eYB0xHSXYwd0HPIfCFYNmhUlLctFrto
X/2Isq5Fh5vm9USS5u76Rx4h+7qFKhh4gthD4L+GX4cLIg==

```

-----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-----
MIICWjCCAaoCAQAwfTElMAkGA1UEBhMCVUsxGjAYBgNVBAMMEW1vYmlsZS5wd3Nl
bmcuY29tMRIwEAYDVQQHDA1DYW1icmlkZ2UxETAPBgNVBAoMCERlbW8gTHRkMRcw
FQYDVQQIDA5DYW1icmlkZ2VzaGlyZTESMBAGA1UECwwJRGVtbyBEZXB0MIIBIjAN
.
. (certificate truncated)
.
tWdJoUNgV/4uIspC/+0s9eTGoLEgt5jgOQpEjuIGkx/5lt+3jYYgkBM+89KEps+X
rEsufRe9AEIrsZKTjBGW6qznuPxlqZhJrzcyZtcXAYvMPK1aaeEIAI9T2VTcgzV+
g5u8p31ylZap3GkuA0HIR0R10VItJTDoTr0a2d+Evf5rIRP5D9VGd0jejMP0poO6
XB2Gfn3HmcPNpwMkurbBsfTkWuk3xbzQfiIkwWtyMvfzfdwcl6U=
-----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-----
MIIDBTCCAe2gAwIBAgIRALPEq57d1knqntc9NgQvwYQwDQYJKoZIhvcNAQELBQAw
HDEaMBGGA1UEAwRbW9iaWxlLnB3c2VuZy5jb20wHhcNMTgwNjE4MDA1MTA5WhcN
MTkwNjE5MDA1MTA5WjAcMR0wGAYDVQQDBFtb2JpbGUucHdzZW5nLmNvbTCCASIw
    .
    . (certificate truncated)
    .
NtnFrOJrJxy4qO44RW8k78RmaT7uc1bDA8IiDeYo4aZdAQDwwJl7RN2UddZlkXaX
Qnj+a8+j3D9CbWtR/VLb6EMwtYgXXf6ClUfRCbZpaStCmyN4baRoGKsqL+u+yyfR
S1woFfAzqPiJ/dDLh5K4wy+b9aFR2RzX7b7dw7M/8nrvbGNkMUFJO9oBMm6IOl92
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
HDEaMBGGA1UEAwRbW9iaWx1LnB3c2VuZy5jb20wHhcNMTgwNjE4MDA1MTA5WhcN
MTkwNjE5MDA1MTA5WjAcMR0wGAYDVQQDBFtb2JpbGUucHdzZW5nLmNvbTCCASIw
    .
    . (certificate truncated)
    .
NtnFrOJrJxy4qO44RW8k78RmaT7uc1bDA8IiDeYo4aZdAQDwwJl7RN2UddZlkXaX
Qnj+a8+j3D9CbWtR/VLb6EMwtYgXXf6ClUfRCbZpaStCmyN4baRoGKsqL+u+yyfR
S1woFfAzqPiJ/dDLh5K4wy+b9aFR2RzX7b7dw7M/8nrvbGNkMUFJO9oBMm6IOl92
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-----
MMIIEvQIBADANBgkqhkiG9w0BAQEFAASCBCwggSjAgEAAoIBAQDfP7kFBwKEuSMs^MimYcoLJ2tpjDQMNrwyVP
/EqMppY2HiVrBIjktYR9xLhHQNAsgwejDbr/QhN7eLVG^MNvMS/
7g+Dg6lP95xM2dm4Zsrd8nTEI23vkYwIqb+Bbrd
      .
      . (key truncated)
      .
FI+H0H5Z1c7gBAoGAZ/
f9L5k6cYZzMXrEf4oN^MVKj1hmclbORGBLB1TOF8buaDuWW9SMQX9VJmzvM4jXb8wuLK+3ALQ8TKvZ2+nQyI^Mg
RLAoF8d0sZZh4v7IHPEHU3Lcd
ZcmuB9FXcmksGSXOQtDzO+SnpqqBOvSRAUj69e^Mcf36qVK9whM2cXlMuUz+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+X8kwDQYJKoZIhvcNAQELBQAwbQxCzAJBgNV
BAYTAlVTMRAwDgYDVQQIEwdBcm16b25hMRMwEQYDVQQHEwpTY290dHNkYWxlMR0w
GAYDVQQKEExFHb0RhZGR5LmNvbSw5jLjEtMCA1UECXMkaHR0cDovL2N1cnRz
      .
      . (certificate truncated)
      .
+vPfyqOq4jCKwuygbfx9dvTAKQ9F+b0kyYucT032s8khTY543E80Q+liUjN5uhKs
DiHpD++C5sN+qKZX+1LbgWY2FO8FRkNrdK/XsaomeJX/NuJHUL/MAdIcPJ4YSTHg
im62qyMSB892SLbGLtSoxuwF0OMTANvg/e4x/PrBJR5Uah6ujyVjWMbZmeqMKNHA
E8PdkWlTfT9d/F9P7TwZhbY28w+0WA0A3qDtOXM=
-----END CERTIFICATE-----
```

```

*** view the certificate authentication bundle ***
Pulse One > https show ca-bundle
-----BEGIN CERTIFICATE-----
MIIE0DCCA7igAwIBAgIBBzANBgkqhkiG9w0BAQsFADCBgzELMAkGA1UEBhMCVVMx
EDA0BgNVBAGTB0FyaXpvcvbmExEzARBgNVBAcTC1Njb3R0c2RhbGUxGjAYBgNVBAoT
EUdvrGFkZHZhY29tLCBjbmMuMTEwLWYDVQDEYHByBEYWRkeSBSb290IENlcnRp
.
. (certificate truncated)
.
RJ17LJ31XubvDGGqv+QqG+6EnriDfcFDzkSnE3ANkR/0yBOTg2DZ2HKocyQetawi
DsoXiWJYRBurISUBAA/NxBti21G00w9RKpv0vHP8ds42pM3Z2Czqrpv1KrKQ0U11
GIo/ikGQI31bS/6kA1ibRrLDYGCd+H1QQc7CoZDDu+8CL9IVVO5EFdkKrqeKM+2x
LXY2JtwE65/3YR8V3Idv7kaWKK2hJn0KCacuBKONvPi8BDAB
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
MIIEfTCCA2WgAwIBAgIDG+cVMA0GCSqGSIb3DQEBCwUAMGMxCzAJBgNVBAYTA1VT
MSEwHwYDVQQKEWhUaGUgR28gRGFkZHZhkgR3JvdXAsIEluYy4xMTAvBgNVBAsTKEdv
IERhZGR5IENsYXNzIDIGQ2VydGlmawNhdGlvbiBBdXR0b3JpdHkwHhcNMTQwMTAx
.
. (certificate truncated)
.
9kIDN0zmiN/VryTyscPzfzLXs4Jlet0lUIDyUGAzHHFIYSaRt4bNYC8nY7NmuHDKO
KHAN4v6mF56ED71XcLNa6R+ghl0773z/aQvgSMO3kwvIClTErF0UZzdsyqUvMQg3
qm5vjLyb4lddJIGvl5echK1srDdMZvNhkREG5L4wn3qkKQmw4TRfZHcYQFHfjDCm
rw==
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
MIIEADCCAuigAwIBAgIBADANBgkqhkiG9w0BAQUFADBjMQswCQYDVQQGEwJVUzEh
MB8GA1UEChMYVGVhIIEEdvIERhZGR5IEdyb3VwLCBjbmMuMTEwLWYDVQQLLEYhHbyBE
YWRkeSBSDBGFzcyAyIENlcnRpZmljYXRpb24gQXV0aG9yaXR5MB4XDTA0MDYyOTE3
.
. (certificate truncated)
.
TMozI+gciKqdi0FuFskg5YmezTvacPd+mSYgFFQlq25zheabIZ0KbIIOqPjCDPoQ
HmyW74cNxA9hi63ugyuV+I6ShHI56yDqg+2DzZduCLzrTia2cyvk0/ZM/iZx4mER
dEr/VxqHD3VILS9RaRegAhJhldXRQLIQTO7ErBBDpqWeCtWVYpoNz4iCxTIM5Cuf
ReYNnyicsbkqWletNw+vHX/bvZ8=
-----END CERTIFICATE-----

*** view the key ***
Pulse One > https show key
PEM contents hidden for security. Verify with hashes below.
Updated: 2017-11-03T17:55:40Z
SHA256: 0171f7c2d1e300a9516f0f75ece2626fa1ad583b8c9509df96e3dca9f4357d2e
MD5: f26a01cfa3674c823daf2b5a748012ae

```

## 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
- created: '2018-06-21T13:28:57Z'
  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 86](#).

## 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 87](#).

## log-aggregator show

Shows the details of data storage for the log-aggregator component.

**Note:** This command is deprecated. Please use [“p1 log-aggregator show” on page 88](#).

## 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 89](#).



## log-aggregator targets list

Shows a list of syslog targets.

**Note:** This command is deprecated. Please use [“p1 log-aggregator targets list” on page 90](#).

## log-aggregator targets remove

Removes a syslog target.

**Note:** This command is deprecated. Please use [“p1 log-aggregator targets remove” on page 91](#).

## 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

```
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 ***
```

```
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 ***
```

```
Pulse One > network arp
```

```
host1.demo.example.com (xx.xx.xx.xx) at hh:hh:hh:hh:hh:hh [ether] on host
```

```
port1.demo.example.com (zz.zz.zz.zz) at kk:kk:kk:kk:kk:kk [ether] on eth0
```

```
port2.demo.example.com (vv.vv.vv.vv) at nn:nn:nn:nn:nn:nn [ether] on eth4
```

```
host2.demo.example.com (yy.yy.yy.yy) at jj:jj:jj:jj:jj:jj [ether] on host
```

```
port3.demo.example.com (vv.vv.vv.vv) at pp:pp:pp:pp:pp:pp [ether] on eth0
```

## 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

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

### Options

```
--help
```

Displays the help text for this command.

### Arguments

```
HOSTNAME
```

The required hostname.

### Examples

```
Pulse One > network hostname appliancel
* 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: appliancel
```

## 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
  netmask: 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

```
p1 domain property set [OPTIONS] DOMAIN_PROPERTY_NAME DOMAIN_PROPERTY
```

### Options

```
--help
```

Displays the help text for this command.

### Arguments

```
DOMAIN_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`

```
DOMAIN_PROPERTY
```

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

### Examples

```
*** 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)
```

```
.
```

```
Provider domain mobile.example.com created.
```

```
Provisioned.
```

## p1 domain whitelist reset

Resets whitelists of IP addresses and countries from which an admin can log into the Pulse One GUI.

**Note:** This list can only be created in the Pulse One GUI.

### 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.

### 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 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-----
\nMIIIEvgIBADANBgkqhkiG9w0BAQEFAASCBAQwggSkAgEAAoIBAQCNDf1IP01ZhEvt\n\nIf03JNyM73t17n0Vx
xUaJPUwXPettGonSJB0cN5ndJU4r6RDo0N85EPo75I2LktG\n\nAjj6RUCk1OPN+PASG2eWXP1ROVYd1PVzeLA6C
4Js8mkCLwB+N2hkA/f9HNxooFQY\n\n1fGjfHaZb70RE2Oj8Q
.
. (esa credentials truncated)
```

```
6PdPLwjd7KwBDdB9KiX+O5b0gA4GpMVM/
L2tBAoGBANbThumPG8GPCqogis0I\n\nxBePd17QYR+g4D4AwVd328iuAuQ3oYyNTHP+rUAiyVwKI4GU6CxhabWH
YAb6ycjm\n\nYF/Pa2EAMaL1bUScENhM3xlejMgyWwRgDQjHkj0sFPdb8EqLqV6EvQRpWkJusHan\n\na+RV/
qSHyCdsFDlfJiL19M1G\n\n-----END PRIVATE KEY-----\n",
"client_email": "account-4@pulse-dev-1125.iam.gserviceaccount.com", "private_key_id":
"473a94a52343c31de3bbd925535b165b15b1d592",
"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_uri: 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: 473a94a52343c31de3bbd925535b165b15b1d592
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: 604bf518cdf6a68872956261e6610ad6

MD5 for the whole Credential string: 34f4ccb1194d79facf25cb662517e3ae

SHA256 for the private key:

a4067666430c507e3f75e4845fe0745ef477a99623b9abdd3f018cfe8b446f70

SHA256 for the whole Credential string:

729d06ea69f86ebfaf1f17875bfae195eab50eb685db600bdd3a4d41cf152451

## 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-----
^MMIIEuzCCA6OgAwIBAgIBAjANBgkqhkiG9w0BAQUFADBIMQswCQYDVQQGEwJVUzET^MMBEGA1UEChMKQXBwbGU
gSW5jLjEmMCQGA1UECXMdQXBwbGUgQ2VydGlmaWNhdGlv^MbiBBdXRob3JpdHkxZjAUBgNVBAMTDUFwcGxlIFJv
b3Qg
.
. (certificate)
.
ieerCVRouier0NlFXVTBMxtinXUWberS7/fxBuN/DlMHhwtXOeuz35WpxoNASUde
Rqk9LgbQIKdClyNI3IAgPEWjUJArMXogJXP3lztioGlj/ETiToCiQALUU//cB0aj
z5I+FEIWQzkRBmN2AKRezm9S5LEBxKgsbtIJRsydUzEm6atkWp2qIHKwZQMRCA==
-----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-----^MMIIGSzCCBT0gAwIBAgIIUubJAMJf/
nAIwDQYJKoZIhvcNAQELBQAwwZyxCzAJBgNV^MBAYTA1VTMRMwEQYDVQKDApBcHBsZSBjbmuMSwwKgYDVQQLD
CNBcHBsZSBXb3Js^MZHdpZGUgRGV2ZWxvcGVyIFJlbGF0aW9uczFEMEIGA1UE
.
. (certificate truncated)
.
Y3VyZS5wdWxzZXNlY3VyZTE5MDcGA1UHuwNl55Rerxoh3Xi7UWFrgJLKsvoiOZUOXma1FEcQXu3A3NOOwn5LayP
fbdJLDZmgxpHrck/XFKTDqcRhD2fo8/PeyknuatSC9fg13g3Dw==
-----END CERTIFICATE-----
Hash values for the iOS Client Push Certificate string:
MD5: fa31afcl1a1b2c33bcd448f28f7ddf9a2
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-----
\nMIIIEwAIBADANBgkqhkiG9w0BAQEFAASCBCowggSmAgEAAoIBAQDMeFBApydNOc9M\n\nFTga5a1qOs0vZRilw
n6k6RIFG3bxOKk0k+iTeQxbRg9/
kcg1zE+N3wcp0Vw4Mg2K\n\nL16f2q4tRLSEzqvtNDjJUuP0rusxmim32nHdM1VHKdd8LvtJ2Ov05iHf6wRgBcIS
\n\nQ+/rTwm21TfQkiWj3A
.
. (msa credentials truncated)
```

```
n1VQyoFU+Dicz1C60+7HWAJw3o5pD2NOHxKgQ4pECgYEAuLu3tNhgH/
28i0++\nnkEYwkFCoHbn1JUw62IsGF+2Crp1GMWdG/qjPu2wizUYnws/
TYC+zk9ZPlkRC36M\n\n2RF+trd2hS6IG/Ts1BEz4e+BlvoDxOgJ5FXUnXx8TRNsfgRRcmmaOv/eWclbWsPa\n\n/
KKFZHcoX9H4InpN6JIHv2AkCYk=\n\n-----END PRIVATE KEY-----\n",
"client_email": "account-1@pws-dev.iam.gserviceaccount.com", "private_key_id":
"5dd8b5951c10b85a0665c1706dcab61c89a01e56",
"client_id": "102471803974255694602",
"token_uri": "https://accounts.google.com/o/oauth2/token", "client_x509_cert_url":
"https://www.googleapis.com/robot/v1/metadata/x509/account-1%40pws-
dev.iam.gserviceaccount.com", "type": "service_account",
"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:

607d0713ebc6837186111dfd5ed2ae1decb05ba6459a8fd758d8e5208b9dc485

## 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@pfpw-
ulsesecureandroidmdmtest2.google.com.iam.gserviceaccount.com
  client_id: '108955911278235671297'
  client_x509_cert_url: https://www.googleapis.com/robot/v1/metadata/x509/
wb882f19b668ec52ef12b76169%40pfpw-
ulsesecureandroidmdmtest2.google.com.iam.gserviceaccount.com
  private_key_id: 4ce2f68b79dff03027d1e0157b29181dc81
  project_id: google.com:pfpw-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:
36c293c8b3fed64dc0c5d21dfa1d83b46a59882c0bfd6c648b837755952
  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 93](#).



## **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 94](#).

## **pws-config set esa**

Sets the Google ESA Credentials.

**Note:** This command is deprecated. Please use [“pws config set esa” on page 95](#).

## **pws-config show esa**

Shows the Workspace ESA information.

**Note:** This command is deprecated. Please use [“pws config show esa” on page 101](#).

## 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 113](#).
- 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, cellsekrpc_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
  Name          State
-----
api            Stopped
backbeat       Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
backend        Stopped
cache          Stopped
cellsecrpc     Stopped
console        Stopped
data-store     Stopped
file-store     Stopped
index          Stopped
portal         Stopped
proxy          Stopped
pws-api        Stopped
ui-assets      Stopped
```



## 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.

During the process, the following message is displayed:

```
Download ready at http://xx.xx.xx.xx:8000/backup/download
MD5: 10e3f47281a8a5c494df8dca7d3c5ddd
Press Ctrl-C when finished.
```

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

Instead, start a web browser and access `http://xx.xx.xx.xx:8000/backup/download`.

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

```
-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*.

Instead, start a web browser and access `http://xx.xx.xx.xx:8000/backup`.

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: 7d84ff6a1b2c3d4abb507d5c3ffef972) 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
.
. (system messages: service removals)
.
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
.
. (system messages: file/directory removals)
.
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 112](#).

### 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 ...
.
. (system messages: stopping services)
.
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
.
. (system messages: removing files and directories)
.
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 112](#).

### 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:

```
Download ready at http://xx.xx.xx.xx:8000/snapshot/download
MD5: 73c0973a126352559b8be388c8ebc605
Press Ctrl-C when finished.
```

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

Instead, start a web browser and access `http://xx.xx.xx.xx:8000/snapshot/download`.

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/modules-load.d 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)
.
Adding data/snapshot/ip-routing-info-2019-04-04T14:37:43Z.log to snapshot-2019-04-
04T14:37:43Z.tar.gz
Adding data/snapshot/service-2019-04-04T14:37:43Z.log to snapshot-2019-04-
04T14:37:43Z.tar.gz
Download ready at http://10.96.16.157:8000/snapshot/download
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

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	909.7G	408.4M	863.3G	0%	/data
data-store	405.71M					
file-store	2.54G					
index	1007.8M					
log-collector	1.03M					
log-indexer	695.55M					
tmp	52B					

## 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 119](#).

### 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
```

