IBM PureData for Operational Analytics pflayer

Command Line Documentation

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Introduction:

IBM PureData System for Operational Analytics as shipped to all customers on all versions included a web-based administration console. The console is described in the knowledge center at the following link.

As part of the fixpacks released in September, 2018 the console is to be removed as part of the last steps of the fixpack. While the console is removed there are layers of the console that remain behind to provide some important appliance features.

The layer that is left is referred to as the pflayer. This document describes the command line commands that continue to be part of the appliance after the web based console is removed. These commands were previously undocumented in the knowledge center.

Discontinued mi* commands and their replacements.

mi* command	**Pflayer Command**
miauth	appl_conf
miinfo	appl_ls_hw & appl_ls_sw
mistart, mistop, mistatus	N/A
miupdate	See Readme for FP2_FP6 levels and higher for more information about changes related how updates are applied.

appl_ls_hw command:

This command displays information about hardware resources in PDOA setup. Using various keys and option command shows detailed information about resources along with status. Where status checks hardware resources reachability and SSH configuration. Valid attribute keys per resource can be displayed using “-v” option. Valid resources types are “san,net,hmc,server_os,server_fsp and storage”. Only one resource type can be used at a time.

Usage:

```
$ appl_ls_hw -help
Display information about the hardware resources in the setup.If no arguments are specified, then information is displayed
about the entire configuration.
Usage:

appl_ls_hw [-v|[-A <key_1,key_2,...key_n> [-f <field separator>]]] [-d] [ -C | -F | -M | -H ] [-h|-help]

appl_ls_hw -l <resource name> [-v] [-d] [-C | -F | -M | -H]  [-h|-help]
appl_ls_hw -r <resource type> [-v] [-d] [-C | -F | -M | -H]  [-h|-help]
appl_ls_hw -m <module> [-v] [-d] [-C | -F | -M | -H]  [-h|-help]
appl_ls_hw -s <sub-module> [-v] [-d] [-C | -F | -M | -H]  [-h|-help]
appl_ls_hw -i <IP address or host name> [-v] [-d] [-h|-help]

appl_ls_hw -l <resource name> [-A <key_1,key_2,...key_n> [-f <field separator>]] [-d] [-C | -F | -M | -H] [-h|-help]
appl_ls_hw -r <resource type> [-A <key_1,key_2,...key_n> [-f <field separator>]] [-d] [-C | -F | -M | -H] [-h|-help]
appl_ls_hw -m <module> [-A <key_1,key_2,...key_n> [-f <field separator>]] [-d] [-C | -F | -M | -H] [-h|-help]
appl_ls_hw -s <sub-module> [-A <key_1,key_2,...key_n> [-f <field separator>]] [-d] [-C | -F | -M | -H] [-h|-help]
appl_ls_hw -i <IP address or host name> [-A <key_1,key_2,...key_n> [-f <field separator>]] [-d] [-h|-help]

Options:
        -l <resource name>        : Display information of the resource with the specified resource name.
        -r <resource type>        : Display information of all the resources with the specified resource type.
        -m <module>               : Display information of all the resources with the specified module type.
        -s <sub-module>           : Display information of all the resources with the specified sub module type.
        -i <IP address or host name> : Display information of the resource with the specified IP address or host name.
        -v                        : Provides output in a raw format.
        -A <key_1,key_2,...key_n> : Displays supplied attribute information in a comma separated format.
        -f <field separator>      : The attribute field separator for the -A option, if not specified comma(,) is used
        -d                        : Displays information of additional sub resources, such as adapters.
        -C                        : Display corporate network information.
        -F                        : Display FCM network information.
        -M                        : Display management network information.
        -H                        : Display HMC private network information.
        -h|-help                  : help
```

Examples :

Displays Status of all resources :

```
$ appl_ls_hw
NAME            HOSTNAME              IP              MODULE          STATUS          DESCRIPTION
server0         kf5hostname05corp     9.114.12.242    Data            Online          IBM Power Express Operating System
server1         kf5hostname03corp     9.114.12.240    Foundation      Online          IBM Power Express Operating System
server2         kf5hostname07corp     9.114.12.246    Data            Online          IBM Power Express Operating System
server3         kf5hostname02corp     9.114.12.239    Foundation      Online          IBM Power Express Operating System
server4         kf5hostname04corp     9.114.12.241    Foundation      Online          IBM Power Express Operating System
server5         kf5hostname06corp     9.114.12.245    Data            Online          IBM Power Express Operating System
server6         kf5hostname01corp     9.114.12.238    Foundation      Online          IBM Power Express Operating System
server_fsp0     -                     -                               Online          IBM Power 810 Express CEC
server_fsp1     -                     -                               Online          IBM Power 810 Express CEC
server_fsp2     -                     -                               Online          IBM Power 810 Express CEC
server_fsp3     -                     -                               Online          IBM Power 810 Express CEC
server_fsp4     -                     -                               Online          IBM Power 810 Express CEC
hmc0                                  9.114.12.236                    Online          IBM Hardware Management Console
hmc1                                  9.114.12.237                    Online          IBM Hardware Management Console
storage0        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage1        -                     -                               Online          IBM FlashSystem 900 Storage
storage2        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage3        -                     -                               Online          IBM FlashSystem 900 Storage
storage4        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage5        -                     -                               Online          IBM FlashSystem 900 Storage
san0            -                     -                               Online          IBM System Storage Switch
san1            -                     -                               Online          IBM System Storage Switch
san2            -                     -                               Online          IBM System Storage Switch
san3            -                     -                               Online          IBM System Storage Switch
net0            -                     -                               Online          IBM System Networking RackSwitch
net1            -                     -                               Online          IBM System Networking RackSwitch
net2            -                     -                               Online          IBM System Networking RackSwitch
net3            -                     -                               Online          IBM System Networking RackSwitch
```

Example to display resources type:

```
$ appl_ls_hw -M -r san
NAME     HOSTNAME        IP              MODULE          STATUS          DESCRIPTION
san0     san_switch1     172.23.1.161                    Online          IBM System Storage Switch
san1     san_switch2     172.23.1.162                    Online          IBM System Storage Switch
san2     san_switch3     172.23.1.163                    Online          IBM System Storage Switch
san3     san_switch4     172.23.1.164                    Online          IBM System Storage Switch
```

Verbose display shows all attributes:

```
$ appl_ls_hw -l storage0 -v
Storage_Frame_Record:
Logical_name=storage0
Logical_name_prefix=storage
Resource_type=storage
Description=IBM Storwize V7000 FAB-1 Storage
Module_type=Foundation
Sub_module_type=Infrastructure
Status=Online
M_Hostname=V7_00
M_IP_address=172.23.1.204
M_DNS=
M_Netmask=255.255.255.0
M_Domain=
M_Gateway=172.23.1.245
Director_handle=N-A
Solution_level=4.0.5.0
FW_level=7.5.0.13
Manufacturer=IBM
Model=524
Machine_type=2076
Serial_number=78209PX
N_controllers=0
N_ports_per_controller=0
N_channels=0
N_ports_per_channel=0
CHNL_WWPNs=
Standby=
AccessState=Unlocked
```

Specified attribute display:

```
$ appl_ls_hw -r storage -A M_IP_address,Logical_name,Model,FW_level
"172.23.1.204","storage0","524","7.5.0.13"
"172.23.1.205","storage1","AE2","1.4.7.1"
"172.23.1.206","storage2","524","7.5.0.13"
"172.23.1.207","storage3","AE2","1.4.7.1"
"172.23.1.208","storage4","524","7.5.0.13"
"172.23.1.209","storage5","AE2","1.4.7.1"
```

appl_conf :

The password for the following users can be changed by using the appl_conf command:

- `root`: root user
- `bcuaix`: core warehouse instance owner and database administrator
- `db2opm`: database performance monitor database user
- `db2psc`: system console database user

Passwords that are managed by the appl_conf command cannot be greater than 20 characters in length.
The resource where password change is attempted should be online

Usage:

```
$ appl_conf -help
Orchestrates the password change for Admin and App users associated with specified hardware resource.
Usage:
        appl_conf chpw -l <resource logical name> -u <user name> -p [<new password>] [-o <old password>] [-cross] [-h|-help]
        appl_conf chpw -r <resource type> -u <user name> -p [<new password>] [-o <old password>] [-h|-help]
        appl_conf [-h|-help]                : help

Options


    chpw              : Command name. Needs to be mentioned without hyphen(-).
    -l logical name   : The logical Name of the hardware resource.
    -r resource type  : The resource type  ( for hardware resources of same type)
    -u user name      : The user name associated with the hardware resource.
    -p new password   : The new password. If -p is mentioned but password is not provided then user will be prompted to enter
the password
    -o old password   : The old password. It is an optional parameter. But it must be specified if the password stored in the
internal database is incorrect.
    -cross            : Use this flag to force password change across all applicable nodes.
                        not applicable with -r option
    -help             : help
```

-help
This option displays help for the command.

User name associated with hardware. Supported user name per hardware as below :
San Swtich : admin
Net switch : admin
Storage : superuser
Hmc : hscroot
AIX Server : root, bcuaix, db2opm, db2psc

If not provided command will use old password from database. For BNT switch if current password is not correct in database it is must to provide old password with command.
In case while database password is not in sync, appl_conf will get database in sync while provided password as new password with command.

Examples :

```
$ appl_conf chpw -l server1 -u root -p
Enter the new password
Changing the password for user 'root' on resource 'server1'.
-------------------------------------------------------------
SCHEMA::CHPW::LOGICAL_NAME::STATUS(PASS/FAIL)
CHPW::server1::FAIL::change_passwd Password change failed for resource(s) 172.23.1.3.
-------------------------------------------------------------


$ appl_conf chpw -l server1 -u root -p
Enter the new password
Changing the password for user 'root' on resource 'server1'.
The password change was successful for the user 'root' on resource 'server1'.
Updating the password in the database for user root.
The password was successfully updated in the database.
-------------------------------------------------------------
SCHEMA::CHPW::LOGICAL_NAME::STATUS(PASS/FAIL)
CHPW::server1::PASS::The password change for 172.23.1.3 was successful.
-------------------------------------------------------------
$ appl_conf chpw -r san -u admin -p
Enter the new password
Updating the password in the database for user admin.
The password was successfully updated in the database.
Updating the password in the database for user admin.
The password was successfully updated in the database.
Updating the password in the database for user admin.
```

```
The password was successfully updated in the database.
Updating the password in the database for user admin.
The password was successfully updated in the database.
------------------------------------------------------------
SCHEMA::CHPW::LOGICAL_NAME::STATUS(PASS/FAIL)
CHPW::san0::PASS::The password change for 172.23.1.161 was successful.
CHPW::san1::PASS::The password change for 172.23.1.162 was successful.
CHPW::san2::PASS::The password change for 172.23.1.163 was successful.
CHPW::san3::PASS::The password change for 172.23.1.164 was successful.
------------------------------------------------------------
```

appl_ls_cat command :

This command displays PDOA registered update images. Command also display product level information which used with various option.

Usage:

```
$ appl_ls_cat -help
Lists the registered IBM PureData System for Operational Analytics update images.
Usage:
  appl_ls_cat -active [-v] [-h|-help]
  appl_ls_cat -i [-v] [-h|-help]
  appl_ls_cat -l <BW release name> [{ -m | -f | -x}] [-v] [-h|-help]
  appl_ls_cat -l <BW module name> [-v] [-h|-help]
  appl_ls_cat -l <BW fix pack name> [-v] [-h|-help]
  appl_ls_cat -l <BW fix name> [-v] [-h|-help]
  appl_ls_cat [-h|-help]

 Options:
  -active         :  Display the active release(s) in the update catalog.
  -i              :  Display the latest installed BW release information.
  -l              :  Display the information for all the registered BW releases/fix-packs/fixes.
  -f <bwh level>  :  Display the information of BW fix packs and fixes for a specific release.
  -m <bwh level>  :  Display the information for the modules within a particular release.
  -x <bwh level>  :  Display the information for the firmware within a particular release.
  -v              :  Display the information in raw format.
  -h|-help        :  help
```

Examples:

List all the registered update image:

```
$ appl_ls_cat
NAME                    VERSION                     STATUS                  DESCRIPTION
bwr0                    4.0.4.2                     Committed               Updates for
IBM_PureData_System_for_Operational_Analytics
bwr1                    4.0.5.0                     Committed               Updates for
IBM_PureData_System_for_Operational_Analytics_DB2105
```

List the details of specific update image:

```
$ appl_ls_cat -l bwr0
NAME                    VERSION                     STATUS                  OPERATION      DESCRIPTION
opm0                    5.3.1.0.8402                Committed               install        OPM
was0                    8.5.5.5                     Committed               install        WebSphere_Application_Server
mi0                     3.0.4.0                     Committed               install        MI
tsa0                    4.1.0.1                     Committed               install
Tivoli_Systems_Automation_for_Multi-Platforms_Update_3.2.2.7
ha_db20                 2.0.0.3                     Committed               install        IBM_Smart_Analytics_HA_toolkit
db20                    10.5.0.5..0                 Committed               install        DB2_Enterprise_Edition
isw0                    10.5.0.20141125_10.5.0.5..0 Committed               install        InfoSphere_Warehouse
pflayer0                4.0.4.2                     Committed               install
IBM_Smart_Analytics_Platform_Layer
pfmgt0                  4.0.4.0                     Committed               install
IBM_Smart_Analytics_Platform_Management
director0               6.3.5.0                     Committed               uninstall      DirectorServer Update
aix0                    7100-03-04-1441             Committed               install        AIX Update
hmc0                    8.8.4.0.1                   Committed               install        HMC Update
pfw0                    SV810_108                   Committed               install        PFW Update
fcadapterfw0            202307                      Committed               install        FCAdapterFW 5273 Update
fcadapterfw1            0320051000                  Committed               install        FCAdapterFW EN0Y Update
netadapterfw0           0400401800007               Committed               install        NetAdapterFW 1648 Update
gpfs0                   4.1.0.6                     Committed               install        GPFS
netadapterfw1           30100150                    Committed               install        NetAdapterFW EN0S Update
netadapterfw2           10090180                    Committed               install        NetAdapterFW 5899 Update
cas0                    6.3.3.0                     Committed               uninstall      CAS Update
isw1                    10.5.0.20141125_10.5.0.5..0 Committed               install        InfoSphere_Warehouse
storagefw0              7.3.0.12                    Committed               install        StorageFW Update
storagefw1              1.4.0.8                     Committed               install        StorageFW Update
sanfw0                  v7.2.1d                     Committed               install        SANFW Update
netfw0                  7.9.12.0                    Committed               install        NetFW Update
netfw1                  7.9.11.0                    Committed               install        NetFW Update
```

appl_ls_sw command:

This command shows software level, compliance and other details of resources. Higher and lower compliance indicate about current level of software is higher or lower than what registered with latest committed update image.

Usage:

```
$ appl_ls_sw -help
Lists the software details of resources, in the setup.
Usage:
    appl_ls_sw -l <logical name> [-c|-v] [-h|-help]
    appl_ls_sw [-h|-help]

    Options:
        -l <logical name>  : Shows the software and firmware inventory for the specified resource.
        -c                 : Determine the product compliance for the prescribed solution level, for the specified resource.
Displays only the products that were found to be out of compliance.
        -v                 : Display the output in raw format
        -h|-help           : help
```

Examples:

Listing software detail of a server:

```
$ appl_ls_sw -l server0
NAME   VERSION
AIX    7100-03-07-1614
DB2    10.5.0.8..0
GPFS   4.2.1.0
HA_DB2 2.0.5.0
ISW    10.5.0.20151117
OQWT   41
TSA    4.1.0.3
```

Listing compliance of the server:

```
$ appl_ls_sw -l server0 -c
NAME VERSION                    COMPLIANCE-STATE
AIX  7100-05-01-1731            Higher
DB2  11.1.3.3.b.0               Higher
GPFS 4.2.3.7                    Higher
ISW  10.5.0.20151104_11.1.3.3.b.0 Lower
OQWT NA                         NA
TSA  4.1.0.4                    Higher
```

appl_start command:

appl_start command starts resources or software's on servers. This command will attempt to power on offline resources. If server status is on this command will start software's on servers.

Usage:

```
$ appl_start -help
Supports the power on operation for resources, in the setup.
Usage:
    appl_start [-l <resource name> [-h] | -m <module> [-h] | -r <resource type> [-h] | -s <sub-module> [-h]] [-i] [-h] [-g]

Options:
    -l <resource name>      : Apply the start or inventory operation on the specified logical resource name <resource name>.
    -m <module>             : Apply the start or inventory operation on all the server resources in the module specified in
<module>.
    -s <sub-module>         : Apply the start or inventory operation on all the server resources in the sub module specified
in <sub module type>.
    -r <resource type>      : Apply the start or inventory operation on all the resources in the resource class specified in
<resource type>.
    -i                      : Collects the resource inventory.
    -g                      : Start only GPFS on all the resources in the resource class or submodule or module or resource
name specified with
    -h                      : help
```

Examples:

Starts Appliance:

```
$ appl_start
Starting the product 'GPFS' on nodes '172.23.1.1 172.23.1.3'
Started the product 'GPFS' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'TSA' on nodes '172.23.1.1 172.23.1.3'
Started the product 'TSA' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'DB2' on nodes '172.23.1.1 172.23.1.3'
Started the product 'DB2' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'HA_ISW' on nodes '172.23.1.1 172.23.1.3'
Started the product 'HA_ISW' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'HA_DB2' on nodes '172.23.1.3 172.23.1.1'
Started the product 'HA_DB2' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'OPM' on nodes '172.23.1.3 172.23.1.1'
Started the product 'OPM' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'WAS' on nodes '172.23.1.3 172.23.1.1'
Started the product 'WAS' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'ISW' on nodes '172.23.1.3 172.23.1.1'
Started the product 'ISW' on nodes '172.23.1.3 172.23.1.1'
NAME            HOSTNAME              IP              MODULE          STATUS          DESCRIPTION
server0         kf5hostname05corp     9.114.12.242    Data            Online          IBM Power Express Operating System
server1         kf5hostname03corp     9.114.12.240    Foundation      Online          IBM Power Express Operating System
server2         kf5hostname07corp     9.114.12.246    Data            Online          IBM Power Express Operating System
server3         kf5hostname02corp     9.114.12.239    Foundation      Online          IBM Power Express Operating System
server4         kf5hostname04corp     9.114.12.241    Foundation      Online          IBM Power Express Operating System
server5         kf5hostname06corp     9.114.12.245    Data            Online          IBM Power Express Operating System
server6         kf5hostname01corp     9.114.12.238    Foundation      Online          IBM Power Express Operating System
server_fsp0     -                     -                               Online          IBM Power 810 Express CEC
server_fsp1     -                     -                               Online          IBM Power 810 Express CEC
server_fsp2     -                     -                               Online          IBM Power 810 Express CEC
server_fsp3     -                     -                               Online          IBM Power 810 Express CEC
server_fsp4     -                     -                               Online          IBM Power 810 Express CEC
hmc0                                  9.114.12.236                    Online          IBM Hardware Management Console
hmc1                                  9.114.12.237                    Online          IBM Hardware Management Console
storage0        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage1        -                     -                               Online          IBM FlashSystem 900 Storage
storage2        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage3        -                     -                               Online          IBM FlashSystem 900 Storage
storage4        -                     -                               Online          IBM Storwize V7000 FAB-1 Storage
storage5        -                     -                               Online          IBM FlashSystem 900 Storage
san0            -                     -                               Online          IBM System Storage Switch
san1            -                     -                               Online          IBM System Storage Switch
san2            -                     -                               Online          IBM System Storage Switch
san3            -                     -                               Online          IBM System Storage Switch
net0            -                     -                               Online          IBM System Networking RackSwitch
net1            -                     -                               Online          IBM System Networking RackSwitch
net2            -                     -                               Online          IBM System Networking RackSwitch
net3            -                     -                               Online          IBM System Networking RackSwitch
```

Start server resource type:

```
$ appl_start -r server_os
Starting the product 'GPFS' on nodes '172.23.1.1 172.23.1.3'
Started the product 'GPFS' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'TSA' on nodes '172.23.1.1 172.23.1.3'
Started the product 'TSA' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'DB2' on nodes '172.23.1.1 172.23.1.3'
Started the product 'DB2' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'HA_ISW' on nodes '172.23.1.1 172.23.1.3'
Started the product 'HA_ISW' on nodes '172.23.1.1 172.23.1.3'
Starting the product 'HA_DB2' on nodes '172.23.1.3 172.23.1.1'
Started the product 'HA_DB2' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'OPM' on nodes '172.23.1.3 172.23.1.1'
Started the product 'OPM' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'WAS' on nodes '172.23.1.3 172.23.1.1'
Started the product 'WAS' on nodes '172.23.1.3 172.23.1.1'
```

```
Starting the product 'ISW' on nodes '172.23.1.3 172.23.1.1'
Started the product 'ISW' on nodes '172.23.1.3 172.23.1.1'
Starting the product 'GPFS' on nodes '172.23.1.7 172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4'
Started the product 'GPFS' on nodes '172.23.1.7 172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4'
Starting the product 'TSA' on nodes '172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7 172.23.1.2'
Started the product 'TSA' on nodes '172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7 172.23.1.2'
Starting the product 'DB2' on nodes '172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6 172.23.1.2'
Started the product 'DB2' on nodes '172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6 172.23.1.2'
Starting the product 'HA_DB2' on nodes '172.23.1.2 172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6'
Started the product 'HA_DB2' on nodes '172.23.1.2 172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6'
Starting the product 'ISW' on nodes '172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7'
Started the product 'ISW' on nodes '172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7'
NAME        HOSTNAME              IP              MODULE         STATUS         DESCRIPTION
server0     kf5hostname05corp     9.114.12.242    Data           Online         IBM Power Express Operating System
server1     kf5hostname03corp     9.114.12.240    Foundation     Online         IBM Power Express Operating System
server2     kf5hostname07corp     9.114.12.246    Data           Online         IBM Power Express Operating System
server3     kf5hostname02corp     9.114.12.239    Foundation     Online         IBM Power Express Operating System
server4     kf5hostname04corp     9.114.12.241    Foundation     Online         IBM Power Express Operating System
server5     kf5hostname06corp     9.114.12.245    Data           Online         IBM Power Express Operating System
server6     kf5hostname01corp     9.114.12.238    Foundation     Online         IBM Power Express Operating System
```

appl_stop command:

This command can be used for resource restart, stop and software service stop on servers.

Usage :

```
$ appl_stop -h
Supports the power off operation for resources, in the setup.
Usage:
    appl_stop [-l <resource name> [-h] | -m <module> [-h] | -r <resource type> [-h] | -s <sub-module> [-h]] [ -q | -f | -R ]
[-g] [-h]

Options:
    -l <resource name>    : Apply the stop, reboot, or quiesce operation on the specified logical resource name <resource
name>
    -m <module>           : Apply the stop, reboot, or quiesce operation on all the server resources in the module specified
in <module>.
    -r <resource type>    : Apply the stop, reboot, or quiesce operation on all the resources in the resource class specified
in <resource type>.
    -s <sub-module>       : Apply the stop, reboot, or quiesce operation on all the resources in the sub module specified in
<sub module type>.
    -q                    : Quiesce the server(s)
    -f                    : Forces the power off
    -R                    : Reboot the resource(s)
    -g                    : stops GPFS on all the resources in the resource class or submodule or module or resource name
specified with
    -h                    : help
```

Examples:

Command to quiesce all software services

```
$ appl_stop -q
Stopping the product 'ISW' on nodes '172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7'.
Stopped the product 'ISW' on nodes '172.23.1.2 172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7'.
Stopping the product 'HA_DB2' on nodes '172.23.1.2 172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6'.
Stopped the product 'HA_DB2' on nodes '172.23.1.2 172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6'.
Stopping the product 'DB2' on nodes '172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6 172.23.1.2'.
Stopped the product 'DB2' on nodes '172.23.1.7 172.23.1.4 172.23.1.5 172.23.1.6 172.23.1.2'.
Stopping the product 'TSA' on nodes '172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7 172.23.1.2'.
Stopped the product 'TSA' on nodes '172.23.1.5 172.23.1.6 172.23.1.4 172.23.1.7 172.23.1.2'.
NAME            HOSTNAME              IP              MODULE         STATUS         DESCRIPTION
server0         kf5hostname05corp     9.114.12.242    Data           Online         IBM Power Express Operating System
server1         kf5hostname03corp     9.114.12.240    Foundation     Online         IBM Power Express Operating System
server2         kf5hostname07corp     9.114.12.246    Data           Online         IBM Power Express Operating System
server3         kf5hostname02corp     9.114.12.239    Foundation     Online         IBM Power Express Operating System
server4         kf5hostname04corp     9.114.12.241    Foundation     Online         IBM Power Express Operating System
server5         kf5hostname06corp     9.114.12.245    Data           Online         IBM Power Express Operating System
server6         kf5hostname01corp     9.114.12.238    Foundation     Online         IBM Power Express Operating System
server_fsp0     -                     -                              Online         IBM Power 810 Express CEC
server_fsp1     -                     -                              Online         IBM Power 810 Express CEC
server_fsp2     -                     -                              Online         IBM Power 810 Express CEC
server_fsp3     -                     -                              Online         IBM Power 810 Express CEC
server_fsp4     -                     -                              Online         IBM Power 810 Express CEC
hmc0                                  9.114.12.236                   Online         IBM Hardware Management Console
hmc1                                  9.114.12.237                   Online         IBM Hardware Management Console
storage0        -                     -                              Online         IBM Storwize V7000 FAB-1 Storage
storage1        -                     -                              Online         IBM FlashSystem 900 Storage
storage2        -                     -                              Online         IBM Storwize V7000 FAB-1 Storage
storage3        -                     -                              Online         IBM FlashSystem 900 Storage
storage4        -                     -                              Online         IBM Storwize V7000 FAB-1 Storage
storage5        -                     -                              Online         IBM FlashSystem 900 Storage
san0            -                     -                              Online         IBM System Storage Switch
san1            -                     -                              Online         IBM System Storage Switch
san2            -                     -                              Online         IBM System Storage Switch
san3            -                     -                              Online         IBM System Storage Switch
net0            -                     -                              Online         IBM System Networking RackSwitch
net1            -                     -                              Online         IBM System Networking RackSwitch
net2            -                     -                              Online         IBM System Networking RackSwitch
net3            -                     -                              Online         IBM System Networking RackSwitch
```

Rebooting server:

```
$ appl_stop -l server0 -R
Checking the status for the resource 'server0'.
Restarting the resource, 'server0'. This may take long time.
The restart operation is successful for the server server0.
Retrieving and updating the status in the database for 'server0'.
Retrieving and updating the child node(s) status in the database for 'server0'.
NAME        HOSTNAME              IP              MODULE      STATUS         DESCRIPTION
server0     kf5hostname05corp     9.114.12.242    Data        Online         IBM Power Express Operating System
```

validate_passwords command:

This command checks and displays if passwords stored in PDOA data are still valid. Passwordless SSH or SSH configuration should be proper to let this command work properly. Sometime even if password is correct but ssh does not work properly this command shows password status as NA.

Usage:

```
$ validate_passwords -h

usage:

    validate_passwords [-h ]
    validate_passwords -a [-l]
    validate_passwords -i <ip_address> -t <type> [-l]

Options:

    -h                  : Print Usage message.
    -a                  : Validates all resources passwords
    -l                  : Display report
    -i                  : Validate for given ip address
    -t                  : [hmc | server_os | net| san]
```

Example:

```
$ validate_passwords -a -l
NAME                IP ADDRESS          PASSWORD_STATUS     DESCRIPTION
hmc0                172.23.1.245        IN_SYNC             Password is correct
hmc1                172.23.1.246        IN_SYNC             Password is correct
server6             172.23.1.1          IN_SYNC             Password is correct
server3             172.23.1.2          IN_SYNC             Password is correct
server5             172.23.1.6          IN_SYNC             Password is correct
server2             172.23.1.7          IN_SYNC             Password is correct
server1             172.23.1.3          IN_SYNC             Password is correct
server0             172.23.1.5          IN_SYNC             Password is correct
server4             172.23.1.4          IN_SYNC             Password is correct
net3                172.23.1.251        IN_SYNC             Password is correct
net1                172.23.1.253        IN_SYNC             Password is correct
net0                172.23.1.254        IN_SYNC             Password is correct
net2                172.23.1.252        IN_SYNC             Password is correct
san0                172.23.1.161        IN_SYNC             Password is correct
san2                172.23.1.163        IN_SYNC             Password is correct
san3                172.23.1.164        IN_SYNC             Password is correct
san1                172.23.1.162        IN_SYNC             Password is correct
storage1            172.23.1.205        IN_SYNC             Password is correct
storage2            172.23.1.206        IN_SYNC             Password is correct
storage4            172.23.1.208        IN_SYNC             Password is correct
storage3            172.23.1.207        IN_SYNC             Password is correct
storage5            172.23.1.209        IN_SYNC             Password is correct
storage0            172.23.1.204        IN_SYNC             Password is correct
```