DASH CLI v3.0 User Guide

Contents

1 Introduction

The DASH CLI v3.0 is a command line application used to perform out of band management tasks (power management, asset inventory, alerts, etc.) using DMTF DASH specifications (DASH CLI v3.0 supports 2.33 DMTF schema)

Main characteristics of CLI are,

- Provides a scripting interface to the DASH APIs. The CLI is provided with sub-commands and targets. Each target has its own sub-commands that are specific to that particular target.
- Run as a shell.

2 Pre-requisites

The DASH Systems must be are provisioned before DASH CLI commands are tried on them. Install below environment on linux to run DASH CLI commands successfully.

- Install pre-requisite using: **bash env.sh** to setup environment**.**
- Or Manually install libSDL, mono, curl and putty.
- README file is given along with package for more details.

3 DASH CLI Version

The DASH CLI version can be checked by typing the command:

```
dashcli version
```

4 DASH CLI Command Format

The below DASH CLI Options section gives a set of usage/description of DASH CLI commands section, supported in this release.

```
dashcli [options] commands
```

Options can be found in section 5. Commands can be found in section 6.

5 DASH CLI Options

Option	Usage	Description
help	help	Display help
version	version	Show DASH CLI version
-h	<host>	Host name or IP address
-p	<port(s)>	Server Port(s)(For discovery more than one ports can be specified separated by commas)
-u	<username>	User Name
-P	<password>	Password
-a	<digest|basic|gss>	Authentication Type [default=digest]
-S	<http|https>	HTTP Scheme [default=http]
-C		Ignore certificate/do not verify certificate (To verify, certificate should be stored in certificate store)
-t	<targetpath>	Target Path
-s	<startip>	Start IP address for discovery (only for discovery)
-e	<endip>	End IP address for discovery (only for discovery)
-T	<timeout>	Timeout in seconds
-v	<1|2>	Verbose Level [1 - More explanation on error or 2-Dump WSMAN data]
-o	<verboseoutput>	Verbose output file to dump wsman data [default is stdout].

6 DASH CLI Commands

Command	Description
help	Display help
version	Show DASHCLI version
enumerate	Enumerate targets
discover	Perform discovery
indication	Indication commands(subscribe for indication, create filters/destinations
listenevents	Listen for events/alerts
textredirection	Configure Text Redirection services
usbredirection	Configure USB Redirection services
raw	Issue raw commands
account	Creates, Deletes and Manages the Account
roles	Manages the Roles
shell	Launch interactive DASH shell
capabilities	Display Capabilities of a target
softwareupdate	Update software of the managed element

7 DASH CLI Targets

DASH Command	Description
alertdestination	List the subscribed alerts and the destination information. Delete the subscribed alerts. (DSP1054 - Indications Profile)
asset	List the physical assets information. (DSP1011 - Physical Asset Profile)
battery	List the battery information. It is used to performs Battery operations: Enable, Disable, Test or Recharge Battery. (DSP1030 - Battery Profile)
bios	List the BIOS information. Other operations: Set BIOS Attributes. (DSP1061 - BIOS Management Profile)
bootconfig	List the boot configuration information. It is used to performs Boot Config operations: Change Boot order, set next boot, set default boot, add new boot configuration or Delete and existing Boot Configuration. (DSP1012 - Boot Control Profile)
computersystem	List the computer system information. It is also used to read Computer System's Power, Processor, Sensor, Software, Asset, Fan, Boot Configuration & User Profiles. It is also used by subcommands to add user, boot config or create Opaque Management Data. (DSP1058 - Base Desktop Mobile)
dhcpclient	List the DHCP Client information. (DSP1037 - DHCP Client Profile)
dnsclient	List the DNS Client information. (DSP1038 - DNS Client Profile)
ethernetport	List the ethernet port information. (DSP1014 - Ethernet Port Profile)
fan	List the fan information. It is also used to Set Fan speed and provide information regarding fan's assets. (DSP1013 - Fan Profile)
filtercollection	List the filter collection information. It is used to performs Filter Collection operations: Show All Filters and Delete. (DSP1054 - Indications Profile)
indicationfilter	List the indication filter information. Other operations: Delete. (DSP1054 - Indications Profile)
indicationsubscription	List the indication subscription information. It is used to performs Indication Subscription operations: Renew and Unsubscribe. (DSP1054 - Indications Profile)
indicatorled	List the indicator LED information. (DSP1074 - Indicator LED Profile)
ipconfiguration	List the IP Configuration information. (DSP1116 - IP Configuration Profile)
ipinterface	List the IP interface information. (DSP1036 - IP Interface Profile)
kvmredirection	List the KVM Redirection information. It is used to performs KVM operations: Enable, Disable, Connect and Start KVM. (DSP1076 - KVM Redirection Profile)
logentry	List the log entry information. (DSP1010 - Record Log Profile)
mediaredirection	List the media redirection information. (DSP1086 - Media Redirection)
memory	List the memory information. It is also used to provide information regarding memory's assets. (DSP1026 - System Memory Profile)
networkport	List the network port information. (DSP1035 - Host LAN Network Port Profile)
opaquemanagementdata	List the opaque management data information. It is used to perform Opaque Management Data operations: Read, Write, Import From URI, Export From URI, Reassign Owner, Assign Access, Lock and Delete. (DSP1070 - Opaque Management Data Profile)
operatingsystem	List the operating system information. (DSP1029 - OS Status Profile)
computersystem power	List the power information. Manage Power states of DASH system. (DSP1027 - Power State Management)
pcidevice	List the PCI Device information. (DSP1075 - PCI Device Profile)
physicalcomputersystemview	List the physical computer system view information. (DSP1108 - Physical Computer System View Profile)
platformwatchdog	List the platform watchdog information. (DSP1040 - Platform Watchdog Profile)

powersupply	List the power supply information. (DSP1015 - Power Supply Profile)
processor	List the processor information. (DSP1022 - CPU Profile)
recordlog	List the record log information. (DSP1010 - Record Log Profile)
registeredprofile	List the registered profile information. (DSP1033 - Profile Registration Profile)
role	List the role information. It is used to perform Role operations: List Permissions, Set Permissions, Add Permissions, Remove Permissions and Delete. (DSP1039 - Role Based Authorization Profile)
sensor	List the sensor information. (DSP1009 - Sensors Profile)
serviceprocessor	List the Service Processor information. (DSP1018 - Service Processor Profile)
software	List the software information. It is also used to update the firmware on the system. (DSP1023 - Software Inventory; DSP1025 - Software Update Profile)
textredirection	List the text redirection information. It is used to performs Text Redirection operations: Activate, Disable, Connect, Disconnect and Start. (DSP1024 - Text Console Redirection Profile)
usbredirection	List the USB redirection information. It is used to perform USB Redirection operations: Activate, Disable, Connect, Disconnect and Start VMR. (DSP1077 - USB Redirection Profile)
user	List the user information. It is used to perform User operations: Create, Enable, Disable, Assign Role, Remove Role, Change Password and Delete. (DSP1034 - Simple Identity Management Profile 4)
discovery	List the discovery information of DASH System(DSP1034 - Simple Identity Management Profile)

8 DASH CLI Help

Help information:

```
dashcli help <target>
```

The help command can be used on sub-commands as well as target sub-commands.

Example:

```
dashcli help computersystem

dashcli help computersystem opaquemanagementdata

dashcli help computersystem opaquemanagementdata create
```

Context help is also shown when user types an incomplete command.

Example:

```
dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass -t
computersystem[0]

dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass -t
computersystem[0] power

dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass -t
opaquemanagementdata[0]

dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass -t
computersystem[0] opaquemanagementdata
```

9 DASH CLI Usage

Few points to consider when trying different DASH CLI commands.

1) All examples of DASH CLI are illustrated with https and digest authentication.

```
dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t
computersystem[0] power status
```

Alternatively, HTTP transport or GSS authentication can be used.

a) HTTP and digest

```
dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass -t
computersystem[0] power status
```

b) HTTPS and digest with SSL certificate ignored

```
dashcli -h dash-system -p 664 -S https -C -a digest -u admin -P adminpass -t
computersystem[0] power status
```

c) HTTP and GSS

```
dashcli -h dash-system -p 623 -S http -a gss -u DOMAIN\User -P userpass -t
computersystem[0] power status
```

d) HTTPS and GSS

```
dashcli -h dash-system -p 664 -S https -a gss -u DOMAIN\User -P userpass -t
computersystem[0] power status
```

e) HTTP and Single Sign-on

```
dashcli -h dash-system -p 623 -S http -a gss -t computersystem[0] power status
```

f) HTTPS and Single Sign-on

```
dashcli -h dash-system -p 664 -S https -a gss -t computersystem[0] power status
```

2) The examples are for HTTPS and assume that SSL certificates are valid & working. To ignore the certificates, provide –C option. For usage, refer 9.3.2 comments section. Refer the document 'DASHCertificates.pdf' in the 'docs' folder of DASH CLI installation, on using self-signed certificates for HTTPS communication.

3) Few commands may not give results on certain DASH systems. Check the capabilities of the DASH system and verify if the functionality is supported by the DASH system.

4) The default port is 623, the default transport is HTTP and the default authentication scheme is digest.

5) The standard DASH HTTPS port is 664.

6) Few commands require elevated privileges. DASH CLI must be run as administrator for those commands to succeed.

Sl No	Test Case	Usage	Comments
9.1	**Discovery commands**		
9.1.1	DASH discovery for a given host	`dashcli –h dash-system discover`	
9.1.2	DASH discovery for a given IP	`dashcli -h 192.168.1.111 discover`	
9.1.3	DASH discoery with digest authentication	`dashcli -s 192.168.0.4 -e 192.168.0.15 -p 623 -S http -a digest -u admin -P adminpass discover`	
9.1.4	DASH discovery with given IP range	`dashcli -s 192.168.1.100 -e 192.168.1.110 discover`	Discover command is over HTTP transport by default
9.1.5	DASH discovery on multiple ports	`dashcli -s 192.168.0.4 -e 192.168.0.15 -p 623,664,8889 discover`	
9.1.6	Discover info	`dashcli -h dash-system discover info`	Perform DASH discovery & list security profiles supported
9.2	**Enumerate commands**		
9.2.1	Enumerate Alert Destination	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate alertdestination`	
9.2.2	Enumerate Asset	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate asset`	
9.2.3	Enumerate Battery	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate battery`	
9.2.4	Enumerate BIOS	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate bios`	
9.2.5	Enumerate Boot Config	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate bootconfig`	
9.2.6	Enumerate Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate computersystem`	
9.2.7	Enumerate DHCP Client	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate dhcpclient`	
9.2.8	Enumerate DNS Client	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate dnsclient`	
9.2.9	Enumerate Ethernet Port	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate ethernetport`	
9.2.10	Enumerate Fan	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate fan`	
9.2.11	Enumerate Filter Collection	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P`	

		adminpass enumerate filtercollection	
9.2.12	Enumerate Indication Filter	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate indicationfilter	
9.2.13	Enumerate Indication Subscription	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate indicationsubscription	
9.2.14	Enumerate Indicator LED	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate indicatorled	
9.2.15	Enumerate IP Interface	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate ipinterface	
9.2.16	Enumerate IP Configuration	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate ipconfiguration	
9.2.17	Enumerate KVM Redirection	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate kvmredirection	
9.2.18	Enumerate Log Entry	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate logentry	
9.2.19	Enumerate Media Redirection	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate mediaredirection	
9.2.20	Enumerate Memory	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate memory	
9.2.21	Enumerate Network Port	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate networkport	
9.2.22	Enumerate Opaque Management Data	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate opaquemanagementdata	
9.2.23	Enumerate Operating System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate operatingsystem	
9.2.24	Enumerate Physical Computer System View	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate physicalcomputersystemview	
9.2.25	Enumerate Platform Watchdog	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate platformwatchdog	
9.2.26	Enumerate Power Supply	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate powersupply	
9.2.27	Enumerate Processor	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate processor	

9.2.28	Enumerate Record Log	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate recordlog`	
9.2.29	Enumerate Registered Profile	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate registeredprofile`	
9.2.30	Enumerate Role	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate role`	
9.2.31	Enumerate Sensor	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate sensor`	
9.2.32	Enumerate Service Processor	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate serviceprocessor`	
9.2.33	Enumerate Software	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate software`	
9.2.34	Enumerate Software Installation Service	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate softwareinstallationservice`	
9.2.35	Enumerate Software Installation Service Capabilities	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate softwareinstallationservicecapabilities`	
9.2.36	Enumerate Text Redirection	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate textredirection`	
9.2.37	Enumerate USB Redirection	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate usbredirection`	
9.2.38	Enumerate User	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass enumerate user`	
9.3 Capabilities commands			
9.3.1	Capabilities using http transport & digest account	`dashcli -h dash-system -p 623 -S http -a digest -u admin -P adminpass capabilities`	Interactive command. HTTP transport must be used only in lab environment for testing purpose. Usage of HTTPS is recommended.
9.3.2	Capabilities using https transport & digest account	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass capabilities`	Interactive command. Use -C option to ignore self-signed or expired certificate. `dashcli -h dash-system -p 664 -S https -C -a digest -u admin -P adminpass capabilities`
9.3.3	Capabilities using https transport & active directory account	`dashcli -h dash-system -p 664 -S https -a gss -u DOMAIN\User -P userpass capabilities`	Interactive command. dash-system must be configured and enabled for active directory authentication

9.3.4	Capabilities using active directory single sign on	`dashcli -h dash-system -p 664 -S https -a gss capabilities`	Interactive command. Logged-in user's authority is used for authentication. This mechanism offers highest level of security and usage of this format is highly recommended. dash-system must be configured and enabled for active directory authentication
9.4	**Alert Destination target commands**		
9.4.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t alertdestination[0] show`	
9.4.2	Delete	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t alertdestination[0] delete`	
9.5	**Asset target commands**		
9.5.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t asset[0] show`	
9.6	**Battery target commands**		
9.6.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t battery[0] show`	
9.6.2	Enable	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t battery[0] enable`	
9.6.3	Disable	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t battery[0] disable`	
9.6.4	Test	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t battery[0] test`	
9.6.5	Recharge	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t battery[0] recharge`	
9.7	**BIOS target commands**		
9.7.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bios[0] show`	
9.7.2	Set Attribute	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bios[0] setattribute <attributename> <value_1> [<value_2>... <value_n>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bios[0] setattribute "DMTF:Network Boot ROM" Enable`
9.8	**Boot Config commands**		
9.8.1	Add	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] bootconfig add <existbootconfiginstancenum> <defaultboot>, <nextboot> <bootorderlistfromtemplateinstance>`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] bootconfig add 2 0 1`
9.9	**Boot Config target commands**		

9.9.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] show	
9.9.2	Delete	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] delete	
9.9.3	Set Default	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] setdefault	
9.9.4	Set Next	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] setnext	
9.9.5	Set Next Single Use	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] setnextsingleuse	
9.9.6	Change Boot Order	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] changebootorder <newbootorderlist...>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t bootconfig[0] chagebootorder 2 1 3
9.10 Computer System target command			
9.10.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] show	
9.10.2	Enumerate Asset within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate asset	
9.10.3	Enumerate Boot Config within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate bootconfig	
9.10.4	Enumerate Fan within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate fan	
9.10.5	Enumerate Memory within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate memory	
9.10.6	Enumerate Power Supply within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate powersupply	
9.10.7	Enumerate Processor within Computer System	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate processor	

9.10.8	Enumerate Sensor within Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate sensor`	
9.10.9	Enumerate Software within Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate software`	
9.10.10	Enumerate User within Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] enumerate user`	
9.10.11	Show Processor within Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0]/processor[0] show`	Like this target commands can be continued until valid targets are present
9.10.12	Show Fan within Processor within Computer System	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0]/processor[0]/fan[0] show`	Like this target commands can be continued until valid targets are present
9.11 DHCP Client target commands			
9.11.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t dhcpclient[0] show`	
9.12 DNS Client target commands			
9.12.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t dnsclient[0] show`	
9.13 Ethernet Port target commands			
9.13.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t ethernetport[0] show`	
9.14 Fan target commands			
9.14.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t fan[0] show`	
9.14.2	Enumerate Asset within Fan	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t fan[0] enumerate asset`	
9.15 Filter Collection target commands			
9.15.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t filtercollection[0] show`	
9.15.2	Show All Filters	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t filtercollection[0] showallfilters`	
9.15.3	Delete	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P`	

		adminpass -t filtercollection[0] delete	
9.16 Indication commands			
Note: Destination URI is the same URI as displayed by running "listenevents" command from 9.16.6 as "URI for events"			
9.16.1	Create Filter	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication createfilter <querylanguage> <querystring>	dashcli -h dash-system -u admin -P adminpass indication createfilter CQL "SELECT * FROM CIM_AlertIndication"
9.16.2	Create Destination	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication createdestination <destination_uri>	dashcli -h dash-system -u admin -P adminpass indication createdestination http://192.168.0.101:8080/event sink
9.16.3	Static Subscribe	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication staticsubscribe <destination_uri> <subscribetype> <expirationtimeout> <filter_instance>	dashcli -h 192.168.1 .100 -p 664 -S https -a digest - admin -P adminpass indication staticsubscribe http://192.168.0.101:8080/event sink push 0 1
9.16.4	Dynamic Subscribe	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication dynamicsubscribe <destination_uri> <subscribetype> <expirationtimeout> <<filter_instance> | <<querylanguage> <queryfilter> [<resource_uri>]>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication dynamicsubscribe http://192.168.1.101:8080/event sink push 0 CQL "SELECT * FROM CIM_AlertIndication"
9.16.5	Collection Subscribe	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication collectionsubscribe <destination_uri> <subscribetype> <expirationtimeout> <filtercollection_instance>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication collectionsubscribe http://192.168.0.101:8080/event sink push 0 1
9.16.6	Listen Events	dashcli [-p <port>] listenevents	Interactive command.
9.16.7	Subscribe	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass indication subscribe	Interactive command.
9.17 Indication Filter target commands			
9.17.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t indicationfilter[0] show	
9.17.2	Delete	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t indicationfilter[0] delete	
9.18 Indication Subscription target commands			
9.18.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t indicationsubscription[0] show	
9.18.2	Renew	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t

		indicationsubscription[0] renew <renewtime>	indicationsubscription[0] renew 2009-01-07T03:17:31-06:00
9.18.3	Unsubscribe	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t indicationsubscription[0] unsubscribe	
9.19 Indicator LED target commands			
9.19.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t indicatorled[0] show	
9.20 IP Configuration target commands			
9.20.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t ipconfiguration[0] show	
9.21 IP Interface target commands			
9.21.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t ipinterface[0] show	
9.22 KVM Redirection target commands			
9.22.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t kvmredirection[0] show	
9.22.2	Enable	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t kvmredirection[0] enable	
9.22.3	Disable	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t kvmredirection[0] disable	
9.22.4	Connect	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t kvmredirection[0] connect	
9.22.5	Start KVM	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t kvmredirection[0] startkvm	
9.23 Log Entry target commands			
9.23.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t logentry[0] show	
9.24 Media Redirection target commands			
9.24.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t mediaredirection[0] show	
9.25 Memory target commands			
9.25.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t memory[0] show	
9.25.2	Enumerate Assets within Memory	dashcli -h dash-system -p 664 -S https -a digest -u admin -P	

		adminpass -t memory[0] enumerate asset	
9.26 Network Port target commands			
9.26.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t networkport[0] show	
9.27 Opaque Management Data commands			
9.27.1	Create	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] opaquemanagementdata create <name> <size> <[<storagelocation>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] opaquemanagementdata create myomd 222
9.28 Opaque Management Data target commands			
9.28.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] show	
9.28.2	Read Data	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] read <offsettoread> <bytestoread> <[<locktoken>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] read 1000 5
9.28.3	Write Data	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] write <offsettowrite> <datatowrite> <[<locktoken>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] write 0 abcd
9.28.4	Import From URI	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] importfromuri <offsettowrite> <bytestowrite> <URI>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] importfromuri 0 100 http://dash.com
9.28.5	Export From URI	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] exportfromuri <offsettowrite> <bytestowrite> <URI>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] exportfromuri 0 100 http://dash.com
9.28.6	Reassign Owner	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] reassignowner <username>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] reassignowner guest
9.28.7	Assign Access	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] assignaccess <username> <activities>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] assignaccess Guest Read
9.28.8	Lock	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] lock <true/false>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t opaquemanagementdata[0] lock true
9.28.9	Delete	dashcli -h dash-system -p 664 -S https -a digest -u admin -P	

		adminpass -t opaquemanagementdata[0] delete	
9.29 Operating System target commands			
9.29.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t operatingsystem[0] show	
9.30 PCI Device target commands			
9.30.1	Status	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t pcidevice[0] show	
9.31 Physical Computer System View target commands			
9.31.1	Status	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t physicalcomputersystemview[0] show	
9.32 Platform Watchdog target commands			
9.32.1	Status	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t platformwatchdog[0] show	
9.33 Power commands			
9.33.1	Status	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] power status	
9.33.2	Control	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] power [on | off |cycle | reset]	
9.33.3	Available States	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] power availablestates	
9.33.4	Supported States	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] power supportedstates	
9.34 Power Supply target commands			
9.34.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t powersupply[0] show	
9.34.2	Enumerate Assets within Power Supply	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t powersupply[0] enumerate asset	
9.35 Processor target commands			
9.35.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t processor[0] show	
9.35.2	Enumerate Memory within Processor	dashcli -h 192.168.0.4 -S https -p 664 -u admin -P adminpass -C -t processor[0] enumerate memory	
9.35.3	Enumerate Sensor within Processor	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t processor[0] enumerate sensor	

9.35.4	Enumerate Fan within Processor	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t processor[0] enumerate fan`	
9.35.5	Enumerate Asset within Processor	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t processor[0] enumerate asset`	
9.36 Record Log target commands			
9.36.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t recordlog[0] show`	
9.37 Registered Profile target commands			
9.37.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t registeredprofile[0] show`	
9.37.2	Is Advertised	`dashcli -h dash-system -u admin -p 664 -S https -a digest -P adminpass registeredprofile isadvertised "fan"`	
9.38 Role target commands			
9.38.1	Show	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] show`	
9.38.2	List Permissions	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] listpermission`	List the privileges supported for that role instance.
9.38.3	Set Permissions	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] setpermission <permission_1> [<permission_2>… <permission_n>]`	Setpermission will overwrite existing permissions. E.g. `dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] setpermission "execute,CPU" "write,Sensors"`
9.38.4	Add Permissions	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] addpermission <permission_1> [<permission_2>… <permission_n>]`	Addpermissions will append to existing permissions. E.g. `dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] addpermission \”execute,SP Login\” \”write, Clear Log\” \”execute, KVM redirection\”`
9.38.5	Remove Permissions	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] removepermission <permission_1> [<permission_2>… <permission_n>]`	Removepermissions will remove the specified permission leaving the rest intact. E.g. `dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin –t role[0] removepermission "execute,CPU" "write,Sensors"`
9.38.6	Roles Manage	`dashcli –h 192.168.1.100 -p 664 -S https –u admin –P admin roles manage`	Interactive command. Performs all role related operations in single command
9.39 Sensor target commands			
9.39.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t sensor[0] show`	

9.39.2	Reading	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t sensor[0] reading`	
9.39.3	Set Threshold	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t sensor[0] setthreshold lnc|unc|lc|uc|lf|uf <thresholdvalue>`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t sensor[0] setthreshold lnc 100`
9.40 Service Processor target commands			
9.40.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t serviceprocessor[0] show`	
9.41 Software target commands			
9.41.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t software[0] show`	
9.41.2	Install	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t software[0] install <softwarepath>`	Software Path format: `http://{ip-address}[:{port}]/{path-to-firmware}/{firmware}`
9.42 Software Update commands			
9.42.1	Start	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass softwareupdate start`	Interactive command. Updates platform software / firmware
9.43 Text Redirection target commands			
9.43.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t textredirection[0] show`	
9.43.2	Activate	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t textredirection[0] activate`	
9.43.3	Disable	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t textredirection[0] disable`	
9.43.4	Start	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t textredirection[0] start`	
9.44 Text Redirection commands			
9.44.1	Connect	`dashcli -h dash-system -p 664 -S https -a digest textredirection connect`	Interactive command. Performs Text redirection with single command. Note: For SSH, one-time-use password is used, if this option is enabled in the DASH System.
9.44.2	Disconnect	`dashcli -h dash-system -p 664 -S https -a digest textredirection disconnect`	Interactive command. Disconnects a text redirection session
9.45 USB Redirection target commands			
Note: Check the 'Integrated web server usage', in section 10 of this document for advanced settings of the integrated web server.			
9.45.1	Show	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P`	

		adminpass -t usbredirection[0] show	
9.45.2	Activate	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t usbredirection[0] activate	
9.45.3	Disable	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t usbredirection[0] disable	
9.45.4	Start VMR	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t usbredirection[0] startvmr <isopath> <true/false>	With Integrated Web server: dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t usbredirection[0] startvmr C:\dos.iso true With Standalone Web server: dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t usbredirection[0] startvmr http://10.138.130.122/dos.iso false
9.46 USB Redirection commands			
9.46.1	Connect	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass usbredirection connect	Interactive command. Perform USB redirection with single command.
9.46.2	Disconnect	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass usbredirection disconnect	Interactive command. Disconnects the usbredirection session
9.47 User commands			
9.47.1	Add	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] user add <user_id> <password>[<organizationname>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t computersystem[0] user add user1 user1pass
9.48 User target commands			
9.48.1	Show	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] show	
9.48.2	Delete	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] delete	
9.48.3	Assign Roles	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] assignroles <rolename_1> [<rolename_2> ... <rolename_n>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] assignroles Admin
9.48.4	Remove Roles	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] removeroles <rolename_1> [<rolename_2> ... <rolename_n>]	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] removeroles Admin
9.48.5	Change Password	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] changepassword <password>	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass -t user[0] changepassword testpasswd
9.48.6	Account Manage	dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass account <manage>	Interactive command. Performs all account related operations in single command

9.49 Shell option			

9.49.1	Shell	`dashcli shell`	Interactive command. Run DASH CLI in shell mode. For instance to enumerate computersystem in shell mode, try this command:
			`dashcli shell`
			`-h dash-system -p 664 -S https`
			`-a digest -u admin -P adminpass`
			`enumerate computersystem`

9.50 Raw commands			
9.50.1	Enumerate Instance Names	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw enumerateinstancenames|ein <classname> [<namespace>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw enumerateinstancenames CIM_ComputerSystem`
9.50.2	Enumerate Instances	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw enumerateinstances|ei <classname> [<namespace>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw enumerateinstances CIM_RegisteredProfile root/interop`
9.50.3	Get Instance	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw getinstance|gi <classuri> [<namespace>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw getinstance http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_RegisteredProfile?InstanceID="desktop" root/interop`
9.50.4	Set Instance	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw setinstance|si <classuri> <property_name_value_pairs> [<namespace>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw setinstance http://schemas.dmtf.org/wbem/wscim/1/cim-schema/2/CIM_Account?CreationClassName="CIM_Account",Name="account_0",SystemName="remote",SystemCreationClassName="CIM_ComputerSystem" "OrganizationName=AMD" root/interop`
9.50.5	Invoke	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw invoke|im <classuri> <method_name> <argument_name_value_pairs> [<namespace>]`	`dashcli -h dash-system -p 664 -S https -a digest -u admin -P adminpass raw invoke http://schemas.dri.org/wbem/wscim/1/cim-schema/2/DRI_PowerManagementService?Name=pwrmgrservice1,CreationClassName=DRI_PowerManagementService,SystemName=host,SystemCreationClassName=DRI_ComputerSystem RequestPowerStateChange "PowerState=2" root/interop`

10 USB Redirection: Integrated web server usage

This section is about advanced settings for integrated web server, which might be used for USB Redirection commands. While defaults may be appropriate for most users, parameters such as listening port (ports) may be modified as required.

DASH CLI comes packaged with Mongoose web server for mounting ISO while performing USB Redirection. The configuration setting of the web server is stored in file pointed by the environment variable 'MONGOOSE_CONF'.
e.g., `MONGOOSE_CONF=C:\mongoose.conf`

On Windows systems, when USB Redirection 'Connect' is performed, the web server starts as Windows service. The name of this service is 'DASHWebServer', and startup-type is set to automatic. This service can be managed by Windows Services console.

DASHWebServer service can be controlled from command prompt. The options are:

Stop service	`webserver -s`
Start service	`webserver -r`
Uninstall service	`webserver -u`
Install service	`webserver -i`

On Linux system, the web server starts as daemon process and can be listed by the command,

```
ps –eaf | grep webserver
```

Note: The port listed in 'mongoose.conf' must be added to firewall exception list. Check the firewall documentation for details.

11 Appendix

11.1 Using self-signed certificates for HTTPS communication

Refer the document 'DASHCertificates.pdf' in the 'docs' folder of DASH CLI installation.

11.2 Active Directory authentication setup

Refer the document 'DASHActiveDirectory.pdf' in the 'docs' folder of DASH CLI installation.

11.3 Developer Mode Usage

Refer the document 'LinuxDASHCLIDeveloperGuide.pdf' in the 'docs' folder of Linux DASH CLI installation.

11.4 Discussion forum link

Link: http://www.amd.com/DASH

11.5 DASH support email

Email: dashsupport@amd.com

Note: DASH CLI is based on the DMTF DASH specification. Some commands might not be supported by a given platform. Check the platform documentation on the DASH support.

Note: profile "softwareupdate" is not supported on linux system.