AMD

Developer Guide

(Version 1.1)

for

AMD

Linux DASH CLI

The contents of this document are provided in connection with Advanced Micro Devices, Inc. ("AMD") products.

Trademarks

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Abbreviations

- **DASH: D**esktop Mobile **A**rchitecture for **S**ystem **H**ardware, the new DMTF Commercial Client management standard produced by the DMTF DMWG. Specifies the transport, management protocol (WS-Man), and DMTF CIM profiles used to manage desktop/mobile PC. A Dash Capable System is a computer system that conforms to the DMTF DASH standard.
- **DMTF: D**istributed **M**anagement **T**ask **F**orce, the industry organization developing system management standards such as DASH and WS-Management.
- **URI**: **U**niform **R**esource **I**dentifier
- **Out-of-band management:** Management tasks that are performed independent of the power or OS state on the managed client or system.

Revision History

Date	Revision	Description
November 21st 2019	1.0	Final draft for DASH CLI 2.5 release.
July 6th 2020	1.1	Final draft for DASH CLI 3.0 release.

Chapter 1: Introduction

DASH CLI supports developer mode, where in 3rd party consoles can pass inputs in JSON and receive outputs in JSON. The output is compliant with Redfish schema. The feature has been developed with focus on developer ease of use in mind.

The Developer Options are made available in 2 modes:
1) ji/jo mode
2) jdo mode

1.1 JI/JO mode

Here ji specifies the input file, with has commands in json format. jo is the output file, where the results are written in Redfish json format. 3rd party consoles have to create a request JSON file and pass it for ji option. The file specified by jo option will have the output written by DASH CLI.

Eg:
```
dashcli.exe -ji discover.json -jo output_discovery.json
```
If the input file discover.json has the content:
```
{"h":"dash-system","Commands":["discover"]}
```

Output file **output_discover.json** has the contents:
```
{
    "@odata.id" : "/DASH/v1/DiscoveryCollection",
    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
            "@odata.type" : "#Discover.v1_0_0.Discover",
            "DashPort" : 623,
            "Discovered" : true,
            "HostName" : "dash-system",
            "Name" : "Discover"
        }
    ],
    "Name" : "Discovery Collection"
}
```

Note: The json contents of **discover.json** is equivalent to passing the flags to dashcli.exe as follows:

```
dashcli.exe -h dash-system discover
```

1.2 JDO mode

With the jdo flag, DASH CLI enters interactive mode and accepts request in JSON format in a single line. The output is then printed to the console.
Eg:
```
dashcli -jdo
{"h":"dash-system","Commands":["discover"]}
```

Output on the console:

```
{
    "@odata.id" : "/DASH/v1/DiscoveryCollection",
    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
            "@odata.type" : "#Discover.v1_0_0.Discover",
            "DashPort" : 623,
            "Discovered" : true,
            "HostName" : "dash-system",
            "Name" : "Discover"
        }
    ],
    "Name" : "Discovery Collection"
}
```

1.3 Difference between JI/JO and JDO options

1) JI & JO Option – Files are created on disk
   a. File operations are support by most programming languages
2) JDO Option – In memory DASH query and response
   a. No overhead of creating and managing files (hence faster)

Chapter 2: Sample classes for Input, Output & Error

Note: The example classes follow C# class style declaration.

2.1 Input class to generate JSON input

The input class is a common class that can be used to create any DASH Command in Developer Mode. It has the fields required to create the input JSON used by DASH CLI.

| Input Class | ```csharp
public class CommandOptions {
    public string h { get; set; }
    public string u { get; set; }
    public string P { get; set; }
    public List<string> S { get; set; }
    public string H { get; set; }
    public string s { get; set; }
    public string e { get; set; }
    public List<string> p { get; set; }
    public int C { get; set; }
    public string t { get; set; }
    public List<string> Commands { get; set; }
}
``` |

The property fields are as follows:

    h – Host Name
    u – User Name
    P – Password
    S – Authentication Mechanism (HTTP/HTTPS)
    H – Host Array (used only with Discovery)
    s – Start Address (used only with Discovery)
    e – End Address (used only with Discovery)
    p – Port Number
    C – Ignore Certificates
    t – Target Command
    Commands – Commands passed along with the target

The "ji JSON" inputs can be sent by using the class Command Options to send input to DASH CLI. Each operation has its own class associated, to de-serialize the output from DASH CLI in JSON format.

2.2 Output class used for different commands

Output Classes for all profiles have a similar format. There is a Profile Collection class, with a List of Profile Members. The Profile Members differ from one profile to the next.

| Output Class | ```csharp
public class ProfileCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    [JsonProperty("Members")]
    public List<ProfileMember> Members { get; set; }
    public string Id { get; set; }
    public string Name { get; set; }
}
public class ProfileMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
``` |

```
                            public string _odata_type { get; set; }
                            public string Name { get; set; }
                            public int InstanceNumber { get; set; }
                            … /* Other Properties specific to the profile */
                    }
```

2.3 Error class

1) If Error code is Zero, it means no errors have occurred, then the error message is status of executed command.

2) If Error code is non-zero, it means some errors have occurred, then the error message prints the output of the errors for executing the command.

Error Class	```public class CommandError { public int ErrorCode { get; set; } public string ErrorMessage { get; set; } }```

3 Discover

3.1 Discover Host

DASH CLI Command	`dashcli -h dash-system discover`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","Commands":["discover"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/DiscoveryCollection",
	    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
	            "@odata.type" : "#Discover.v1_0_0.Discover",
	            "DashPort" : 623,
	            "Discovered" : true,
	            "HostName" : "dash-system",
	            "Name" : "Discover"
	        }
	    ],
	    "Name" : "Discovery Collection"
	}</pre>

Output Class	<pre>public class DiscoveryCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    [JsonProperty("name")]
	    public string name { get; set; }
	    [JsonProperty("Members")]
	    public List<DiscoveryMember> Members;
	}
	public class DiscoveryMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string HostName { get; set; }
	    public bool Discovered { get; set; }
	    public int DashPort { get; set; }
	    [JsonProperty("Info")]
	    public DiscoveryInfo Info { get; set; }
	}
	public class DiscoveryInfo {
	    public string DASHVersion { get; set; }
	    public string ProductVendor { get; set; }
	    public string ProductVersion { get; set; }
	    public string ProtocolVersion { get; set; }
	    public List<string> SecurityProfile { get; set; }
	}</pre>

3.2 Discover IP

DASH CLI Command	`dashcli -h 10.138.137.71 discover`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"10.138.137.71","Commands":["discover"]}`

| Output JSON | ```json
{
    "@odata.id" : "/DASH/v1/DiscoveryCollection",
    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
            "@odata.type" : "#Discover.v1_0_0.Discover",
            "DashPort" : 623,
            "Discovered" : true,
            "HostName" : "10.138.137.71",
            "Name" : "Discover"
        }
    ],
    "Name" : "Discovery Collection"
}
``` |
|---|---|
| Output Class | ```csharp
public class DiscoveryCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    [JsonProperty("name")]
    public string name { get; set; }
    [JsonProperty("Members")]
    public List<DiscoveryMember> Members;
}
public class DiscoveryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string HostName { get; set; }
    public bool Discovered { get; set; }
    public int DashPort { get; set; }
    [JsonProperty("Info")]
    public DiscoveryInfo Info { get; set; }
}
public class DiscoveryInfo {
    public string DASHVersion { get; set; }
    public string ProductVendor { get; set; }
    public string ProductVersion { get; set; }
    public string ProtocolVersion { get; set; }
    public List<string> SecurityProfile { get; set; }
}
``` |

3.3 Discover Host Array

DASH CLI Command	N/A
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"H":["non-dash-system1","dash-system1","non-dash-system2","dash-system2","non-dash-system3","non-dash-system4"],` `"Commands":["discover"]}`
| Output JSON | ```json
{
    "@odata.id" : "/DASH/v1/DiscoveryCollection",
    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
    "Members" : [
        {
            "Discovered" : false,
            "HostName" : "non-dash-system1"
        },
        {
            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
            "@odata.type" : "#Discover.v1_0_0.Discover",
            "DashPort" : 623,
            "Discovered" : true,
            "HostName" : "dash-system1",
            "Name" : "Discover"
        },
        {
``` |

```
                        "Discovered" : false,
                        "HostName" : "non-dash-system2"
                    },
                    {
                        "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
                        "@odata.type" : "#Discover.v1_0_0.Discover",
                        "DashPort" : 623,
                        "Discovered" : true,
                        "HostName" : "dash-system2",
                        "Name" : "Discover"
                    },
                    {
                        "Discovered" : false,
                        "HostName" : "non-dash-system3"
                    },
                    {
                        "Discovered" : false,
                        "HostName" : "non-dash-system4"
                    }
                ],
                "Name" : "Discovery Collection"
            }
```

Output Class	```
	public class DiscoveryInfo {
	    public string DASHVersion { get; set; }
	    public string ProductVendor { get; set; }
	    public string ProductVersion { get; set; }
	    public string ProtocolVersion { get; set; }
	    public List<string> SecurityProfile { get; set; }
	}
	public class DiscoveryMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string HostName { get; set; }
	    public bool Discovered { get; set; }
	    public int DashPort { get; set; }
	    [JsonProperty("Info")]
	    public DiscoveryInfo Info { get; set; }
	}
	public class DiscoveryCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    [JsonProperty("name")]
	    public string name { get; set; }
	    [JsonProperty("Members")]
	    public List<DiscoveryMember> Members;
	}
	``

3.4 Discover IP Range

DASH CLI Command	`dashcli -s 10.138.135.208 -e 10.138.135.215 discover`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"s":"10.138.135.208","e":"10.138.135.215","Commands":["discover"]}`

Output JSON	<pre>{
"@odata.id" : "/DASH/v1/DiscoveryCollection",
"@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
"Members" : [
{
"Discovered" : false,
"HostName" : "10.138.135.208"
},
{
"Discovered" : false,
"HostName" : "10.138.135.209"
},
{
"Discovered" : false,
"HostName" : "10.138.135.210"
},
{
"Discovered" : false,
"HostName" : "10.138.135.211"
},
{
"Discovered" : false,
"HostName" : "10.138.135.212"
},
{
"Discovered" : false,
"HostName" : "10.138.135.213"
},
{
"@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
"@odata.type" : "#Discover.v1_0_0.Discover",
"DashPort" : 623,
"Discovered" : true,
"HostName" : "10.138.135.214",
"Name" : "Discover"
},
{
"Discovered" : false,
"HostName" : "10.138.135.215"
}
],
"Name" : "Discovery Collection"
}</pre>
Output Class	<pre>public class DiscoveryInfo {
public string DASHVersion { get; set; }
public string ProductVendor { get; set; }
public string ProductVersion { get; set; }
public string ProtocolVersion { get; set; }
public List<string> SecurityProfile { get; set; }
}
public class DiscoveryMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
public string HostName { get; set; }
public bool Discovered { get; set; }
public int DashPort { get; set; }
[JsonProperty("Info")]
public DiscoveryInfo Info { get; set; }
}
public class DiscoveryCollection {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
[JsonProperty("name")]
public string name { get; set; }
[JsonProperty("Members")]
public List<DiscoveryMember> Members;
}</pre>

3.5 Discover Info

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass discover info`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["discover","info"]}`

| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/DiscoveryCollection",
    "@odata.type" : "#DiscoveryCollection.v1_0_0.DiscoveryCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/DiscoveryCollection/Discover",
            "@odata.type" : "#Discover.v1_0_0.Discover",
            "DashPort" : 623,
            "Discovered" : true,
            "HostName" : "dash-system",
            "Info" : {
                "DASHVersion" : "1.1.0",
                "ProductVendor" : "Broadcom Corporation",
                "ProductVersion" : "1.40.0.1 Feb 19 2010 19:54:12",
                "ProtocolVersion" :
"http://schemas.dmtf.org/wbem/wsman/1/wsman.xsd",
                "SecurityProfile" : [
"http://schemas.dmtf.org/wbem/wsman/1/wsman/secprofile/http/digest",
"http://schemas.dmtf.org/wbem/wsman/1/wsman/secprofile/http/spnego-kerberos",
"http://schemas.dmtf.org/wbem/wsman/1/wsman/secprofile/https/digest",
"http://schemas.dmtf.org/wbem/wsman/1/wsman/secprofile/https/spnego-kerberos"
                ]
            },
            "Name" : "Discover"
        }
    ],
    "Name" : "Discovery Collection"
}
``` |
| Output Class | ```
public class DiscoveryInfo {
    public string DASHVersion { get; set; }
    public string ProductVendor { get; set; }
    public string ProductVersion { get; set; }
    public string ProtocolVersion { get; set; }
    public List<string> SecurityProfile { get; set; }
}
public class DiscoveryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string HostName { get; set; }
    public bool Discovered { get; set; }
    public int DashPort { get; set; }
    [JsonProperty("Info")]
    public DiscoveryInfo Info { get; set; }
}
public class DiscoveryCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    [JsonProperty("name")]
    public string name { get; set; }
    [JsonProperty("Members")]
    public List<DiscoveryMember> Members;
}
``` |

4 Computer System

4.1 Enumerate Computer System

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate computersystem`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass", "Commands":["enumerate","computersystem"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/ComputerSystemCollection",
    "@odata.type" :
"#ComputerSystemCollection.v1_5_1.ComputerSystemCollection",
    "Id" : "ComputerSystemCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/ComputerSystemCollection/ComputerSystem",
            "@odata.type" : "#ComputerSystem.v1_0_1.ComputerSystem",
            "AvailableRequestedPowerStates" : [ "On", "Power Cycle (Off -
Soft)", "Off - Soft", "Master Bus Reset" ],
            "CurrentPowerState" : "On",
            "DedicatedTo" : [ "Desktop" ],
            "ElementName" : "Computer System",
            "EnabledState" : "Enabled",
            "Id" : "ComputerSystem",
            "InstanceNumber" : 0,
            "Name" : "10.136.6.63",
            "PowerOnTime" : "N/A",
            "PrimaryOwner" : "Ganesh Kamath",
            "PrimaryOwnerContact" : "2B550",
            "RequestSupportedPowerStates" : [
                "On",
                "Power Cycle (Off - Soft)",
                "Off - Soft",
                "Master Bus Reset",
                "Sleep -Deep",
                "Hibernate (Off - Soft)",
                "Off - Soft Graceful",
                "Master Bus Reset Graceful",
                "Power Cycle (Off - Soft Graceful)"
            ],
            "RequestedPowerState" : "Master Bus Reset",
            "RequestedState" : "No Change",
            "SupportedPowerChangeCapabilities" : [
                "Power State Settable",
                "Power Cycling Supported",
                "HW Reset Supported",
                "Graceful Shutdown Supported"
            ],
            "SupportedPowerStates" : [
                "Other",
                "On",
                "Sleep - Light",
                "Sleep -Deep",
                "Power Cycle (Off - Soft)",
                "Hibernate (Off - Soft)",
                "Off - Soft",
                "Master Bus Reset",
                "Off - Soft Graceful",
                "Master Bus Reset Graceful",
                "Power Cycle (Off - Soft Graceful)"
            ]
        }
    ],
    "Name" : "Computer System Collection"
}
``` |

| Output Class | ```csharp
public class ComputerSystemCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<ComputerSystemMember> Members { get; set; }
    public string Name { get; set; }
}
public class ComputerSystemMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public List<string> AvailableRequestedPowerStates { get; set; }
    public string CurrentPowerState { get; set; }
    public List<string> DedicatedTo { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string Id { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public string PowerOnTime { get; set; }
    public string PrimaryOwner { get; set; }
    public string PrimaryOwnerContact { get; set; }
    public List<string> RequestSupportedPowerStates { get; set; }
    public string RequestedPowerState { get; set; }
    public string RequestedState { get; set; }
    public List<string> SupportedPowerChangeCapabilities { get; set; }
    public List<string> SupportedPowerStates { get; set; }
}
``` |

4.2 Computer System Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/ComputerSystemCollection/ComputerSystem",
    "@odata.type" : "#ComputerSystem.v1_0_1.ComputerSystem",
    "AvailableRequestedPowerStates" : [ "On", "Power Cycle (Off - Soft)", "Off - Soft", "Master Bus Reset" ],
    "CurrentPowerState" : "On",
    "DedicatedTo" : [ "Desktop" ],
    "ElementName" : "Computer System",
    "EnabledState" : "Enabled",
    "Id" : "ComputerSystem",
    "InstanceNumber" : 0,
    "Name" : "10.136.6.63",
    "PowerOnTime" : "N/A",
    "PrimaryOwner" : "Ganesh Kamath",
    "PrimaryOwnerContact" : "2B550",
    "RequestSupportedPowerStates" : [
        "On",
        "Power Cycle (Off - Soft)",
        "Off - Soft",
        "Master Bus Reset",
        "Sleep -Deep",
        "Hibernate (Off - Soft)",
        "Off - Soft Graceful",
        "Master Bus Reset Graceful",
        "Power Cycle (Off - Soft Graceful)"
    ],
``` |

<table>
<tr><td rowspan="2"></td><td>

```
            "RequestedPowerState" : "Master Bus Reset",
            "RequestedState" : "No Change",
            "SupportedPowerChangeCapabilities" : [
               "Power State Settable",
               "Power Cycling Supported",
               "HW Reset Supported",
               "Graceful Shutdown Supported"
            ],
            "SupportedPowerStates" : [
               "Other",
               "On",
               "Sleep - Light",
               "Sleep -Deep",
               "Power Cycle (Off - Soft)",
               "Hibernate (Off - Soft)",
               "Off - Soft",
               "Master Bus Reset",
               "Off - Soft Graceful",
               "Master Bus Reset Graceful",
               "Power Cycle (Off - Soft Graceful)"
            ]
         }
```

</td></tr>
</table>

| Output Class | ```
public class ComputerSystemMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<string> AvailableRequestedPowerStates { get; set; }
    public string CurrentPowerState { get; set; }
    public List<string> DedicatedTo { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string Id { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public string PowerOnTime { get; set; }
    public string PrimaryOwner { get; set; }
    public string PrimaryOwnerContact { get; set; }
    public List<string> RequestSupportedPowerStates { get; set; }
    public string RequestedPowerState { get; set; }
    public string RequestedState { get; set; }
    public List<string> SupportedPowerChangeCapabilities { get; set; }
    public List<string> SupportedPowerStates { get; set; }
}
``` |
|---|---|

4.3 Enumerate Asset

DASH CLI Command	`dashcli –h dash-system –u admin –P adminpass –t computersystem[0] enumerate asset`
jdo Usage	`dashcli –jdo`
ji/jo Usage	`dashcli –ji input_json.txt –jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","asset"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",
    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",
    "Id" : "PhysicalAssetCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ChassisType" : "Mini Tower",
            "ElementName" : "Chassis",
            "InstanceNumber" : 0,
            "Manufacturer" : "Hewlett-Packard",
``` |

<table>
<tr><td></td><td>

```
            "Model" : "HP Compaq 6005 Pro MT PC",
            "Name" : "PhysicalAsset",
            "PackageType" : "Chassis/Frame",
            "PartNumber" : "N/A",
            "SKU" : "AT493AV",
            "SerialNumber" : "INA105T9LB",
            "Tag" : "BRCM:3"
        }
    ],
    "Name" : "Physical Asset Collection"
}
```

</td></tr>
</table>

| Output Class | ```
public class PhysicalAssetCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<PhysicalAssetMember> Members { get; set; }
    public string Name { get; set; }
}
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
    public List<string> ConnectorType { get; set; }
    public string ElementName { get; set; }
    public int InstanceNumber { get; set; }
    public string Manufacturer { get; set; }
    public string Model { get; set; }
    public string Name { get; set; }
    public string PartNumber { get; set; }
    public string SKU { get; set; }
    public string SerialNumber { get; set; }
    public int SlotNumber { get; set; }
    public string Tag { get; set; }
    public string CanbeFRUed { get; set; }
    public string MemoryBankLabel { get; set; }
    public string MemoryCapacity { get; set; }
    public string MemoryFormFactor { get; set; }
    public string MemoryType { get; set; }
    public string IsHostingBoard { get; set; }
    public string PackageType { get; set; }
    public string ChassisType { get; set; }
}
``` |
|---|---|

4.4 Enumerate Boot Config

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate bootconfig`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","bootconfig"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/BootConfigurationCollection",
    "@odata.type" :
"#BootConfigurationCollection.v1_0_0.BootConfigurationCollection",
    "Id" : "BootConfigurationCollection",
    "Members" : [
        {
            "@odata.id" :
"/DASH/v1/BootConfigurationCollection/BootConfiguration",
``` |

```json
            "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration",
            "BootDevices" : [
                {
                    "Name" : "BRCM:Network:3",
                    "Value" : 0
                },
                {
                    "Name" : "BRCM:Hard Drive:1",
                    "Value" : 1
                },
                {
                    "Name" : "BRCM:USB Device:4",
                    "Value" : 2
                },
                {
                    "Name" : "BRCM:CD-ROM:2",
                    "Value" : 3
                }
            ],
            "ElementName" : "Boot Configuration Setting #1",
            "Id" : "BootConfiguration",
            "InstanceId" : "BRCM:31.1",
            "InstanceNumber" : 0,
            "IsCurrentConfiguration" : "No",
            "IsDefaultConfiguration" : "No",
            "IsNextConfiguration" : "Yes",
            "Name" : "Boot Configuration"
        },
        {
            "@odata.id" :
"/DASH/v1/BootConfigurationCollection/BootConfiguration",
            "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration",
            "BootDevices" : [
                {
                    "Name" : "BRCM:Hard Drive:5",
                    "Value" : 0
                },
                {
                    "Name" : "BRCM:CD-ROM:6",
                    "Value" : 1
                },
                {
                    "Name" : "BRCM:Network:7",
                    "Value" : 2
                },
                {
                    "Name" : "BRCM:USB Device:8",
                    "Value" : 3
                }
            ],
            "ElementName" : "Boot Configuration Setting #2",
            "Id" : "BootConfiguration",
            "InstanceId" : "BRCM:31.2",
            "InstanceNumber" : 1,
            "IsCurrentConfiguration" : "No",
            "IsDefaultConfiguration" : "No",
            "IsNextConfiguration" : "No",
            "Name" : "Boot Configuration"
        }
    ],
    "Name" : "Boot Config Collection"
}
```

| Output Class | ```csharp
public class BootConfigurationCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
``` |

```
                        public List<BootConfigurationMember> Members { get; set; }
                        public string Name { get; set; }
                }
                public class BootConfigurationMember {
                        [JsonProperty("@odata.id")]
                        public string _odata_id { get; set; }
                        [JsonProperty("@odata.type")]
                        public string odatatype { get; set; }
                        public List<BootDevice> BootDevices { get; set; }
                        public string ElementName { get; set; }
                        public string Id { get; set; }
                        public string InstanceId { get; set; }
                        public int InstanceNumber { get; set; }
                        public string IsCurrentConfiguration { get; set; }
                        public string IsDefaultConfiguration { get; set; }
                        public string IsNextConfiguration { get; set; }
                        public string Name { get; set; }
                }
                public class BootDevice {
                        public string Name { get; set; }
                        public int Value { get; set; }
                }
```

4.5 Enumerate Fan

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate fan`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","fan"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/FanCollection",
	    "@odata.type" : "#FanCollection.v1_0_0.FanCollection",
	    "Id" : "FanCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/FanCollection/Fan",
	            "@odata.type" : "#Fan.v1_0_0.Fan",
	            "DesiredSpeed" : "N/A",
	            "DeviceID" : "BRCM:10.1",
	            "ElementName" : "Fan #1",
	            "EnabledState" : "Not Applicable",
	            "HealthState" : "OK",
	            "InstanceNumber" : 0,
	            "IsActiveCooling" : "Yes",
	            "IsVariableSpeed" : "Yes",
	            "Name" : "Fan",
	            "OperationalState" : ["OK"],
	            "RequestedState" : "Not Applicable"
	        },
	        {
	            "@odata.id" : "/DASH/v1/FanCollection/Fan",
	            "@odata.type" : "#Fan.v1_0_0.Fan",
	            "DesiredSpeed" : "N/A",
	            "DeviceID" : "BRCM:10.2",
	            "ElementName" : "Fan #2",
	            "EnabledState" : "Not Applicable",
	            "HealthState" : "OK",
	            "InstanceNumber" : 1,
	            "IsActiveCooling" : "Yes",
	            "IsVariableSpeed" : "Yes",
	            "Name" : "Fan",
	            "OperationalState" : ["OK"],
	            "RequestedState" : "Not Applicable"
	        }</pre>

Output Class	```csharp
	        ],
	        "Name" : "Fan Collection"
	    }
	public class FanCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<FanMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class FanMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public int DesiredSpeed { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public string HealthState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string IsActiveCooling { get; set; }
	    public string IsVariableSpeed { get; set; }
	    public string Name { get; set; }
	    public List<string> OperationalState { get; set; }
	    public string RequestedState { get; set; }
	}
	``

4.6 Enumerate Memory

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate memory`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","memory"]}`

Output JSON	```json
	{
	    "@odata.id" : "/DASH/v1/MemoryCollection",
	    "@odata.type" : "#MemoryCollection.v1_0_0.MemoryCollection",
	    "Id" : "MemoryCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
	            "@odata.type" : "#Memory.v1_0_0.Memory",
	            "AccessType" : "Read/Write Supported",
	            "AvailableMemory" : "4096 MB",
	            "DeviceID" : "BRCM:8.1",
	            "ElementName" : "Total System Memory",
	            "EnabledState" : "Enabled",
	            "HealthState" : "Unknown",
	            "InstanceNumber" : 0,
	            "IsVolatileMemory" : "Yes",
	            "Name" : "Memory",
	            "RequestedState" : "Not Applicable",
	            "TotalMemory" : "4096 MB"
	        }
	    ],
	    "Name" : "Memory Collection"
	}
	``

| Output Class | ```csharp
public class MemoryCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<MemoryMember> Members { get; set; }
    public string Name { get; set; }
}
public class MemoryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string AccessType { get; set; }
    public string AvailableMemory { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string IsVolatileMemory { get; set; }
    public string Name { get; set; }
    public string RequestedState { get; set; }
    public string TotalMemory { get; set; }
}
``` |

4.7 Enumerate Power Supply

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate powersupply`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate"," powersupply"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/PowerSupplyCollection",
    "@odata.type" : "#PowerSupplyCollection.v1_0_0.PowerSupplyCollection",
    "Id" : "PowerSupplyCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/PowerSupplyCollection/PowerSupply",
            "@odata.type" : "#PowerSupply.v1_0_0.PowerSupply",
            "DeviceID" : "BRCM:9.1",
            "ElementName" : "Power Supply #1",
            "EnabledState" : "Enabled",
            "HealthState" : "Unknown",
            "InstanceNumber" : 0,
            "Name" : "Power Supply",
            "OperationalState" : [ "Unknown" ],
            "RequestedState" : "Not Applicable",
            "TotalPower" : 0
        }
    ],
    "Name" : "Power Supply Collection"
}
``` |
| Output Class | ```csharp
public class PowerSupplyCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<PowerSupplyMember> Members { get; set; }
``` |

```
            public string Name { get; set; }
        }
        public class PowerSupplyMember {
            [JsonProperty("@odata.id")]
            public string _odata_id { get; set; }
            [JsonProperty("@odata.type")]
            public string odatatype { get; set; }
            public string DeviceID { get; set; }
            public string ElementName { get; set; }
            public string EnabledState { get; set; }
            public string HealthState { get; set; }
            public int InstanceNumber { get; set; }
            public string Name { get; set; }
            public List<string> OperationalState { get; set; }
            public string RequestedState { get; set; }
            public int TotalPower { get; set; }
        }
```

4.8 Enumerate Processor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate processor`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","processor"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/ProcessorCollection",
	    "@odata.type" : "#ProcessorCollection.v1_0_0.ProcessorCollection",
	    "Id" : "ProcessorCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/ProcessorCollection/Processor",
	            "@odata.type" : "#Processor.v1_0_0.Processor",
	            "CPUStatus" : "CPU Enabled",
	            "CurClockSpeed" : "3000 MHz",
	            "DeviceID" : "BRCM:7.1",
	            "ElementName" : "Processor #1",
	            "EnabledState" : "Enabled",
	            "ExtBusSpeed" : "200 MHz",
	            "Family" : "AMD Phenom(TM) II Processor Family",
	            "HealthState" : "Unknown",
	            "InstanceNumber" : 0,
	            "LoadPercent" : "N/A",
	            "MaxClockSpeed" : "3000 MHz",
	            "Name" : "Processor",
	            "OperationalState" : ["Unknown"],
	            "RequestedState" : "Not Applicable"
	        }
	    ],
	    "Name" : "Processor Collection"
	}</pre>

Output Class	<pre>public class ProcessorCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<ProcessorMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class ProcessorMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]</pre>

```csharp
            public string odatatype { get; set; }
            public string CPUStatus { get; set; }
            public string CurClockSpeed { get; set; }
            public string DeviceID { get; set; }
            public string ElementName { get; set; }
            public string EnabledState { get; set; }
            public string ExtBusSpeed { get; set; }
            public string Family { get; set; }
            public string HealthState { get; set; }
            public int InstanceNumber { get; set; }
            public string LoadPercent { get; set; }
            public string MaxClockSpeed { get; set; }
            public string Name { get; set; }
            public List<string> OperationalState { get; set; }
            public string RequestedState { get; set; }
        }
```

4.9 Enumerate Sensor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate sensor`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","sensor"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/SensorCollection",
	    "@odata.type" : "#SensorCollection.v1_0_0.SensorCollection",
	    "Id" : "SensorCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
	            "@odata.type" : "#Sensor.v1_0_0.Sensor",
	            "BaseUnit" : "RPM",
	            "CurrentState" : "Normal",
	            "DeviceID" : "BRCM:11.1",
	            "ElementName" : "Numeric Sensor #1 (Tachometer)",
	            "EnabledState" : "Not Applicable",
	            "HealthState" : "Unknown",
	            "InstanceNumber" : 0,
	            "Name" : "Sensor",
	            "OperationalState" : ["No Contact"],
	            "PossibleStates" : [
	                "Non-Critical",
	                "Lower Non-Critical",
	                "Upper Non-Critical",
	                "Critical",
	                "Lower Critical",
	                "Upper Critical",
	                "Fatal",
	                "Lower Fatal",
	                "Upper Fatal",
	                "Normal",
	                "Unknown"
	            ],
	            "RateUnits" : "None",
	            "RequestedState" : "No Change",
	            "SensorReading" : 0,
	            "SensorType" : "Tachometer",
	            "ThresholdLC" : "N/A",
	            "ThresholdLF" : "N/A",
	            "ThresholdLNC" : "N/A",
	            "ThresholdUC" : "N/A",
	            "ThresholdUF" : "N/A",
	            "ThresholdUNC" : "N/A",
	            "UnitModifier" : 0</pre>

```
            },
            {
                "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
                "@odata.type" : "#Sensor.v1_0_0.Sensor",
                "BaseUnit" : "RPM",
                "CurrentState" : "Normal",
                "DeviceID" : "BRCM:11.2",
                "ElementName" : "Numeric Sensor #2 (Tachometer)",
                "EnabledState" : "Not Applicable",
                "HealthState" : "Unknown",
                "InstanceNumber" : 1,
                "Name" : "Sensor",
                "OperationalState" : [ "No Contact" ],
                "PossibleStates" : [
                    "Non-Critical",
                    "Lower Non-Critical",
                    "Upper Non-Critical",
                    "Critical",
                    "Lower Critical",
                    "Upper Critical",
                    "Fatal",
                    "Lower Fatal",
                    "Upper Fatal",
                    "Normal",
                    "Unknown"
                ],
                "RateUnits" : "None",
                "RequestedState" : "No Change",
                "SensorReading" : 0,
                "SensorType" : "Tachometer",
                "ThresholdLC" : "N/A",
                "ThresholdLF" : "N/A",
                "ThresholdLNC" : "N/A",
                "ThresholdUC" : "N/A",
                "ThresholdUF" : "N/A",
                "ThresholdUNC" : "N/A",
                "UnitModifier" : 0
            },
            {
                "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
                "@odata.type" : "#Sensor.v1_0_0.Sensor",
                "BaseUnit" : "Degrees C",
                "CurrentState" : "Normal",
                "DeviceID" : "BRCM:11.3",
                "ElementName" : "Numeric Sensor #3 (Chassis Temperature)",
                "EnabledState" : "Not Applicable",
                "HealthState" : "Unknown",
                "InstanceNumber" : 2,
                "Name" : "Sensor",
                "OperationalState" : [ "No Contact" ],
                "PossibleStates" : [
                    "Non-Critical",
                    "Lower Non-Critical",
                    "Upper Non-Critical",
                    "Critical",
                    "Lower Critical",
                    "Upper Critical",
                    "Fatal",
                    "Lower Fatal",
                    "Upper Fatal",
                    "Normal",
                    "Unknown"
                ],
                "RateUnits" : "None",
                "RequestedState" : "No Change",
                "SensorReading" : 0,
                "SensorType" : "Temperature",
                "ThresholdLC" : "N/A",
                "ThresholdLF" : "N/A",
```

```
                    "ThresholdLNC" : "N/A",
                    "ThresholdUC" : "N/A",
                    "ThresholdUF" : "N/A",
                    "ThresholdUNC" : "N/A",
                    "UnitModifier" : -3
                },
                {
                    "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
                    "@odata.type" : "#Sensor.v1_0_0.Sensor",
                    "BaseUnit" : "Degrees C",
                    "CurrentState" : "Normal",
                    "DeviceID" : "BRCM:11.4",
                    "ElementName" : "Numeric Sensor #4 (CPU Temperature)",
                    "EnabledState" : "Not Applicable",
                    "HealthState" : "Unknown",
                    "InstanceNumber" : 3,
                    "Name" : "Sensor",
                    "OperationalState" : [ "No Contact" ],
                    "PossibleStates" : [
                        "Non-Critical",
                        "Lower Non-Critical",
                        "Upper Non-Critical",
                        "Critical",
                        "Lower Critical",
                        "Upper Critical",
                        "Fatal",
                        "Lower Fatal",
                        "Upper Fatal",
                        "Normal",
                        "Unknown"
                    ],
                    "RateUnits" : "None",
                    "RequestedState" : "No Change",
                    "SensorReading" : 0,
                    "SensorType" : "Temperature",
                    "ThresholdLC" : "N/A",
                    "ThresholdLF" : "N/A",
                    "ThresholdLNC" : "N/A",
                    "ThresholdUC" : "N/A",
                    "ThresholdUF" : "N/A",
                    "ThresholdUNC" : "N/A",
                    "UnitModifier" : -3
                }
            ],
            "Name" : "Sensor Collection"
        }
```

Output Class	
| | ```csharp
public class SensorCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<SensorMember> Members { get; set; }
    public string Name { get; set; }
}
public class SensorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string BaseUnit { get; set; }
    public string CurrentState { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
``` |

```
                public string Name { get; set; }
                public List<string> OperationalState { get; set; }
                public List<string> PossibleStates { get; set; }
                public string RateUnits { get; set; }
                public string RequestedState { get; set; }
                public int SensorReading { get; set; }
                public string SensorType { get; set; }
                public int ThresholdLC { get; set; }
                public int ThresholdLF { get; set; }
                public int ThresholdLNC { get; set; }
                public int ThresholdUC { get; set; }
                public int ThresholdUF { get; set; }
                public int ThresholdUNC { get; set; }
                public int UnitModifier { get; set; }
        }
```

4.10 Enumerate Software

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate software`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","software"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/SoftwareCollection",
	    "@odata.type" : "#SoftwareCollection.v1_0_0.SoftwareCollection",
	    "Id" : "SoftwareCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
	            "@odata.type" : "#Software.v1_0_0.Software",
	            "BuildNumber" : 1,
	            "ElementName" : "Bios Firmware",
	            "IdentityInfoType" : ["Bios Firmware"],
	            "IdentityInfoValue" : ["BIOS:285409537:0"],
	            "InstanceID" : "SW:0",
	            "InstanceNumber" : 0,
	            "IsEntity" : "True",
	            "MajorVersion" : 1,
	            "Manufacturer" : "LENOVO",
	            "MinorVersion" : 0,
	            "Name" : "Software",
	            "OperationalStatus" : "N/A",
	            "RevisionNumber" : 1,
	            "SoftwareClassifications" : ["Firmware/BIOS"],
	            "TargetedOperatingSystems" : "N/A",
	            "VersionString" : "M11KT45A"
	        },
	        {
	            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
	            "@odata.type" : "#Software.v1_0_0.Software",
	            "BuildNumber" : "N/A",
	            "ElementName" : "Dash Firmware",
	            "IdentityInfoType" : ["Dash Firmware"],
	            "IdentityInfoValue" : ["DASH:Firmware:1"],
	            "InstanceID" : "SW:1",
	            "InstanceNumber" : 1,
	            "IsEntity" : "True",
	            "MajorVersion" : 2,
	            "Manufacturer" : "Realtek",
	            "MinorVersion" : 110,
	            "Name" : "Software",
	            "OperationalStatus" : "N/A",
	            "RevisionNumber" : 0,
	            "SoftwareClassifications" : ["Firmware"],</pre>

	`            "TargetedOperatingSystems" : "N/A",`
	`            "VersionString" : "20180822.1200000110"`
	`        }`
	`    ],`
	`    "Name" : "Software Collection"`
	`}`
| Output Class | ```csharp
public class SoftwareCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<SoftwareMember> Members { get; set; }
    public string Name { get; set; }
}
public class SoftwareMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public int BuildNumber { get; set; }
    public string ElementName { get; set; }
    public List<string> IdentityInfoType { get; set; }
    public List<string> IdentityInfoValue { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string IsEntity { get; set; }
    public int MajorVersion { get; set; }
    public string Manufacturer { get; set; }
    public int MinorVersion { get; set; }
    public string Name { get; set; }
    public List<string> OperationalStatus { get; set; }
    public int RevisionNumber { get; set; }
    public List<string> SoftwareClassifications { get; set; }
    public string TargetedOperatingSystems { get; set; }
    public string VersionString { get; set; }
}
``` |

4.11 Enumerate User

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] enumerate user`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["enumerate","user"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/AccountService/ManagerAccountCollection",
    "@odata.type" :
"#ManagerAccountCollection.v1_0_0.ManagerAccountCollection",
    "Id" : "ManagerAccountCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/ManagerAccountCollection/ManagerAccount",
            "@odata.type" : "#ManagerAccount.v1_0_0.ManagerAccount",
            "AssociatedRoles" : [ "Administrator Role" ],
            "ElementName" : "Administrator Account",
            "EnabledState" : "Enabled",
            "InstanceNumber" : 0,
            "Name" : "User:1",
            "OrganizationName" : [ "My Company" ],
            "RequestedState" : "Enabled",
            "UserId" : "Administrator"
        },
        {
``` |

	``
	            "@odata.id" : "/DASH/v1/ManagerAccountCollection/ManagerAccount",
	            "@odata.type" : "#ManagerAccount.v1_0_0.ManagerAccount",
	            "AssociatedRoles" : ["Operator Role"],
	            "ElementName" : "Operator Account",
	            "EnabledState" : "Offline",
	            "InstanceNumber" : 1,
	            "Name" : "User:2",
	            "OrganizationName" : ["My Company"],
	            "RequestedState" : "Offline",
	            "UserId" : "Operator"
	        }
	    ],
	    "Name" : "Manager Account Collection"
	}
	``

Output Class	```
	    public class UserCollection {
	        [JsonProperty("@odata.id")]
	        public string _odata_id { get; set; }
	        [JsonProperty("@odata.type")]
	        public string _odata_type { get; set; }
	        [JsonProperty("Members")]
	        public List<UserMember> Members { get; set; }
	        public string Id { get; set; }
	        public string Name { get; set; }
	    }
	    public class UserMember {
	        public List<string> AssociatedRoles { get; set; }
	        public string ElementName { get; set; }
	        public string EnabledState { get; set; }
	        public string Name { get; set; }
	        public List<string> OrganizationName { get; set; }
	        public string RequestedState { get; set; }
	        public string UserId { get; set; }
	    }
	``

4.12 Power Status

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power status`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["power","status"]}`

Output JSON	```
	{
	    "@odata.id" : "/DASH/v1/Systems/12345678-1234-5678-90ab-cddeefaabbcc",
	    "@odata.type" : "#ComputerSystem.v1_5_1.ComputerSystem",
	    "Id" : "12345678-1234-5678-90ab-cddeefaabbcc",
	    "Name" : "Computer System",
	    "PowerState" : "On"
	}
	``

Output Class	```
	    public class PowerStatus {
	        [JsonProperty("@odata.id")]
	        public string _odata_id { get; set; }
	        [JsonProperty("@odata.type")]
	        public string _odata_type { get; set; }
	        public string Id { get; set; }
	        public string Name { get; set; }
	        public string PowerState { get; set; }
	    }
	``

4.13 Power Available States

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power availablestates`
jdo Usage	`dashcli -jdo`

ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]",` `"Commands":["power","availablestates"]}`

Output JSON	`{`
	`    "Available Power States (Code - Name)" : [`
	`      "5 - Power Cycle (Off - Soft)",`
	`      "8 - Off - Soft",`
	`      "10 - Master Bus Reset"`
	`    ]`
	`}`

Output Class	`public class AvailablePowerStates {`
	`    [JsonProperty("Available Power States (Code - Name)")]`
	`    public List<string> AvailablePowerStatesCodeName { get; set; }`
	`}`

4.14 Power Available States Version 2

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power availablestates`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]",` `"Commands":["power","availablestates2"]}`

Output JSON	`{`
	`    "Available Power States" : [`
	`        {`
	`            "Code" : 2,`
	`            "Name" : "On"`
	`        },`
	`        {`
	`            "Code" : 4,`
	`            "Name" : "Sleep -Deep"`
	`        },`
	`        {`
	`            "Code" : 7,`
	`            "Name" : "Hibernate (Off - Soft)"`
	`        },`
	`        {`
	`            "Code" : 8,`
	`            "Name" : "Off - Soft"`
	`        },`
	`        {`
	`            "Code" : 10,`
	`            "Name" : "Master Bus Reset"`
	`        }`
	`    ]`
	`}`

Output Class	`public class AvailablePowerStates2 {`
	`    [JsonProperty("Available Power States")]`
	`    public List<AvailablePowerState2> AvailablePowerStatesCodeName2 { get; set; }`
	`}`
	
	`public class AvailablePowerState2 {`
	`    public int Code { get; set; }`
	`    public string Name { get; set; }`
	`}`

4.15 Power Supported States

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power supportedstates`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`

Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]",` `"Commands":["power","supportedstates"]}`
| Output JSON | ```
{
    "Supported Power States (Code - Name)" : [
        "1 - Other",
        "2 - On",
        "3 - Sleep - Light",
        "4 - Sleep -Deep",
        "5 - Power Cycle (Off - Soft)",
        "7 - Hibernate (Off - Soft)",
        "8 - Off - Soft",
        "10 - Master Bus Reset",
        "12 - Off - Soft Graceful",
        "14 - Master Bus Reset Graceful",
        "15 - Power Cycle (Off - Soft Graceful)"
    ]
}
``` |
| Output Class | ```
public class SupportedPowerStates {
    [JsonProperty("Supported Power States (Code - Name)")]
    public List<string> SupportedPowerStatesCodeName { get; set; }
}
``` |

4.16 Power Supported States Version 2

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power` `supportedstates`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]",` `"Commands":["power","supportedstates2"]}`
| Output JSON | ```
{
    "Supported Power States" : [
        {
            "Code" : 2,
            "Name" : "On"
        },
        {
            "Code" : 5,
            "Name" : "Power Cycle (Off - Soft)"
        },
        {
            "Code" : 8,
            "Name" : "Off - Soft"
        },
        {
            "Code" : 9,
            "Name" : "Power Cycle (Off-Hard)"
        },
        {
            "Code" : 10,
            "Name" : "Master Bus Reset"
        },
        {
            "Code" : 11,
            "Name" : "Diagnostic Interrupt (NMI)"
        },
        {
            "Code" : 12,
            "Name" : "Off - Soft Graceful"
        },
        {
            "Code" : 13,
            "Name" : "Off - Hard Graceful"
        },
        {
            "Code" : 14,
            "Name" : "Master Bus Reset Graceful"
``` |

```
                },
                {
                    "Code" : 15,
                    "Name" : "Power Cycle (Off - Soft Graceful)"
                },
                {
                    "Code" : 16,
                    "Name" : "Power Cycle (Off - Hard Graceful)"
                }
            ]
        }
```

| Output Class | ```
public class SupportedPowerStates2 {
    [JsonProperty("Supported Power States")]
    public List<SupportedPowerState2> SupportedPowerStatesCodeName2 { get; set; }
}
public class SupportedPowerState2 {
    public int Code { get; set; }
    public string Name { get; set; }
}
``` |
|---|---|

4.17 Power State Change

	<<option>>	
DASH CLI Command		`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] power <<option>>`
jdo Usage		`dashcli -jdo`
ji/jo Usage		`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["power","<<option>>"]}`
| Output JSON | on | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "On Reset Succeeded"
}
``` |
| | off | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "Off Reset Succeeded"
}
``` |
| | cycle | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "Cycle Reset Succeeded"
}
``` |
| | restart | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "Graceful Reset Succeeded"
}
``` |
| | reset | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "Hard Reset Succeeded"
}
``` |
| | offgraceful | ```
{
    "ErrorCode" : -1,
    "ErrorMessage" : "Error: Power Operation Failed"
}
``` |
| | sleep | ```
{
    "ErrorCode" : -1,
    "ErrorMessage" : "Error: Power Operation Failed"
}
``` |
| | hibernate | ```
{
    "ErrorCode" : -1,
    "ErrorMessage" : "Error: Power Operation Failed"
}
``` |
| Output Class | | ```
public class CommandError {
    public int ErrorCode { get; set; }
    public string ErrorMessage { get; set; }
}
``` |

Note: List of Power States (Refer DSP 1027)

<<option>> Name	<<option>> Code	Description
on	2	Initiate the transition of the system to full on state.
	3	Initiate the transition of the system to standby or sleep state.
sleep	4	Initiate the transition of the system to standby or sleep state.
cycle/softreset	5	Transition the system to off state in which the system consumes a minimal amount of power, followed by a transition to on state.
	6	Initiate the transition of the system to power off state, in which the power consumption is zero except for the real-time clock.
hibernate	7	Transition the system to hibernation state. – write system context to non-volatile storage, power off the system and devices.
turnoff/off	8	Initiate the transition of the system to off state, in which the system consumes a minimal amount of power.
	9	Transition the system to power off state, in which the power consumption is zero except for the real-time clock, followed by a transition to on state.
reset/hardreset	10	Perform hardware reset on the system.
	11	Assert an NMI on the system.
shutdown/offgraceful	12	Perform an orderly transition to power off state, in which the system consumes a minimal amount of power.
	13	Perform an orderly transition to power off state, in which the power consumption is zero except for the real-time clock.
restart/resetgraceful	14	Perform an orderly shutdown of the system followed by hardware reset.
	15	Perform an orderly transition of the system to power off state, in which the system consumes a minimal amount of power, followed by a transition to on state.
	16	Perform an orderly transition of the system to power off state, in which the power consumption is zero except for the real-time clock, followed by a transition to on state.

4.18 Asset

DASH CLI Command	`dashcli –h dash-system –u admin -P adminpass -t computersystem[0]/asset[0] show`
jdo Usage	`dashcli –jdo`
ji/jo Usage	`dashcli –ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/asset[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
    "CanbeFRUed" : "No",
    "ElementName" : "Processor #1",
    "InstanceNumber" : 0,
    "Manufacturer" : "AMD",
    "Model" : "AMD Phenom(tm) II X4 B95 Processor",
``` |

	``` "Name" : "PhysicalAsset", "PartNumber" : "N/A", "SKU" : "N/A", "SerialNumber" : "N/A", "Tag" : "BRCM:4.1" } ```
Output Class	```csharp public class PhysicalAssetMember { [JsonProperty("@odata.id")] public string _odata_id { get; set; } [JsonProperty("@odata.type")] public string odatatype { get; set; } public string ConnectorLayout { get; set; } public List<string> ConnectorType { get; set; } public string ElementName { get; set; } public int InstanceNumber { get; set; } public string Manufacturer { get; set; } public string Model { get; set; } public string Name { get; set; } public string PartNumber { get; set; } public string SKU { get; set; } public string SerialNumber { get; set; } public int SlotNumber { get; set; } public string Tag { get; set; } public string CanbeFRUed { get; set; } public string MemoryBankLabel { get; set; } public string MemoryCapacity { get; set; } public string MemoryFormFactor { get; set; } public string MemoryType { get; set; } public string IsHostingBoard { get; set; } public string PackageType { get; set; } public string ChassisType { get; set; } } ```

4.19 Boot Config

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/ bootconfig[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/bootconfig[0]", "Commands":["show"]}`
Output JSON	``` { "@odata.id" : "/DASH/v1/BootConfigurationCollection/BootConfiguration", "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration", "BootDevices" : [{ "Name" : "BRCM:Network:3", "Value" : 0 }, { "Name" : "BRCM:Hard Drive:1", "Value" : 1 }, { "Name" : "BRCM:USB Device:4", "Value" : 2 }, { "Name" : "BRCM:CD-ROM:2", "Value" : 3 }], "ElementName" : "Boot Configuration Setting #1", "Id" : "BootConfiguration", "InstanceId" : "BRCM:31.1", ```

	``"InstanceNumber" : 0,``
	``"IsCurrentConfiguration" : "No",``
	``"IsDefaultConfiguration" : "No",``
	``"IsNextConfiguration" : "Yes",``
	``"Name" : "Boot Configuration"``
	``}``

Output
Class
	```public class BootConfigurationMember {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string odatatype { get; set; }```
	``` public List<BootDevice> BootDevices { get; set; }```
	``` public string ElementName { get; set; }```
	``` public string Id { get; set; }```
	``` public string InstanceId { get; set; }```
	``` public int InstanceNumber { get; set; }```
	``` public string IsCurrentConfiguration { get; set; }```
	``` public string IsDefaultConfiguration { get; set; }```
	``` public string IsNextConfiguration { get; set; }```
	``` public string Name { get; set; }```
	```}```
	```public class BootDevice {```
	``` public string Name { get; set; }```
	``` public int Value { get; set; }```
	```}```

Note: List of Boot Config commands

Command	Input JSON command
Show	``{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/bootconfig[0]",`` ``"Commands":["show"]}``
Change Boot Order	``{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/bootconfig[0]",`` ``"Commands":["changebootorder","3","2","1","0"]}``

4.20 Fan

DASH CLI Command	``dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/`` ``fan[0] show``
jdo Usage	``dashcli -jdo``
ji/jo Usage	``dashcli -ji input_json.txt -jo output_json.txt``
Input JSON	``{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/fan[0]",`` ``"Commands":["show"]}``

Output JSON	``{``
	``    "@odata.id" : "/DASH/v1/FanCollection/Fan",``
	``    "@odata.type" : "#Fan.v1_0_0.Fan",``
	``    "DesiredSpeed" : "N/A",``
	``    "DeviceID" : "BRCM:10.1",``
	``    "ElementName" : "Fan #1",``
	``    "EnabledState" : "Not Applicable",``
	``    "HealthState" : "OK",``
	``    "InstanceNumber" : 0,``
	``    "IsActiveCooling" : "Yes",``
	``    "IsVariableSpeed" : "Yes",``
	``    "Name" : "Fan",``
	``    "OperationalState" : [ "OK" ],``
	``    "RequestedState" : "Not Applicable"``
	``}``

Output Class	```public class FanMember {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string odatatype { get; set; }```
	``` public int DesiredSpeed { get; set; }```
	``` public string DeviceID { get; set; }```

```
           public string ElementName { get; set; }
           public string EnabledState { get; set; }
           public string HealthState { get; set; }
           public int InstanceNumber { get; set; }
           public string IsActiveCooling { get; set; }
           public string IsVariableSpeed { get; set; }
           public string Name { get; set; }
           public List<string> OperationalState { get; set; }
           public string RequestedState { get; set; }
       }
```

Note: List of Fan commands

Command	Input JSON command
Show	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/fan[0]", "Commands":["show"]}
Enumerate Asset	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/fan[0]", "Commands":["enumerate","asset"]}
Asset Show	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/fan[0]/asset[0]", "Commands":["show"]}

4.21 Memory

DASH CLI Command	dashcli –h dash-system –u admin –P adminpass –t computersystem[0]/ memory[0] show
jdo Usage	dashcli –jdo
ji/jo Usage	dashcli –ji input_json.txt –jo output_json.txt
Input JSON	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/memory[0]", "Commands":["show"]}

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
	    "@odata.type" : "#Memory.v1_0_0.Memory",
	    "AccessType" : "Read/Write Supported",
	    "AvailableMemory" : "4096 MB",
	    "DeviceID" : "BRCM:8.1",
	    "ElementName" : "Total System Memory",
	    "EnabledState" : "Enabled",
	    "HealthState" : "Unknown",
	    "InstanceNumber" : 0,
	    "IsVolatileMemory" : "Yes",
	    "Name" : "Memory",
	    "RequestedState" : "Not Applicable",
	    "TotalMemory" : "4096 MB"
	}</pre>

Output Class	<pre>public class MemoryMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string AccessType { get; set; }
	    public string AvailableMemory { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public string HealthState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string IsVolatileMemory { get; set; }
	    public string Name { get; set; }
	    public string RequestedState { get; set; }
	    public string TotalMemory { get; set; }
	}</pre>

Note: List of Memory commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/memory[0]",` `"Commands":["show"]}`
Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/memory[0]",` `"Commands":["enumerate","asset"]}`
Asset Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/memory[0]/asset[0]",` `"Commands":["show"]}`

4.22 Power Supply

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/` `powersupply[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/powersupply[0]",` `"Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/PowerSupplyCollection/PowerSupply",`
	`    "@odata.type" : "#PowerSupply.v1_0_0.PowerSupply",`
	`    "DeviceID" : "BRCM:9.1",`
	`    "ElementName" : "Power Supply #1",`
	`    "EnabledState" : "Enabled",`
	`    "HealthState" : "Unknown",`
	`    "InstanceNumber" : 0,`
	`    "Name" : "Power Supply",`
	`    "OperationalState" : [ "Unknown" ],`
	`    "RequestedState" : "Not Applicable",`
	`    "TotalPower" : 0`
	`}`

Output Class	`public class PowerSupplyMember {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string odatatype { get; set; }`
	`    public string DeviceID { get; set; }`
	`    public string ElementName { get; set; }`
	`    public string EnabledState { get; set; }`
	`    public string HealthState { get; set; }`
	`    public int InstanceNumber { get; set; }`
	`    public string Name { get; set; }`
	`    public List<string> OperationalState { get; set; }`
	`    public string RequestedState { get; set; }`
	`    public int TotalPower { get; set; }`
	`}`

Note: List of Power Supply commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/powersupply[0]",` `"Commands":["show"]}`
Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/powersupply[0]",` `"Commands":["enumerate","asset"]}`
Asset Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/powersupply[0]/asset[0]",` `"Commands":["show"]}`

4.23 Processors

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/processor[0] show`

jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/ProcessorCollection/Processor",
	    "@odata.type" : "#Processor.v1_0_0.Processor",
	    "CPUStatus" : "CPU Enabled",
	    "CurClockSpeed" : "3000 MHz",
	    "DeviceID" : "BRCM:7.1",
	    "ElementName" : "Processor #1",
	    "EnabledState" : "Enabled",
	    "ExtBusSpeed" : "200 MHz",
	    "Family" : "AMD Phenom(TM) II Processor Family",
	    "HealthState" : "Unknown",
	    "InstanceNumber" : 0,
	    "LoadPercent" : "N/A",
	    "MaxClockSpeed" : "3000 MHz",
	    "Name" : "Processor",
	    "OperationalState" : ["Unknown"],
	    "RequestedState" : "Not Applicable"
	}</pre>

Output Class	<pre>public class ProcessorMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string CPUStatus { get; set; }
	    public string CurClockSpeed { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public string ExtBusSpeed { get; set; }
	    public string Family { get; set; }
	    public string HealthState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string LoadPercent { get; set; }
	    public string MaxClockSpeed { get; set; }
	    public string Name { get; set; }
	    public List<string> OperationalState { get; set; }
	    public string RequestedState { get; set; }
	}</pre>

Note: List of Processor commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["show"]}`
Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["enumerate","asset"]}`
Enumerate Fan	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["enumerate","fan"]}`
Enumerate Sensor	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["enumerate","sensor"]}`
Enumerate Memory	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]", "Commands":["enumerate","memory"]}`
Asset Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/asset[0]", "Commands":["show"]}`
Fan Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/fan[0]", "Commands":["show"]}`
Fan Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/fan[0]", "Commands":["enumerate","asset"]}`

Fan Show Asset	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/fan[0]/asset[0]",`
	`"Commands":["show"]}`

Memory Show	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/memory[0]",`
	`"Commands":["show"]}`

Memory Enumerate Asset	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/memory[0]",`
	`"Commands":["enumerate","asset"]}`

Memory Show Asset	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/memory[0]/asset[0]",`
	`"Commands":["show"]}`

Sensor Show	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/sensor[0]",`
	`"Commands":["show"]}`

Sensor Set Threshold	`{"h":"dash-`
	`system","u":"admin","P":"adminpass","t":"computersystem[0]/processor[0]/sensor[0]",`
	`"Commands":["setthreshold","lnc","100"]}`

4.24 Sensor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/` `sensor[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/sensor[0]",` `"Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
	    "@odata.type" : "#Sensor.v1_0_0.Sensor",
	    "BaseUnit" : "RPM",
	    "CurrentState" : "Normal",
	    "DeviceID" : "BRCM:11.1",
	    "ElementName" : "Numeric Sensor #1 (Tachometer)",
	    "EnabledState" : "Not Applicable",
	    "HealthState" : "Unknown",
	    "InstanceNumber" : 0,
	    "Name" : "Sensor",
	    "OperationalState" : ["No Contact"],
	    "PossibleStates" : [
	       "Non-Critical",
	       "Lower Non-Critical",
	       "Upper Non-Critical",
	       "Critical",
	       "Lower Critical",
	       "Upper Critical",
	       "Fatal",
	       "Lower Fatal",
	       "Upper Fatal",
	       "Normal",
	       "Unknown"
	    ],
	    "RateUnits" : "None",
	    "RequestedState" : "No Change",
	    "SensorReading" : 0,
	    "SensorType" : "Tachometer",
	    "ThresholdLC" : "N/A",
	    "ThresholdLF" : "N/A",
	    "ThresholdLNC" : "N/A",
	    "ThresholdUC" : "N/A",
	    "ThresholdUF" : "N/A",
	    "ThresholdUNC" : "N/A",
	    "UnitModifier" : 0
	}</pre>

| Output Class | ```csharp
public class SensorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string BaseUnit { get; set; }
    public string CurrentState { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public List<string> PossibleStates { get; set; }
    public string RateUnits { get; set; }
    public string RequestedState { get; set; }
    public int SensorReading { get; set; }
    public string SensorType { get; set; }
    public int ThresholdLC { get; set; }
    public int ThresholdLF { get; set; }
    public int ThresholdLNC { get; set; }
    public int ThresholdUC { get; set; }
    public int ThresholdUF { get; set; }
    public int ThresholdUNC { get; set; }
    public int UnitModifier { get; set; }
}
``` |
|---|---|

Note: List of Sensor commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/sensor[0]","Commands":["show"]}`
Reading	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/sensor[0]","Commands":["reading"]}`
Set Threshold	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/sensor[0]","Commands":["setthreshold","lnc","100"]}`

4.25 Software

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/software[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/software[0]","Commands":["show"]}`
| Output JSON | ```json
{
    "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
    "@odata.type" : "#Software.v1_0_0.Software",
    "BuildNumber" : 1,
    "ElementName" : "Bios Firmware",
    "IdentityInfoType" : [ "Bios Firmware" ],
    "IdentityInfoValue" : [ "BIOS:285409537:0" ],
    "InstanceID" : "SW:0",
    "InstanceNumber" : 0,
    "IsEntity" : "True",
    "MajorVersion" : 1,
    "Manufacturer" : "LENOVO",
    "MinorVersion" : 0,
    "Name" : "Software",
    "OperationalStatus" : "N/A",
    "RevisionNumber" : 1,
    "SoftwareClassifications" : [ "Firmware/BIOS" ],
    "TargetedOperatingSystems" : "N/A",
    "VersionString" : "M11KT45A"
}
``` |

| Output Class | ```
public class SensorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string BaseUnit { get; set; }
    public string CurrentState { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public List<string> PossibleStates { get; set; }
    public string RateUnits { get; set; }
    public string RequestedState { get; set; }
    public int SensorReading { get; set; }
    public string SensorType { get; set; }
    public int ThresholdLC { get; set; }
    public int ThresholdLF { get; set; }
    public int ThresholdLNC { get; set; }
    public int ThresholdUC { get; set; }
    public int ThresholdUF { get; set; }
    public int ThresholdUNC { get; set; }
    public int UnitModifier { get; set; }
}
``` |

Note: List of Software commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/software[0]", "Commands":["show"]}`
Install	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/software[0]", "Commands":["install","http://10.138.141.209/xampp/bin/5762tm3.05"]}`

4.26 User Management

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0]/user[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/ManagerAccountCollection/ManagerAccount",
    "@odata.type" : "#ManagerAccount.v1_0_0.ManagerAccount",
    "AssociatedRoles" : [ "Administrator Role" ],
    "ElementName" : "Administrator Account",
    "EnabledState" : "Enabled",
    "InstanceNumber" : 0,
    "Name" : "User:1",
    "OrganizationName" : [ "My Company" ],
    "RequestedState" : "Enabled",
    "UserId" : "Administrator"
}
``` |
| Output Class | ```
public class UserMember {
    public List<string> AssociatedRoles { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string Name { get; set; }
    public List<string> OrganizationName { get; set; }
    public string RequestedState { get; set; }
    public string UserId { get; set; }
}
``` |

Note: List of User commands

Command	Input JSON command
Show	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[2]", "Commands":["show"]}
Enable	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[2]", "Commands":["enable"]}
Disable	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[2]", "Commands":["disable"]}
Assign Roles	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[2]", "Commands":["assignroles","Role:0","Role:1"]}
Remove Roles	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[2]", "Commands":["removeroles","Role:1"]}
Delete	{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]/user[0]", "Commands":["delete"]}

Note: Refer section 28 User *for User profile*

5 Alert Destination

5.1 Enumerate Alert Destination

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate alertdestination`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","alertdestination"]}`

Output JSON	`{`
	   `"@odata.id" : "/DASH/v1/AlertDestinationCollection",`
	   `"@odata.type" :`
	`"#AlertDestinationCollection.v1_0_0.AlertDestinationCollection",`
	   `"Id" : "AlertDestinationCollection",`
	   `"Members" : [`
	      `{`
	        `"@odata.id" :`
	`"/DASH/v1/AlertDestinationCollection/AlertDestination",`
	        `"@odata.type" : "#AlertDestination.v1_0_0.AlertDestination",`
	        `"CreationClassName" : "CIM_ListenerDestinationWSManagement",`
	        `"Destination" : "`http://192.168.56.1:3275/eventsink`",`
	        `"ElementName" : "WS-Management Listener Destination #1",`
	        `"InstanceNumber" : 0,`
	        `"Name" : "ListenerDestinationWSManagement:1",`
	        `"PersistenceType" : "Transient",`
	        `"Protocol" : "WS-Management",`
	        `"SystemCreationClassName" : "CIM_ComputerSystem",`
	        `"SystemName" : "dash-system"`
	      `}`
	   `],`
	   `"Name" : "Alert Destination Collection"`
	`}`

Output Class	```public class AlertDestinationCollection {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string Id { get; set; }```
	``` public string _odata_type { get; set; }```
	``` [JsonProperty("Members")]```
	``` public List<AlertDestinationMember> Members { get; set; }```
	``` public string Name { get; set; }```
	```}```
	```public class AlertDestinationMember {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string _odata_type { get; set; }```
	``` public string CreationClassName { get; set; }```
	``` public string Destination { get; set; }```
	``` public string ElementName { get; set; }```
	``` public int InstanceNumber { get; set; }```
	``` public string Name { get; set; }```
	``` public string PersistenceType { get; set; }```
	``` public string Protocol { get; set; }```
	``` public string SystemCreationClassName { get; set; }```
	``` public string SystemName { get; set; }```
	```}```

5.2 Alert Destination Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t alertdestination[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`

Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"alertdestination[0]",` `"Commands":["show"]}`

Output JSON	```{```
	``` "@odata.id" : "/DASH/v1/AlertDestinationCollection/AlertDestination",```
	``` "@odata.type" : "#AlertDestination.v1_0_0.AlertDestination",```
	``` "CreationClassName" : "CIM_ListenerDestinationWSManagement",```
	``` "Destination" : "http://192.168.56.1:3275/eventsink",```
	``` "ElementName" : "WS-Management Listener Destination #1",```
	``` "InstanceNumber" : 0,```
	``` "Name" : "ListenerDestinationWSManagement:1",```
	``` "PersistenceType" : "Transient",```
	``` "Protocol" : "WS-Management",```
	``` "SystemCreationClassName" : "CIM_ComputerSystem",```
	``` "SystemName" : "dash-system"```
	```}```

Output Class	```public class AlertDestinationMember {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string _odata_type { get; set; }```
	``` public string CreationClassName { get; set; }```
	``` public string Destination { get; set; }```
	``` public string ElementName { get; set; }```
	``` public int InstanceNumber { get; set; }```
	``` public string Name { get; set; }```
	``` public string PersistenceType { get; set; }```
	``` public string Protocol { get; set; }```
	``` public string SystemCreationClassName { get; set; }```
	``` public string SystemName { get; set; }```
	```}```

5.3 Alert Destination Delete

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t alertdestination[0] delete`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"alertdestination[0]",` `"Commands":["delete"]}`

Output JSON	```{```
	``` "ErrorCode" : 0,```
	``` "ErrorMessage" : "Alert Destination Deleted Successfully"```
	```}```

Output Class	```public class CommandError {```
	``` public int ErrorCode { get; set; }```
	``` public string ErrorMessage { get; set; }```
	```}```

6 Asset

6.1 Enumerate Asset

DASH CLI Command	`dashcli –h dash-system –u admin –P adminpass enumerate asset`
jdo Usage	`dashcli –jdo`
ji/jo Usage	`dashcli –ji input_json.txt –jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","asset"]}`
Output JSON	(see below)

```
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",
    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",
    "Id" : "PhysicalAssetCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "ConnectorLayout" : "Slot",
            "ConnectorType" : [ "PCI" ],
            "ElementName" : "Slot #1",
            "InstanceNumber" : 0,
            "Manufacturer" : "N/A",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "N/A",
            "SlotNumber" : 4,
            "Tag" : "BRCM:6.1"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "ConnectorLayout" : "Slot",
            "ConnectorType" : [ "Unknown" ],
            "ElementName" : "Slot #2",
            "InstanceNumber" : 1,
            "Manufacturer" : "N/A",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "N/A",
            "SlotNumber" : 1,
            "Tag" : "BRCM:6.2"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "ConnectorLayout" : "Slot",
            "ConnectorType" : [ "Unknown" ],
            "ElementName" : "Slot #3",
            "InstanceNumber" : 2,
            "Manufacturer" : "N/A",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "N/A",
            "SlotNumber" : 2,
            "Tag" : "BRCM:6.3"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "ConnectorLayout" : "Slot",
            "ConnectorType" : [ "Unknown" ],
            "ElementName" : "Slot #4",
```

```
              "InstanceNumber" : 3,
              "Manufacturer" : "N/A",
              "Model" : "N/A",
              "Name" : "PhysicalAsset",
              "PartNumber" : "N/A",
              "SKU" : "N/A",
              "SerialNumber" : "N/A",
              "SlotNumber" : 3,
              "Tag" : "BRCM:6.4"
           },
           {
              "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
              "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
              "CanbeFRUed" : "No",
              "ElementName" : "Processor #1",
              "InstanceNumber" : 4,
              "Manufacturer" : "AMD",
              "Model" : "AMD Phenom(tm) II X4 B95 Processor",
              "Name" : "PhysicalAsset",
              "PartNumber" : "N/A",
              "SKU" : "N/A",
              "SerialNumber" : "N/A",
              "Tag" : "BRCM:4.1"
           },
           {
              "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
              "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
              "CanbeFRUed" : "No",
              "ElementName" : "Physical Memory Device #1",
              "InstanceNumber" : 5,
              "Manufacturer" : "JEDEC ID:80 CE",
              "MemoryBankLabel" : "SMBIOS_003d",
              "MemoryCapacity" : "2048 MB",
              "MemoryFormFactor" : "DIMM",
              "MemoryType" : "DDR3",
              "Model" : "N/A",
              "Name" : "PhysicalAsset",
              "PartNumber" : "M378B5673FH0-CH9",
              "SKU" : "N/A",
              "SerialNumber" : "822D9E63",
              "Tag" : "BRCM:5.1"
           },
           {
              "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
              "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
              "CanbeFRUed" : "No",
              "ElementName" : "Physical Memory Device #2",
              "InstanceNumber" : 6,
              "Manufacturer" : "JEDEC ID:80 CE",
              "MemoryBankLabel" : "SMBIOS_003e",
              "MemoryCapacity" : "2048 MB",
              "MemoryFormFactor" : "DIMM",
              "MemoryType" : "DDR3",
              "Model" : "N/A",
              "Name" : "PhysicalAsset",
              "PartNumber" : "M378B5673FH0-CH9",
              "SKU" : "N/A",
              "SerialNumber" : "7F2D9E63",
              "Tag" : "BRCM:5.2"
           },
           {
              "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
              "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
              "CanbeFRUed" : "No",
              "ElementName" : "Physical Memory Device #3",
              "InstanceNumber" : 7,
              "Manufacturer" : "N/A",
              "MemoryBankLabel" : "SMBIOS_0040",
              "MemoryCapacity" : "1024 KB",
```

```
            "MemoryFormFactor" : "Other",
            "MemoryType" : "Flash",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "N/A",
            "Tag" : "BRCM:5.3"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "Yes",
            "ElementName" : "BaseBoard",
            "InstanceNumber" : 8,
            "IsHostingBoard" : "Yes",
            "Manufacturer" : "Hewlett-Packard",
            "Model" : "3047h",
            "Name" : "PhysicalAsset",
            "PackageType" : "Module/Card",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "INA105T9LB",
            "Tag" : "BRCM:23"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ChassisType" : "Mini Tower",
            "ElementName" : "Chassis",
            "InstanceNumber" : 9,
            "Manufacturer" : "Hewlett-Packard",
            "Model" : "HP Compaq 6005 Pro MT PC",
            "Name" : "PhysicalAsset",
            "PackageType" : "Chassis/Frame",
            "PartNumber" : "N/A",
            "SKU" : "AT493AV",
            "SerialNumber" : "INA105T9LB",
            "Tag" : "BRCM:3"
        }
    ],
    "Name" : "Physical Asset Collection"
}
```

| Output Class | ```csharp
public class PhysicalAssetCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<PhysicalAssetMember> Members { get; set; }
    public string Name { get; set; }
}
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
    public List<string> ConnectorType { get; set; }
    public string ElementName { get; set; }
    public int InstanceNumber { get; set; }
    public string Manufacturer { get; set; }
    public string Model { get; set; }
    public string Name { get; set; }
    public string PartNumber { get; set; }
    public string SKU { get; set; }
``` |

```
                              public string SerialNumber { get; set; }
                              public int SlotNumber { get; set; }
                              public string Tag { get; set; }
                              public string CanbeFRUed { get; set; }
                              public string MemoryBankLabel { get; set; }
                              public string MemoryCapacity { get; set; }
                              public string MemoryFormFactor { get; set; }
                              public string MemoryType { get; set; }
                              public string IsHostingBoard { get; set; }
                              public string PackageType { get; set; }
                              public string ChassisType { get; set; }
                          }
```

6.2 Asset Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t asset[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"asset[0]",` `"Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
	    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
	    "ConnectorLayout" : "Slot",
	    "ConnectorType" : ["PCI"],
	    "ElementName" : "Slot #1",
	    "InstanceNumber" : 0,
	    "Manufacturer" : "N/A",
	    "Model" : "N/A",
	    "Name" : "PhysicalAsset",
	    "PartNumber" : "N/A",
	    "SKU" : "N/A",
	    "SerialNumber" : "N/A",
	    "SlotNumber" : 4,
	    "Tag" : "BRCM:6.1"
	}</pre>

Output Class	<pre>public class PhysicalAssetMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string ConnectorLayout { get; set; }
	    public List<string> ConnectorType { get; set; }
	    public string ElementName { get; set; }
	    public int InstanceNumber { get; set; }
	    public string Manufacturer { get; set; }
	    public string Model { get; set; }
	    public string Name { get; set; }
	    public string PartNumber { get; set; }
	    public string SKU { get; set; }
	    public string SerialNumber { get; set; }
	    public int SlotNumber { get; set; }
	    public string Tag { get; set; }
	    public string CanbeFRUed { get; set; }
	    public string MemoryBankLabel { get; set; }
	    public string MemoryCapacity { get; set; }
	    public string MemoryFormFactor { get; set; }
	    public string MemoryType { get; set; }
	    public string IsHostingBoard { get; set; }
	    public string PackageType { get; set; }
	    public string ChassisType { get; set; }
	}</pre>

7 BIOS

7.1 Enumerate BIOS

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate bios`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","bios"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/BIOSCollection",
"@odata.type" : "#BIOSCollection.v1_0_0.BIOSCollection",
"Id" : "BIOSCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/BIOSCollection/BIOS",
"@odata.type" : "#BIOS.v1_0_0.BIOS",
"BIOSAttributes" : [
{
"AllowedStringLength" : "N/A",
"AttributeInstanceNumber" : 0,
"AttributeName" : "Com Port Address",
"CurrentValues" : ["Disabled"],
"DefaultValues" : ["Disabled"],
"InstanceID" : "BIOSEnumeration:2147680256",
"IsOrderedList" : "N/A",
"IsReadOnly" : "False",
"PendingValues" : "N/A",
"PossibleValues" : ["Disabled", "Enabled"],
"StringType" : "N/A"
},
{
"AllowedStringLength" : "N/A",
"AttributeInstanceNumber" : 1,
"AttributeName" : "Route Port 80h Cycles to",
"CurrentValues" : ["LPC"],
"DefaultValues" : ["LPC"],
"InstanceID" : "BIOSEnumeration:2147680257",
"IsOrderedList" : "N/A",
"IsReadOnly" : "False",
"PendingValues" : "N/A",
"PossibleValues" : ["LPC", "PCI"],
"StringType" : "N/A"
},
{
"AllowedStringLength" : "N/A",
"AttributeInstanceNumber" : 2,
"AttributeName" : "Legacy USB Support",
"CurrentValues" : ["Enabled"],
"DefaultValues" : ["Disabled"],
"InstanceID" : "BIOSEnumeration:2147680258",
"IsOrderedList" : "N/A",
"IsReadOnly" : "False",
"PendingValues" : "N/A",
"PossibleValues" : ["Disabled", "Enabled"],
"StringType" : "N/A"
},
{
"AllowedStringLength" : "N/A",
"AttributeInstanceNumber" : 3,
"AttributeName" : "Force PXE Boot",
"CurrentValues" : ["Enabled"],
"DefaultValues" : ["Disabled"],
"InstanceID" : "BIOSEnumeration:2147680259",
"IsOrderedList" : "N/A",
"IsReadOnly" : "False",
"PendingValues" : "N/A",
"PossibleValues" : ["Disabled", "Enabled"],</pre>

```
                                    "StringType" : "N/A"
                                },
                                {
                                    "AllowedStringLength" : "N/A",
                                    "AttributeInstanceNumber" : 4,
                                    "AttributeName" : "Force HardDisk0 Boot",
                                    "CurrentValues" : [ "Enabled" ],
                                    "DefaultValues" : [ "Disabled" ],
                                    "InstanceID" : "BIOSEnumeration:2147680260",
                                    "IsOrderedList" : "N/A",
                                    "IsReadOnly" : "False",
                                    "PendingValues" : "N/A",
                                    "PossibleValues" : [ "Disabled", "Enabled" ],
                                    "StringType" : "N/A"
                                },
                                {
                                    "AllowedStringLength" : "N/A",
                                    "AttributeInstanceNumber" : 5,
                                    "AttributeName" : "Force HardDisk1 Safe Boot",
                                    "CurrentValues" : [ "Enabled" ],
                                    "DefaultValues" : [ "Disabled" ],
                                    "InstanceID" : "BIOSEnumeration:2147680261",
                                    "IsOrderedList" : "N/A",
                                    "IsReadOnly" : "False",
                                    "PendingValues" : "N/A",
                                    "PossibleValues" : [ "Disabled", "Enabled" ],
                                    "StringType" : "N/A"
                                },
                                {
                                    "AllowedStringLength" : "N/A",
                                    "AttributeInstanceNumber" : 6,
                                    "AttributeName" : "Force HardDisk2 Diag",
                                    "CurrentValues" : [ "Enabled" ],
                                    "DefaultValues" : [ "Disabled" ],
                                    "InstanceID" : "BIOSEnumeration:2147680262",
                                    "IsOrderedList" : "N/A",
                                    "IsReadOnly" : "False",
                                    "PendingValues" : "N/A",
                                    "PossibleValues" : [ "Disabled", "Enabled" ],
                                    "StringType" : "N/A"
                                },
                                {
                                    "AllowedStringLength" : "N/A",
                                    "AttributeInstanceNumber" : 7,
                                    "AttributeName" : "Force CD/DVD Rom Boot",
                                    "CurrentValues" : [ "Enabled" ],
                                    "DefaultValues" : [ "Disabled" ],
                                    "InstanceID" : "BIOSEnumeration:2147680263",
                                    "IsOrderedList" : "N/A",
                                    "IsReadOnly" : "False",
                                    "PendingValues" : "N/A",
                                    "PossibleValues" : [ "Disabled", "Enabled" ],
                                    "StringType" : "N/A"
                                }
                            ],
                            "BIOSName" : "10M30009US",
                            "InstanceNumber" : 0,
                            "IsPrimaryBIOS" : "N/A",
                            "Manufacturer" : "LENOVO",
                            "Name" : "BIOS",
                            "SoftwareElementID" : "BIOS:262148",
                            "SoftwareElementState" : "Executable",
                            "TargetOperatingSystem" : "Not Applicable",
                            "Version" : "M11KT45A"
                        }
                    ],
                    "Name" : "BIOS Collection"
                }
```

| Output Class | ```csharp
public class BIOSCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<BIOSMember> Members { get; set; }
    public string Name { get; set; }
}
public class BIOSMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<BiosAttribute> BIOSAttributes { get; set; }
    public string BIOSName { get; set; }
    public int InstanceNumber { get; set; }
    public string IsPrimaryBIOS { get; set; }
    public string Manufacturer { get; set; }
    public string Name { get; set; }
    public string SoftwareElementID { get; set; }
    public string SoftwareElementState { get; set; }
    public string TargetOperatingSystem { get; set; }
    public string Version { get; set; }
}
public class BiosAttribute {
    public string AllowedStringLength { get; set; }
    public int AttributeInstanceNumber { get; set; }
    public string AttributeName { get; set; }
    public List<string> CurrentValues { get; set; }
    public List<string> DefaultValues { get; set; }
    public string InstanceID { get; set; }
    public string IsOrderedList { get; set; }
    public string IsReadOnly { get; set; }
    public List<string> PendingValues { get; set; }
    public List<string> PossibleValues { get; set; }
    public string StringType { get; set; }
}
``` |
|---|---|

7.2 BIOS Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t bios[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"bios[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/BIOSCollection/BIOS",
    "@odata.type" : "#BIOS.v1_0_0.BIOS",
    "BIOSAttributes" : [
        {
            "AllowedStringLength" : "N/A",
            "AttributeInstanceNumber" : 0,
            "AttributeName" : "Com Port Address",
            "CurrentValues" : [ "Disabled" ],
            "DefaultValues" : [ "Disabled" ],
            "InstanceID" : "BIOSEnumeration:2147680256",
            "IsOrderedList" : "N/A",
            "IsReadOnly" : "False",
            "PendingValues" : "N/A",
            "PossibleValues" : [ "Disabled", "Enabled" ],
            "StringType" : "N/A"
        },
        {
            "AllowedStringLength" : "N/A",
``` |

```
                  "AttributeInstanceNumber" : 1,
                  "AttributeName" : "Route Port 80h Cycles to",
                  "CurrentValues" : [ "LPC" ],
                  "DefaultValues" : [ "LPC" ],
                  "InstanceID" : "BIOSEnumeration:2147680257",
                  "IsOrderedList" : "N/A",
                  "IsReadOnly" : "False",
                  "PendingValues" : "N/A",
                  "PossibleValues" : [ "LPC", "PCI" ],
                  "StringType" : "N/A"
              },
              {
                  "AllowedStringLength" : "N/A",
                  "AttributeInstanceNumber" : 2,
                  "AttributeName" : "Legacy USB Support",
                  "CurrentValues" : [ "Enabled" ],
                  "DefaultValues" : [ "Disabled" ],
                  "InstanceID" : "BIOSEnumeration:2147680258",
                  "IsOrderedList" : "N/A",
                  "IsReadOnly" : "False",
                  "PendingValues" : "N/A",
                  "PossibleValues" : [ "Disabled", "Enabled" ],
                  "StringType" : "N/A"
              },
              {
                  "AllowedStringLength" : "N/A",
                  "AttributeInstanceNumber" : 3,
                  "AttributeName" : "Force PXE Boot",
                  "CurrentValues" : [ "Enabled" ],
                  "DefaultValues" : [ "Disabled" ],
                  "InstanceID" : "BIOSEnumeration:2147680259",
                  "IsOrderedList" : "N/A",
                  "IsReadOnly" : "False",
                  "PendingValues" : "N/A",
                  "PossibleValues" : [ "Disabled", "Enabled" ],
                  "StringType" : "N/A"
              },
              {
                  "AllowedStringLength" : "N/A",
                  "AttributeInstanceNumber" : 4,
                  "AttributeName" : "Force HardDisk0 Boot",
                  "CurrentValues" : [ "Enabled" ],
                  "DefaultValues" : [ "Disabled" ],
                  "InstanceID" : "BIOSEnumeration:2147680260",
                  "IsOrderedList" : "N/A",
                  "IsReadOnly" : "False",
                  "PendingValues" : "N/A",
                  "PossibleValues" : [ "Disabled", "Enabled" ],
                  "StringType" : "N/A"
              },
              {
                  "AllowedStringLength" : "N/A",
                  "AttributeInstanceNumber" : 5,
                  "AttributeName" : "Force HardDisk1 Safe Boot",
                  "CurrentValues" : [ "Enabled" ],
                  "DefaultValues" : [ "Disabled" ],
                  "InstanceID" : "BIOSEnumeration:2147680261",
                  "IsOrderedList" : "N/A",
                  "IsReadOnly" : "False",
                  "PendingValues" : "N/A",
                  "PossibleValues" : [ "Disabled", "Enabled" ],
                  "StringType" : "N/A"
              },
              {
                  "AllowedStringLength" : "N/A",
                  "AttributeInstanceNumber" : 6,
                  "AttributeName" : "Force HardDisk2 Diag",
                  "CurrentValues" : [ "Enabled" ],
                  "DefaultValues" : [ "Disabled" ],
```

```
        "InstanceID" : "BIOSEnumeration:2147680262",
        "IsOrderedList" : "N/A",
        "IsReadOnly" : "False",
        "PendingValues" : "N/A",
        "PossibleValues" : [ "Disabled", "Enabled" ],
        "StringType" : "N/A"
    },
    {
        "AllowedStringLength" : "N/A",
        "AttributeInstanceNumber" : 7,
        "AttributeName" : "Force CD/DVD Rom Boot",
        "CurrentValues" : [ "Enabled" ],
        "DefaultValues" : [ "Disabled" ],
        "InstanceID" : "BIOSEnumeration:2147680263",
        "IsOrderedList" : "N/A",
        "IsReadOnly" : "False",
        "PendingValues" : "N/A",
        "PossibleValues" : [ "Disabled", "Enabled" ],
        "StringType" : "N/A"
    }
],
"BIOSName" : "10M30009US",
"InstanceNumber" : 0,
"IsPrimaryBIOS" : "N/A",
"Manufacturer" : "LENOVO",
"Name" : "BIOS",
"SoftwareElementID" : "BIOS:262148",
"SoftwareElementState" : "Executable",
"TargetOperatingSystem" : "Not Applicable",
"Version" : "M11KT45A"
}
```

| Output Class | ```csharp
public class BIOSMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<BiosAttribute> BIOSAttributes { get; set; }
    public string BIOSName { get; set; }
    public int InstanceNumber { get; set; }
    public string IsPrimaryBIOS { get; set; }
    public string Manufacturer { get; set; }
    public string Name { get; set; }
    public string SoftwareElementID { get; set; }
    public string SoftwareElementState { get; set; }
    public string TargetOperatingSystem { get; set; }
    public string Version { get; set; }
}
public class BiosAttribute {
    public string AllowedStringLength { get; set; }
    public int AttributeInstanceNumber { get; set; }
    public string AttributeName { get; set; }
    public List<string> CurrentValues { get; set; }
    public List<string> DefaultValues { get; set; }
    public string InstanceID { get; set; }
    public string IsOrderedList { get; set; }
    public string IsReadOnly { get; set; }
    public List<string> PendingValues { get; set; }
    public List<string> PossibleValues { get; set; }
    public string StringType { get; set; }
}
``` |

7.3 BIOS Set Attribute

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t bios[0] setattribute "Com Port Address" Enable`
jdo Usage	`dashcli -jdo`

ji/jo Usage	`dashcli –ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"bios[0]", "Commands":["setattribute","Com Port Address","Enable"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "SetAttributes Successful"`
	`}`

Output Class	`public class CommandError {`
	`    public int ErrorCode { get; set; }`
	`    public string ErrorMessage { get; set; }`
	`}`

8 Boot Config

8.1 Enumerate Boot Config

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate bootconfig`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","bootconfig"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/BootConfigurationCollection",
	    "@odata.type" :
	"#BootConfigurationCollection.v1_0_0.BootConfigurationCollection",
	    "Id" : "BootConfigurationCollection",
	    "Members" : [
	        {
	            "@odata.id" :
	"/DASH/v1/BootConfigurationCollection/BootConfiguration",
	            "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration",
	            "BootDevices" : [
	                {
	                    "Name" : "BRCM:Hard Drive:1",
	                    "Value" : 0
	                },
	                {
	                    "Name" : "BRCM:USB Device:4",
	                    "Value" : 1
	                },
	                {
	                    "Name" : "BRCM:Network:3",
	                    "Value" : 2
	                },
	                {
	                    "Name" : "BRCM:CD-ROM:2",
	                    "Value" : 3
	                }
	            ],
	            "ElementName" : "Boot Configuration Setting #1",
	            "Id" : "BootConfiguration",
	            "InstanceId" : "BRCM:31.1",
	            "InstanceNumber" : 0,
	            "IsCurrentConfiguration" : "No",
	            "IsDefaultConfiguration" : "No",
	            "IsNextConfiguration" : "Yes",
	            "Name" : "Boot Configuration"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/BootConfigurationCollection/BootConfiguration",
	            "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration",
	            "BootDevices" : [
	                {
	                    "Name" : "BRCM:Hard Drive:5",
	                    "Value" : 0
	                },
	                {
	                    "Name" : "BRCM:CD-ROM:6",
	                    "Value" : 1
	                },
	                {
	                    "Name" : "BRCM:Network:7",
	                    "Value" : 2
	                },
	                {
	                    "Name" : "BRCM:USB Device:8",
	                    "Value" : 3
	                }
	            ],</pre>

| | ```
            "ElementName" : "Boot Configuration Setting #2",
            "Id" : "BootConfiguration",
            "InstanceId" : "BRCM:31.2",
            "InstanceNumber" : 1,
            "IsCurrentConfiguration" : "No",
            "IsDefaultConfiguration" : "No",
            "IsNextConfiguration" : "No",
            "Name" : "Boot Configuration"
        }
    ],
    "Name" : "Boot Config Collection"
}
``` |
| Output Class | ```
public class BootConfigurationCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<BootConfigurationMember> Members { get; set; }
    public string Name { get; set; }
}
public class BootConfigurationMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<BootDevice> BootDevices { get; set; }
    public string ElementName { get; set; }
    public string Id { get; set; }
    public string InstanceId { get; set; }
    public int InstanceNumber { get; set; }
    public string IsCurrentConfiguration { get; set; }
    public string IsDefaultConfiguration { get; set; }
    public string IsNextConfiguration { get; set; }
    public string Name { get; set; }
}
public class BootDevice {
    public string Name { get; set; }
    public int Value { get; set; }
}
``` |

8.2 Boot Config Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t bootconfig[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"bootconfig[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/BootConfigurationCollection/BootConfiguration",
    "@odata.type" : "#BootConfiguration.v1_0_0.BootConfiguration",
    "BootDevices" : [
        {
            "Name" : "BRCM:Hard Drive:1",
            "Value" : 0
        },
        {
            "Name" : "BRCM:USB Device:4",
            "Value" : 1
        },
        {
            "Name" : "BRCM:Network:3",
            "Value" : 2
        },
        {
``` |

<table>
<tr><td></td><td>

```
            "Name" : "BRCM:CD-ROM:2",
            "Value" : 3
        }
    ],
    "ElementName" : "Boot Configuration Setting #1",
    "Id" : "BootConfiguration",
    "InstanceId" : "BRCM:31.1",
    "InstanceNumber" : 0,
    "IsCurrentConfiguration" : "No",
    "IsDefaultConfiguration" : "No",
    "IsNextConfiguration" : "Yes",
    "Name" : "Boot Configuration"
}
```
</td></tr>
<tr><td>Output Class</td><td>

```csharp
public class BootConfigurationMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<BootDevice> BootDevices { get; set; }
    public string ElementName { get; set; }
    public string Id { get; set; }
    public string InstanceId { get; set; }
    public int InstanceNumber { get; set; }
    public string IsCurrentConfiguration { get; set; }
    public string IsDefaultConfiguration { get; set; }
    public string IsNextConfiguration { get; set; }
    public string Name { get; set; }
}
public class BootDevice {
    public string Name { get; set; }
    public int Value { get; set; }
}
```
</td></tr>
</table>

8.3 Boot Config Change Boot Order

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t bootconfig[0] changebootorder 3 2 1 0`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"bootconfig[0]", "Commands":["changebootorder","3","2","1","0"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "Boot Order Changed Successfully"`
	`}`

Output Class	`public class CommandError {`
	`    public int ErrorCode { get; set; }`
	`    public string ErrorMessage { get; set; }`
	`}`

9 Ethernet Port

9.1 Enumerate Ethernet Port

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate ethernetport`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","ethernetport"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/EthernetPortCollection",
	    "@odata.type" : "#EthernetPortCollection.v1_0_0.EthernetPortCollection",
	    "Id" : "EthernetPortCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/EthernetPortCollection/EthernetPort",
	            "@odata.type" : "#EthernetPort.v1_0_0.EthernetPort",
	            "Capabilities" : ["WakeOnLan"],
	            "DeviceID" : "BRCM:34",
	            "ElementName" : "Ethernet Port",
	            "EnabledCapabilities" : "N/A",
	            "EnabledState" : "Not Applicable",
	            "InstanceNumber" : 0,
	            "LinkTechnology" : "Ethernet",
	            "MACAddress" : "64315031BE9D",
	            "MaximumSpeed" : "1 Gbps",
	            "Name" : "EthernetPort",
	            "NetworkAddress" : ["64315031BE9D"],
	            "PortType" : "1000BaseT",
	            "RequestedSpeed" : "N/A",
	            "RequestedState" : "Not Applicable",
	            "Speed" : "1 Gbps"
	        }
	    ],
	    "Name" : "EthernetPort Collection"
	}</pre>

Output Class	<pre>public class EthernetPortCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<EthernetPortMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class EthernetPortMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public List<string> Capabilities { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public List<string> EnabledCapabilities { get; set; }
	    public string EnabledState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string LinkTechnology { get; set; }
	    public string MACAddress { get; set; }
	    public string MaximumSpeed { get; set; }
	    public string Name { get; set; }
	    public List<string> NetworkAddress { get; set; }
	    public string PortType { get; set; }
	    public string RequestedSpeed { get; set; }
	    public string RequestedState { get; set; }
	    public string Speed { get; set; }
	}</pre>

9.2 Ethernet Port Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t ethernetport[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"ethernetport[0]", "Commands":["show"]}`

Output JSON	```{```
	 `    "@odata.id" : "/DASH/v1/EthernetPortCollection/EthernetPort",`
	 `    "@odata.type" : "#EthernetPort.v1_0_0.EthernetPort",`
	 `    "Capabilities" : [ "WakeOnLan" ],`
	 `    "DeviceID" : "BRCM:34",`
	 `    "ElementName" : "Ethernet Port",`
	 `    "EnabledCapabilities" : "N/A",`
	 `    "EnabledState" : "Not Applicable",`
	 `    "InstanceNumber" : 0,`
	 `    "LinkTechnology" : "Ethernet",`
	 `    "MACAddress" : "64315031BE9D",`
	 `    "MaximumSpeed" : "1 Gbps",`
	 `    "Name" : "EthernetPort",`
	 `    "NetworkAddress" : [ "64315031BE9D" ],`
	 `    "PortType" : "1000BaseT",`
	 `    "RequestedSpeed" : "N/A",`
	 `    "RequestedState" : "Not Applicable",`
	 `    "Speed" : "1 Gbps"`
	 `}`

Output Class	```public class EthernetPortMember {```
	 `    [JsonProperty("@odata.id")]`
	 `    public string _odata_id { get; set; }`
	 `    [JsonProperty("@odata.type")]`
	 `    public string odatatype { get; set; }`
	 `    public List<string> Capabilities { get; set; }`
	 `    public string DeviceID { get; set; }`
	 `    public string ElementName { get; set; }`
	 `    public List<string> EnabledCapabilities { get; set; }`
	 `    public string EnabledState { get; set; }`
	 `    public int InstanceNumber { get; set; }`
	 `    public string LinkTechnology { get; set; }`
	 `    public string MACAddress { get; set; }`
	 `    public string MaximumSpeed { get; set; }`
	 `    public string Name { get; set; }`
	 `    public List<string> NetworkAddress { get; set; }`
	 `    public string PortType { get; set; }`
	 `    public string RequestedSpeed { get; set; }`
	 `    public string RequestedState { get; set; }`
	 `    public string Speed { get; set; }`
	 `}`

10 Fan

10.1 Enumerate Fan

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate fan`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","fan"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/FanCollection",
    "@odata.type" : "#FanCollection.v1_0_0.FanCollection",
    "Id" : "FanCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/FanCollection/Fan",
            "@odata.type" : "#Fan.v1_0_0.Fan",
            "DesiredSpeed" : "N/A",
            "DeviceID" : "BRCM:10.1",
            "ElementName" : "Fan #1",
            "EnabledState" : "Not Applicable",
            "HealthState" : "OK",
            "InstanceNumber" : 0,
            "IsActiveCooling" : "Yes",
            "IsVariableSpeed" : "Yes",
            "Name" : "Fan",
            "OperationalState" : [ "OK" ],
            "RequestedState" : "Not Applicable"
        },
        {
            "@odata.id" : "/DASH/v1/FanCollection/Fan",
            "@odata.type" : "#Fan.v1_0_0.Fan",
            "DesiredSpeed" : "N/A",
            "DeviceID" : "BRCM:10.2",
            "ElementName" : "Fan #2",
            "EnabledState" : "Not Applicable",
            "HealthState" : "OK",
            "InstanceNumber" : 1,
            "IsActiveCooling" : "Yes",
            "IsVariableSpeed" : "Yes",
            "Name" : "Fan",
            "OperationalState" : [ "OK" ],
            "RequestedState" : "Not Applicable"
        }
    ],
    "Name" : "Fan Collection"
}
``` |
| Output Class | ```
public class FanCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<FanMember> Members { get; set; }
    public string Name { get; set; }
}
public class FanMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public int DesiredSpeed { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
``` |

```
                public int InstanceNumber { get; set; }
                public string IsActiveCooling { get; set; }
                public string IsVariableSpeed { get; set; }
                public string Name { get; set; }
                public List<string> OperationalState { get; set; }
                public string RequestedState { get; set; }
            }
```

10.2 Fan Show

DASH CLI Command	`dashcli –h dash-system –u admin –P adminpass –t fan[0] show`
jdo Usage	`dashcli –jdo`
ji/jo Usage	`dashcli –ji input_json.txt –jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"fan[0]",` `"Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/FanCollection/Fan",`
	`    "@odata.type" : "#Fan.v1_0_0.Fan",`
	`    "DesiredSpeed" : "N/A",`
	`    "DeviceID" : "BRCM:10.1",`
	`    "ElementName" : "Fan #1",`
	`    "EnabledState" : "Not Applicable",`
	`    "HealthState" : "OK",`
	`    "InstanceNumber" : 0,`
	`    "IsActiveCooling" : "Yes",`
	`    "IsVariableSpeed" : "Yes",`
	`    "Name" : "Fan",`
	`    "OperationalState" : [ "OK" ],`
	`    "RequestedState" : "Not Applicable"`
	`}`

Output Class	`    public class FanMember {`
	`        [JsonProperty("@odata.id")]`
	`        public string _odata_id { get; set; }`
	`        [JsonProperty("@odata.type")]`
	`        public string odatatype { get; set; }`
	`        public int DesiredSpeed { get; set; }`
	`        public string DeviceID { get; set; }`
	`        public string ElementName { get; set; }`
	`        public string EnabledState { get; set; }`
	`        public string HealthState { get; set; }`
	`        public int InstanceNumber { get; set; }`
	`        public string IsActiveCooling { get; set; }`
	`        public string IsVariableSpeed { get; set; }`
	`        public string Name { get; set; }`
	`        public List<string> OperationalState { get; set; }`
	`        public string RequestedState { get; set; }`
	`    }`

10.3 Enumerate Asset

DASH CLI Command	`dashcli –h dash-system –u admin –P adminpass –t fan[0] enumerate asset`
jdo Usage	`dashcli –jdo`
ji/jo Usage	`dashcli –ji input_json.txt –jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"fan[0]",` `"Commands":["enumerate","asset"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",`
	`    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",`
	`    "Id" : "PhysicalAssetCollection",`
	`    "Members" : [`
	`        {`
	`            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",`
	`            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",`
	`            "CanbeFRUed" : "Yes",`

```
                    "ElementName" : "BaseBoard:0",
                    "InstanceNumber" : 0,
                    "IsHostingBoard" : "Yes",
                    "Manufacturer" : "LENOVO",
                    "Model" : "30FD",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "SDK0J40697 WIN 3305035440590",
                    "SKU" : "NULL",
                    "SerialNumber" : "                      ",
                    "Tag" : "Card:0"
                },
                {

                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "CanbeFRUed" : "No",
                    "ChassisType" : "Desktop",
                    "ElementName" : "Chassis:0",
                    "InstanceNumber" : 1,
                    "Manufacturer" : "LENOVO",
                    "Model" : "10M30009US",
                    "Name" : "PhysicalAsset",
                    "PackageType" : "Chassis/Frame",
                    "PartNumber" : "None",
                    "SKU" : "LENOVO_MT_10M3_BU_LENOVO_FM_ThinkCentre M715q",
                    "SerialNumber" : "MJ04WH8F",
                    "Tag" : "Chassis:0",
                    "Version" : "None"
                },
                {

                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "CanbeFRUed" : "No",
                    "ElementName" : "Processor:0",
                    "InstanceNumber" : 2,
                    "Manufacturer" : "AuthenticAMD",
                    "Model" : "AMD PRO A12-9800E R7, 12 COMPUTE CORES 4C+8G   ",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "UnKnown ",
                    "SKU" : "NULL",
                    "SerialNumber" : "UnKnown ",
                    "Tag" : "Processor:0"
                },
                {

                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "CanbeFRUed" : "No",
                    "ElementName" : "Memory:0",
                    "InstanceNumber" : 3,
                    "Manufacturer" : "Hynix/Hyundai",
                    "MemoryBankLabel" : "CHANNEL A",
                    "MemoryCapacity" : "8192 MB",
                    "MemoryFormFactor" : "DIMM",
                    "MemorySpeed" : "2400 nanosecond",
                    "MemoryType" : "DDR4",
                    "Model" : "N/A",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "HMA81GS6AFR8N-UH     ",
                    "SKU" : "N/A",
                    "SerialNumber" : "51B27A3F",
                    "Tag" : "Mem:0"
                },
                {
                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "ConnectorLayout" : "Slot",
                    "ConnectorType" : [ "Other" ],
                    "ElementName" : "Slot:0",
                    "InstanceNumber" : 4,
                    "Manufacturer" : "N/A",
```

```
                    "Model" : "J6B2",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "N/A",
                    "SKU" : "N/A",
                    "SerialNumber" : "N/A",
                    "SlotNumber" : 0,
                    "Tag" : "Slot:0"
                },
                {
                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "ConnectorLayout" : "Slot",
                    "ConnectorType" : [ "Other" ],
                    "ElementName" : "Slot:1",
                    "InstanceNumber" : 5,
                    "Manufacturer" : "N/A",
                    "Model" : "J6B1",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "N/A",
                    "SKU" : "N/A",
                    "SerialNumber" : "N/A",
                    "SlotNumber" : 1,
                    "Tag" : "Slot:1"
                },
                {
                    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                    "ConnectorLayout" : "Slot",
                    "ConnectorType" : [ "Other" ],
                    "ElementName" : "Slot:2",
                    "InstanceNumber" : 6,
                    "Manufacturer" : "N/A",
                    "Model" : "J6D1",
                    "Name" : "PhysicalAsset",
                    "PartNumber" : "N/A",
                    "SKU" : "N/A",
                    "SerialNumber" : "N/A",
                    "SlotNumber" : 2,
                    "Tag" : "Slot:2"
                }
            ],
            "Name" : "Physical Asset Collection"
        }
```

Output Class

```csharp
public class PhysicalAssetCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<PhysicalAssetMember> Members { get; set; }
    public string Name { get; set; }
}
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
    public List<string> ConnectorType { get; set; }
    public string ElementName { get; set; }
    public int InstanceNumber { get; set; }
    public string Manufacturer { get; set; }
    public string Model { get; set; }
    public string Name { get; set; }
    public string PartNumber { get; set; }
    public string SKU { get; set; }
    public string SerialNumber { get; set; }
```

```
                            public int SlotNumber { get; set; }
                            public string Tag { get; set; }
                            public string CanbeFRUed { get; set; }
                            public string MemoryBankLabel { get; set; }
                            public string MemoryCapacity { get; set; }
                            public string MemoryFormFactor { get; set; }
                            public string MemoryType { get; set; }
                            public string IsHostingBoard { get; set; }
                            public string PackageType { get; set; }
                            public string ChassisType { get; set; }
                    }
```

10.4 Asset

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t fan[0]/asset[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"fan[0]/asset[0]", "Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",`
	`    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",`
	`    "CanbeFRUed" : "Yes",`
	`    "ElementName" : "BaseBoard:0",`
	`    "InstanceNumber" : 0,`
	`    "IsHostingBoard" : "Yes",`
	`    "Manufacturer" : "LENOVO",`
	`    "Model" : "30FD",`
	`    "Name" : "PhysicalAsset",`
	`    "PartNumber" : "SDK0J40697 WIN 3305035440590",`
	`    "SKU" : "NULL",`
	`    "SerialNumber" : "                    ",`
	`    "Tag" : "Card:0"`
	`}`

Output Class	(see code below)

```
    public class PhysicalAssetMember {
        [JsonProperty("@odata.id")]
        public string _odata_id { get; set; }
        [JsonProperty("@odata.type")]
        public string odatatype { get; set; }
        public string ConnectorLayout { get; set; }
        public List<string> ConnectorType { get; set; }
        public string ElementName { get; set; }
        public int InstanceNumber { get; set; }
        public string Manufacturer { get; set; }
        public string Model { get; set; }
        public string Name { get; set; }
        public string PartNumber { get; set; }
        public string SKU { get; set; }
        public string SerialNumber { get; set; }
        public int SlotNumber { get; set; }
        public string Tag { get; set; }
        public string CanbeFRUed { get; set; }
        public string MemoryBankLabel { get; set; }
        public string MemoryCapacity { get; set; }
        public string MemoryFormFactor { get; set; }
        public string MemoryType { get; set; }
        public string IsHostingBoard { get; set; }
        public string PackageType { get; set; }
        public string ChassisType { get; set; }
    }
```

11 Filter Collection

11.1 Enumerate Filter Collection

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate filtercollection`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","filtercollection"]}`

Output JSON	```
	{
	    "@odata.id" : "/DASH/v1/FilterCollectionCollection",
	    "@odata.type" :
	"#FilterCollectionCollection.v1_0_0.FilterCollectionCollection",
	    "Id" : "FilterCollectionCollection",
	    "Members" : [
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:PlatformEvents",
	            "InstanceID" : "BRCM:24.1",
	            "InstanceNumber" : 0,
	            "Name" : "FilterCollection"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:LifecycleEvents",
	            "InstanceID" : "BRCM:24.2",
	            "InstanceNumber" : 1,
	            "Name" : "FilterCollection"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:LifecyclePlatformEvents",
	            "InstanceID" : "BRCM:24.3",
	            "InstanceNumber" : 2,
	            "Name" : "FilterCollection"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:BootProgressEvents",
	            "InstanceID" : "BRCM:24.4",
	            "InstanceNumber" : 3,
	            "Name" : "FilterCollection"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:BootProgressPlatformEvents",
	            "InstanceID" : "BRCM:24.5",
	            "InstanceNumber" : 4,
	            "Name" : "FilterCollection"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/FilterCollectionCollection/FilterCollection",
	            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
	            "CollectionName" : "BRCM:LifecycleBootProgressEvents",
	            "InstanceID" : "BRCM:24.6",
	            "InstanceNumber" : 5,
	            "Name" : "FilterCollection"
	``

```json
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:LifecycleBootProgressPlatformEvents",
            "InstanceID" : "BRCM:24.7",
            "InstanceNumber" : 6,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEvents",
            "InstanceID" : "BRCM:24.80",
            "InstanceNumber" : 7,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptLifecycleBootProgress",
            "InstanceID" : "BRCM:24.81",
            "InstanceNumber" : 8,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptBootProgressPlatform",
            "InstanceID" : "BRCM:24.82",
            "InstanceNumber" : 9,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptBootProgress",
            "InstanceID" : "BRCM:24.83",
            "InstanceNumber" : 10,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptLifecyclePlatform",
            "InstanceID" : "BRCM:24.84",
            "InstanceNumber" : 11,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptLifecycle",
            "InstanceID" : "BRCM:24.85",
            "InstanceNumber" : 12,
            "Name" : "FilterCollection"
        },
        {
            "@odata.id" :
"/DASH/v1/FilterCollectionCollection/FilterCollection",
            "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
            "CollectionName" : "BRCM:AllEventsExceptPlatform",
```

| | ```
            "InstanceID" : "BRCM:24.86",
            "InstanceNumber" : 13,
            "Name" : "FilterCollection"
        }
    ],
    "Name" : "Filter Collection Collection"
}
``` |
| Output Class | ```csharp
public class FilterCollectionCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<FilterCollectionMember> Members { get; set; }
    public string Name { get; set; }
}
public class FilterCollectionMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string CollectionName { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
}
``` |

11.2 Filter Collection Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t filtercollection[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"filtercollection[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/FilterCollectionCollection/FilterCollection",
    "@odata.type" : "#FilterCollection.v1_0_0.FilterCollection",
    "CollectionName" : "BRCM:PlatformEvents",
    "InstanceID" : "BRCM:24.1",
    "InstanceNumber" : 0,
    "Name" : "FilterCollection"
}
``` |
| Output Class | ```csharp
public class FilterCollectionMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string CollectionName { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
}
``` |

11.3 Filter Collection Show All Filters

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t filtercollection[0] showallfilters`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"filtercollection[0]", "Commands":["showallfilters"]}`

Output JSON	`{`
	   `"Members" : []`
	`}`

Output Class	```public class ShowAllFilters {```
	``` public List<Filter> Members { get; set; }```
	```}```
	```public class Filter {```
	``` public string Name { get; set; }```
	``` public string QueryString { get; set; }```
	```}```

11.4 Filter Collection Delete

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t filtercollection[0] delete`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"filtercollection[0]",` `"Commands":["delete"]}`

Output JSON	`{`
	   `"ErrorCode" : -1,`
	   `"ErrorMessage" : "Error: Deleting Indication Filter"`
	`}`

Output Class	```public class CommandError {```
	``` public int ErrorCode { get; set; }```
	``` public string ErrorMessage { get; set; }```
	```}```

12 Indication

12.1 Indication Subscribe

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass indication subscribe`
	        `Notification URI [Mandatory]: http://10.136.131.230:8080/eventsink`
	        `DELIVERY MODES [Mandatory]: push`
	        `Expiration Time [Optional]: NULL`
	        `FILTER TYPES [Mandatory]: Filter Collection`
	        `Choose valid instance number from the above list : 13`
	        `EndTo URI [Default - Delivered to NotifyTo URI]: NULL`
	        `Encode type [Optional] : NULL`
	        `Locale (Ex: ln-en) [Optional] : NULL`
	        `Request BookMarks [Y/N] [Optional] : NULL`
	        `Heartbeat Interval in seconds [Optional] : NULL`
	        `Connection Retry Count [Optional] : NULL`

jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["indication","subscribe","13","http://10.136.131.230:8080/eventsink"]}`

Output JSON	`{`
	    `"ErrorCode" : 0,`
	    `"ErrorMessage" : "Indication subscription created successfully"`
	`}`

Output Class	`public class CommandError {`
	    `public int ErrorCode { get; set; }`
	    `public string ErrorMessage { get; set; }`
	`}`

13 Indication Filter

13.1 Enumerate Indication Filter

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate indicationfilter`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","indicationfilter"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/IndicationFilterCollection",
"@odata.type" :
"#IndicationFilterCollection.v1_0_0.IndicationFilterCollection",
"Id" : "IndicationFilterCollection",
"Members" : [
{
"@odata.id" :
"/DASH/v1/IndicationFilterCollection/IndicationFilter",
"@odata.type" : "#IndicationFilter.v1_0_0.IndicationFilter",
"CreationClassName" : "CIM_IndicationFilter",
"ElementName" : "N/A",
"IndividualSubscriptionSupported" : "True",
"InstanceNumber" : 0,
"Name" : "IndicationFilter",
"Query" : "SELECT * FROM CIM_AlertIndication",
"QueryLanguage" : "WQL",
"SourceNamespace" : "WQL",
"SystemCreationClassName" : "CIM_IndicationFilter",
"SystemName" : "ManagedSystem"
},
{
"@odata.id" :
"/DASH/v1/IndicationFilterCollection/IndicationFilter",
"@odata.type" : "#IndicationFilter.v1_0_0.IndicationFilter",
"CreationClassName" : "CIM_IndicationFilter",
"ElementName" : "N/A",
"IndividualSubscriptionSupported" : "True",
"InstanceNumber" : 1,
"Name" : "000000a8-0000-1000-8002-002324d366f2",
"Query" : "SELECT * FROM CIM_AlertIndication",
"QueryLanguage" : "WQL",
"SourceNamespace" : "WQL",
"SystemCreationClassName" : "CIM_IndicationFilter",
"SystemName" : "ManagedSystem"
}
],
"Name" : "Indication Filter Collection"
}</pre>
Output Class	<pre>public class IndicationFilterCollection {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
public string Id { get; set; }
[JsonProperty("Members")]
public List<IndicationFilterMember> Members { get; set; }
public string Name { get; set; }
}
public class IndicationFilterMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string odatatype { get; set; }
public string CreationClassName { get; set; }
public string ElementName { get; set; }
public string IndividualSubscriptionSupported { get; set; }
public int InstanceNumber { get; set; }</pre>

```
            public string Name { get; set; }
            public string Query { get; set; }
            public string QueryLanguage { get; set; }
            public string SourceNamespace { get; set; }
            public string SystemCreationClassName { get; set; }
            public string SystemName { get; set; }
    }
```

13.2 Indication Filter Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t indicationfilter[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"indicationfilter[0]",` `"Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/IndicationFilterCollection/IndicationFilter",`
	`    "@odata.type" : "#IndicationFilter.v1_0_0.IndicationFilter",`
	`    "CreationClassName" : "CIM_IndicationFilter",`
	`    "ElementName" : "N/A",`
	`    "IndividualSubscriptionSupported" : "True",`
	`    "InstanceNumber" : 0,`
	`    "Name" : "IndicationFilter",`
	`    "Query" : "SELECT * FROM CIM_AlertIndication",`
	`    "QueryLanguage" : "WQL",`
	`    "SourceNamespace" : "WQL",`
	`    "SystemCreationClassName" : "CIM_IndicationFilter",`
	`    "SystemName" : "ManagedSystem"`
	`}`

Output Class	`public class IndicationFilterMember {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string odatatype { get; set; }`
	`    public string CreationClassName { get; set; }`
	`    public string ElementName { get; set; }`
	`    public string IndividualSubscriptionSupported { get; set; }`
	`    public int InstanceNumber { get; set; }`
	`    public string Name { get; set; }`
	`    public string Query { get; set; }`
	`    public string QueryLanguage { get; set; }`
	`    public string SourceNamespace { get; set; }`
	`    public string SystemCreationClassName { get; set; }`
	`    public string SystemName { get; set; }`
	`}`

13.3 Indication Filter Delete

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t indicationfilter[0] delete`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"indicationfilter[0]",` `"Commands":["delete"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "Indication Filter Deleted Successfully"`
	`}`

Output Class	`public class CommandError {`
	`    public int ErrorCode { get; set; }`
	`    public string ErrorMessage { get; set; }`
	`}`

14 Indication Subscription

14.1 Enumerate Indication Subscription

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate indicationsubscription`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","indicationsubscription"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/IndicationSubscriptionCollection",
	    "@odata.type" :
	"#IndicationSubscriptionCollection.v1_0_0.IndicationSubscriptionCollection",
	    "Id" : "IndicationSubscriptionCollection",
	    "Members" : [
	        {
	            "@odata.id" :
	"/DASH/v1/IndicationSubscriptionCollection/IndicationSubscription",
	            "@odata.type" :
	"#IndicationSubscription.v1_0_0.IndicationSubscription",
	            "Destination" : "http://127.0.0.1:8080/eventsink",
	            "FailureTriggerTimeInterval" : 0,
	            "FilterName" : "DMTF:INFO",
	            "InstanceNumber" : 0,
	            "Name" : "IndicationSubscription",
	            "OnFatalErrorPolicy" : "Remove",
	            "OtherOnFatalErrorPolicy" : "N/A",
	            "OtherSubscriptionState" : "N/A",
	            "RepeatNotificationCount" : "N/A",
	            "RepeatNotificationGap" : "N/A",
	            "RepeatNotificationInterval" : "N/A",
	            "RepeatNotificationPolicy" : "None",
	            "SubscriptionState" : "Enabled"
	        },
	        {
	            "@odata.id" :
	"/DASH/v1/IndicationSubscriptionCollection/IndicationSubscription",
	            "@odata.type" :
	"#IndicationSubscription.v1_0_0.IndicationSubscription",
	            "Destination" : "http://127.0.0.1:8080/eventsink",
	            "FailureTriggerTimeInterval" : 0,
	            "FilterName" : "DMTF:HW",
	            "InstanceNumber" : 1,
	            "Name" : "IndicationSubscription",
	            "OnFatalErrorPolicy" : "Remove",
	            "OtherOnFatalErrorPolicy" : "N/A",
	            "OtherSubscriptionState" : "N/A",
	            "RepeatNotificationCount" : "N/A",
	            "RepeatNotificationGap" : "N/A",
	            "RepeatNotificationInterval" : "N/A",
	            "RepeatNotificationPolicy" : "None",
	            "SubscriptionState" : "Enabled"
	        }
	    ],
	    "Name" : "Indication Subscription Collection"
	}</pre>

Output Class	<pre>public class IndicationSubscriptionCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<IndicationSubscriptionMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class IndicationSubscriptionMember {</pre>

```
                    [JsonProperty("@odata.id")]
                    public string _odata_id { get; set; }
                    [JsonProperty("@odata.type")]
                    public string odatatype { get; set; }
                    public string Destination { get; set; }
                    public int FailureTriggerTimeInterval { get; set; }
                    public string FilterName { get; set; }
                    public int InstanceNumber { get; set; }
                    public string Name { get; set; }
                    public string OnFatalErrorPolicy { get; set; }
                    public string OtherOnFatalErrorPolicy { get; set; }
                    public string OtherSubscriptionState { get; set; }
                    public int RepeatNotificationCount { get; set; }
                    public int RepeatNotificationGap { get; set; }
                    public int RepeatNotificationInterval { get; set; }
                    public string RepeatNotificationPolicy { get; set; }
                    public string SubscriptionState { get; set; }
            }
```

14.2 Indication Subscription Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t indicationsubscription[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"indicationsubscription[0]", "Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" :
	"/DASH/v1/IndicationSubscriptionCollection/IndicationSubscription",
	    "@odata.type" : "#IndicationSubscription.v1_0_0.IndicationSubscription",
	    "Destination" : "http://127.0.0.1:8080/eventsink",
	    "FailureTriggerTimeInterval" : 0,
	    "FilterName" : "DMTF:INFO",
	    "InstanceNumber" : 0,
	    "Name" : "IndicationSubscription",
	    "OnFatalErrorPolicy" : "Remove",
	    "OtherOnFatalErrorPolicy" : "N/A",
	    "OtherSubscriptionState" : "N/A",
	    "RepeatNotificationCount" : "N/A",
	    "RepeatNotificationGap" : "N/A",
	    "RepeatNotificationInterval" : "N/A",
	    "RepeatNotificationPolicy" : "None",
	    "SubscriptionState" : "Enabled"
	}</pre>

Output Class	<pre>public class IndicationSubscriptionMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string Destination { get; set; }
	    public int FailureTriggerTimeInterval { get; set; }
	    public string FilterName { get; set; }
	    public int InstanceNumber { get; set; }
	    public string Name { get; set; }
	    public string OnFatalErrorPolicy { get; set; }
	    public string OtherOnFatalErrorPolicy { get; set; }
	    public string OtherSubscriptionState { get; set; }
	    public int RepeatNotificationCount { get; set; }
	    public int RepeatNotificationGap { get; set; }
	    public int RepeatNotificationInterval { get; set; }
	    public string RepeatNotificationPolicy { get; set; }
	    public string SubscriptionState { get; set; }
	}</pre>

15 KVM Redirection

15.1 Enumerate KVM Redirection

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate kvmredirection`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","kvmredirection"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/KVMRedirectionCollection",
	    "@odata.type" :
	"#KVMRedirectionCollection.v1_0_0.KVMRedirectionCollection",
	    "Id" : "KVMRedirectionCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/KVMRedirectionCollection/KVMRedirection",
	            "@odata.type" : "#KVMRedirection.v1_0_0.KVMRedirection",
	            "CreationClassName" : "CIM_KVMRedirectionSAP",
	            "ElementName" : "KVMRedirectionSAP:0",
	            "EnabledState" : "Disabled",
	            "Id" : "KVMRedirection",
	            "InstanceNumber" : 0,
	            "KVMProtocol" : "RDP",
	            "MaxCurrentEnabledSAPs" : "2",
	            "Name" : "KVMRedirectionSAP",
	            "RedirectionServiceType" : ["KVM"],
	            "SharingMode" : "Exclusive"
	        },
	        {
	            "@odata.id" : "/DASH/v1/KVMRedirectionCollection/KVMRedirection",
	            "@odata.type" : "#KVMRedirection.v1_0_0.KVMRedirection",
	            "CreationClassName" : "CIM_KVMRedirectionSAP",
	            "ElementName" : "KVMRedirectionSAP:1",
	            "EnabledState" : "Disabled",
	            "Id" : "KVMRedirection",
	            "InstanceNumber" : 1,
	            "KVMProtocol" : "VNC-RFB",
	            "MaxCurrentEnabledSAPs" : "2",
	            "Name" : "KVMRedirectionSAP",
	            "RedirectionServiceType" : ["KVM"],
	            "SharingMode" : "Exclusive"
	        }
	    ],
	    "Name" : "KVM Collection"
	}</pre>

Output Class	<pre>public class KVMRedirectionCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<KVMRedirectionMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class KVMRedirectionMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string CreationClassName { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public string Id { get; set; }
	    public int InstanceNumber { get; set; }
	    public string KVMProtocol { get; set; }</pre>

```
                                   public string MaxCurrentEnabledSAPs { get; set; }
                                   public string Name { get; set; }
                                   public List<string> RedirectionServiceType { get; set; }
                                   public string SharingMode { get; set; }
                          }
```

15.2 KVM Redirection Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t kvmredirection[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"kvmredirection[0]", "Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/KVMRedirectionCollection/KVMRedirection",`
	`    "@odata.type" : "#KVMRedirection.v1_0_0.KVMRedirection",`
	`    "CreationClassName" : "CIM_KVMRedirectionSAP",`
	`    "ElementName" : "KVMRedirectionSAP:0",`
	`    "EnabledState" : "Disabled",`
	`    "Id" : "KVMRedirection",`
	`    "InstanceNumber" : 0,`
	`    "KVMProtocol" : "RDP",`
	`    "MaxCurrentEnabledSAPs" : "2",`
	`    "Name" : "KVMRedirectionSAP",`
	`    "RedirectionServiceType" : [ "KVM" ],`
	`    "SharingMode" : "Exclusive"`
	`}`

Output Class	`public class KVMRedirectionMember {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string odatatype { get; set; }`
	`    public string CreationClassName { get; set; }`
	`    public string ElementName { get; set; }`
	`    public string EnabledState { get; set; }`
	`    public string Id { get; set; }`
	`    public int InstanceNumber { get; set; }`
	`    public string KVMProtocol { get; set; }`
	`    public string MaxCurrentEnabledSAPs { get; set; }`
	`    public string Name { get; set; }`
	`    public List<string> RedirectionServiceType { get; set; }`
	`    public string SharingMode { get; set; }`
	`}`

15.3 KVM Redirection Actions

	<<option>>	
DASH CLI Command		`dashcli -h dash-system -u admin -P adminpass -t kvmredirection[0] <<option>>`
jdo Usage		`dashcli -jdo`
ji/jo Usage		`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass","t":"kvmredirection[0]", "Commands":["<<option>>"]}`

Output JSON	enable	`{`
		`    "ErrorCode" : 0,`
		`    "ErrorMessage" : "KVM SAP enabled successfully"`
		`}`

	disable	`{`
		`    "ErrorCode" : 0,`
		`    "ErrorMessage" : "KVM SAP Disabled successfully"`
		`}`

	connect	`{`
		`    "ErrorCode" : 0,`
		`    "ErrorMessage" : "Launch KVM-VNC Viewer Succeeded"`
		`}`

	startkvm	`{`
		`    "ErrorCode" : 0,`
		`    "ErrorMessage" : "Launch KVM-VNC Viewer Succeeded"`
		`}`

Output Class		`public class CommandError {`
		`    public int ErrorCode { get; set; }`
		`    public string ErrorMessage { get; set; }`
		`}`

16 Log Entry

16.1 Enumerate Log Entry

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate logentry`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","logentry"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/LogEntryCollection",
"@odata.type" : "#LogEntryCollection.v1_0_0.LogEntryCollection",
"Id" : "LogEntryCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
"@odata.type" : "#LogEntry.v1_0_0.LogEntry",
"CreationTimeStamp" : "197001 1000000.000000-000",
"ElementName" : "info Entry 256",
"InstanceID" : "0",
"InstanceNumber" : 0,
"LogInstanceID" : "id",
"LogName" : "info",
"MessageArguments" : "N/A",
"MessageID" : "N/A",
"Name" : "LogEntry",
"OwingEntity" : "N/A",
"PerceivedSeverity" : "N/A",
"RecordData" : "Reserved for future definition by this
specification\n",
"RecordFormat" : "RecordType*string",
"RecordID" : "256"
},
{
"@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
"@odata.type" : "#LogEntry.v1_0_0.LogEntry",
"CreationTimeStamp" : "197001 1000000.000000-000",
"ElementName" : "info Entry 256",
"InstanceID" : "1",
"InstanceNumber" : 1,
"LogInstanceID" : "id",
"LogName" : "info",
"MessageArguments" : "N/A",
"MessageID" : "N/A",
"Name" : "LogEntry",
"OwingEntity" : "N/A",
"PerceivedSeverity" : "N/A",
"RecordData" : "Starting keyboard controller initialization\n",
"RecordFormat" : "RecordType*string",
"RecordID" : "256"
},
{
"@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
"@odata.type" : "#LogEntry.v1_0_0.LogEntry",
"CreationTimeStamp" : "197001 1000000.000000-000",
"ElementName" : "info Entry 256",
"InstanceID" : "2",
"InstanceNumber" : 2,
"LogInstanceID" : "id",
"LogName" : "info",
"MessageArguments" : "N/A",
"MessageID" : "N/A",
"Name" : "LogEntry",
"OwingEntity" : "N/A",
"PerceivedSeverity" : "N/A",
"RecordData" : "Starting pointing device test\n",
"RecordFormat" : "RecordType*string",
"RecordID" : "256"</pre>

```
        },
        {
            "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
            "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
            "CreationTimeStamp" : "197001 1000000.000000-000",
            "ElementName" : "info Entry 256",
            "InstanceID" : "3",
            "InstanceNumber" : 3,
            "LogInstanceID" : "id",
            "LogName" : "info",
            "MessageArguments" : "N/A",
            "MessageID" : "N/A",
            "Name" : "LogEntry",
            "OwingEntity" : "N/A",
            "PerceivedSeverity" : "N/A",
            "RecordData" : "Starting keyboard test\n",
            "RecordFormat" : "RecordType*string",
            "RecordID" : "256"
        },
        {
            "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
            "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
            "CreationTimeStamp" : "197001 1000000.000000-000",
            "ElementName" : "info Entry 256",
            "InstanceID" : "4",
            "InstanceNumber" : 4,
            "LogInstanceID" : "id",
            "LogName" : "info",
            "MessageArguments" : "N/A",
            "MessageID" : "N/A",
            "Name" : "LogEntry",
            "OwingEntity" : "N/A",
            "PerceivedSeverity" : "N/A",
            "RecordData" : "Starting keyboard controller initialization\n",
            "RecordFormat" : "RecordType*string",
            "RecordID" : "256"
        },
        {
            "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
            "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
            "CreationTimeStamp" : "197001 1000000.000000-000",
            "ElementName" : "info Entry 256",
            "InstanceID" : "5",
            "InstanceNumber" : 5,
            "LogInstanceID" : "id",
            "LogName" : "info",
            "MessageArguments" : "N/A",
            "MessageID" : "N/A",
            "Name" : "LogEntry",
            "OwingEntity" : "N/A",
            "PerceivedSeverity" : "N/A",
            "RecordData" : "Starting option ROM initialization\n",
            "RecordFormat" : "RecordType*string",
            "RecordID" : "256"
        },
        {
            "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
            "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
            "CreationTimeStamp" : "197001 1000000.000000-000",
            "ElementName" : "info Entry 256",
            "InstanceID" : "6",
            "InstanceNumber" : 6,
            "LogInstanceID" : "id",
            "LogName" : "info",
            "MessageArguments" : "N/A",
            "MessageID" : "N/A",
            "Name" : "LogEntry",
            "OwingEntity" : "N/A",
            "PerceivedSeverity" : "N/A",
```

	``
	            "RecordData" : "Starting PCI resource configuration\n",
	            "RecordFormat" : "RecordType*string",
	            "RecordID" : "256"
	        }
	    ],
	    "Name" : "Log Entry Collection"
	}
	``

Output Class	```csharp
	public class LogEntryCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<LogEntryMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class LogEntryMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string CreationTimeStamp { get; set; }
	    public string ElementName { get; set; }
	    public string InstanceID { get; set; }
	    public int InstanceNumber { get; set; }
	    public string LogInstanceID { get; set; }
	    public string LogName { get; set; }
	    public List<string> MessageArguments { get; set; }
	    public string MessageID { get; set; }
	    public string Name { get; set; }
	    public string OwingEntity { get; set; }
	    public int PerceivedSeverity { get; set; }
	    public string RecordData { get; set; }
	    public string RecordFormat { get; set; }
	    public string RecordID { get; set; }
	}
	``

16.2 Log Entry Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t logentry[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"logentry[0]",` `"Commands":["show"]}`

Output JSON	```
	{
	    "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
	    "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
	    "CreationTimeStamp" : "197001 1000000.000000-000",
	    "ElementName" : "info Entry 256",
	    "InstanceID" : "0",
	    "InstanceNumber" : 0,
	    "LogInstanceID" : "id",
	    "LogName" : "info",
	    "MessageArguments" : "N/A",
	    "MessageID" : "N/A",
	    "Name" : "LogEntry",
	    "OwingEntity" : "N/A",
	    "PerceivedSeverity" : "N/A",
	    "RecordData" : "Reserved for future definition by this specification\n",
	    "RecordFormat" : "RecordType*string",
	    "RecordID" : "256"
	}
	``

| Output Class | ```csharp
public class LogEntryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string CreationTimeStamp { get; set; }
    public string ElementName { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string LogInstanceID { get; set; }
    public string LogName { get; set; }
    public List<string> MessageArguments { get; set; }
    public string MessageID { get; set; }
    public string Name { get; set; }
    public string OwingEntity { get; set; }
    public int PerceivedSeverity { get; set; }
    public string RecordData { get; set; }
    public string RecordFormat { get; set; }
    public string RecordID { get; set; }
}
``` |

17 Memory

17.1 Enumerate Memory

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate memory`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","memory"]}`
Output JSON	```{
"@odata.id" : "/DASH/v1/MemoryCollection",
"@odata.type" : "#MemoryCollection.v1_0_0.MemoryCollection",
"Id" : "MemoryCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/MemoryCollection/Memory",
"@odata.type" : "#Memory.v1_0_0.Memory",
"AccessType" : "Read/Write Supported",
"AvailableMemory" : "4096 MB",
"DeviceID" : "BRCM:8.1",
"ElementName" : "Total System Memory",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",
"InstanceNumber" : 0,
"IsVolatileMemory" : "Yes",
"Name" : "Memory",
"RequestedState" : "Not Applicable",
"TotalMemory" : "4096 MB"
},
{
"@odata.id" : "/DASH/v1/MemoryCollection/Memory",
"@odata.type" : "#Memory.v1_0_0.Memory",
"AccessType" : "N/A",
"AvailableMemory" : "N/A",
"DeviceID" : "BRCM:8.102",
"ElementName" : "CPU #1 L1 Cache",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",
"InstanceNumber" : 1,
"IsVolatileMemory" : "N/A",
"Name" : "Memory",
"RequestedState" : "Not Applicable",
"TotalMemory" : "524288 Bytes"
},
{
"@odata.id" : "/DASH/v1/MemoryCollection/Memory",
"@odata.type" : "#Memory.v1_0_0.Memory",
"AccessType" : "N/A",
"AvailableMemory" : "N/A",
"DeviceID" : "BRCM:8.104",
"ElementName" : "CPU #1 L2 Cache",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",
"InstanceNumber" : 2,
"IsVolatileMemory" : "N/A",
"Name" : "Memory",
"RequestedState" : "Not Applicable",
"TotalMemory" : "2048 KB"
},
{
"@odata.id" : "/DASH/v1/MemoryCollection/Memory",
"@odata.type" : "#Memory.v1_0_0.Memory",
"AccessType" : "N/A",
"AvailableMemory" : "N/A",
"DeviceID" : "BRCM:8.106",
"ElementName" : "CPU #1 L3 Cache",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",```

<table>
<tr><td></td><td>

```
            "InstanceNumber" : 3,
            "IsVolatileMemory" : "N/A",
            "Name" : "Memory",
            "RequestedState" : "Not Applicable",
            "TotalMemory" : "6144 KB"
        }
    ],
    "Name" : "Memory Collection"
}
```
</td></tr>
<tr><td>Output Class</td><td>

```csharp
public class MemoryCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<MemoryMember> Members { get; set; }
    public string Name { get; set; }
}
public class MemoryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string AccessType { get; set; }
    public string AvailableMemory { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string IsVolatileMemory { get; set; }
    public string Name { get; set; }
    public string RequestedState { get; set; }
    public string TotalMemory { get; set; }
}
```
</td></tr>
</table>

17.2 Memory Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t memory[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"memory[0]",` `"Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/LogEntryCollection/LogEntry",
	    "@odata.type" : "#LogEntry.v1_0_0.LogEntry",
	    "CreationTimeStamp" : "197001 1000000.000000-000",
	    "ElementName" : "info Entry 256",
	    "InstanceID" : "0",
	    "InstanceNumber" : 0,
	    "LogInstanceID" : "id",
	    "LogName" : "info",
	    "MessageArguments" : "N/A",
	    "MessageID" : "N/A",
	    "Name" : "LogEntry",
	    "OwingEntity" : "N/A",
	    "PerceivedSeverity" : "N/A",
	    "RecordData" : "Reserved for future definition by this specification\n",
	    "RecordFormat" : "RecordType*string",
	    "RecordID" : "256"
	}</pre>

| Output Class | ```
public class MemoryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string AccessType { get; set; }
    public string AvailableMemory { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string IsVolatileMemory { get; set; }
    public string Name { get; set; }
    public string RequestedState { get; set; }
    public string TotalMemory { get; set; }
}
``` |
|---|---|

17.3 Enumerate Asset

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t memory[0] enumerate asset`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"memory[0]", "Commands":["enumerate","asset"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",
    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",
    "Id" : "PhysicalAssetCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ElementName" : "Physical Memory Device #1",
            "InstanceNumber" : 0,
            "Manufacturer" : "JEDEC ID:80 CE",
            "MemoryBankLabel" : "SMBIOS_003d",
            "MemoryCapacity" : "2048 MB",
            "MemoryFormFactor" : "DIMM",
            "MemoryType" : "DDR3",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "M378B5673FH0-CH9",
            "SKU" : "N/A",
            "SerialNumber" : "822D9E63",
            "Tag" : "BRCM:5.1"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ElementName" : "Physical Memory Device #2",
            "InstanceNumber" : 1,
            "Manufacturer" : "JEDEC ID:80 CE",
            "MemoryBankLabel" : "SMBIOS_003e",
            "MemoryCapacity" : "2048 MB",
            "MemoryFormFactor" : "DIMM",
            "MemoryType" : "DDR3",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "M378B5673FH0-CH9",
            "SKU" : "N/A",
            "SerialNumber" : "7F2D9E63",
            "Tag" : "BRCM:5.2"
        }
    ],
``` |

	```"Name" : "Physical Asset Collection"``` ```}```

Output Class	```public class PhysicalAssetCollection {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string _odata_type { get; set; }```
	``` public string Id { get; set; }```
	``` [JsonProperty("Members")]```
	``` public List<PhysicalAssetMember> Members { get; set; }```
	``` public string Name { get; set; }```
	```}```
	```public class PhysicalAssetMember {```
	``` [JsonProperty("@odata.id")]```
	``` public string _odata_id { get; set; }```
	``` [JsonProperty("@odata.type")]```
	``` public string odatatype { get; set; }```
	``` public string ConnectorLayout { get; set; }```
	``` public List<string> ConnectorType { get; set; }```
	``` public string ElementName { get; set; }```
	``` public int InstanceNumber { get; set; }```
	``` public string Manufacturer { get; set; }```
	``` public string Model { get; set; }```
	``` public string Name { get; set; }```
	``` public string PartNumber { get; set; }```
	``` public string SKU { get; set; }```
	``` public string SerialNumber { get; set; }```
	``` public int SlotNumber { get; set; }```
	``` public string Tag { get; set; }```
	``` public string CanbeFRUed { get; set; }```
	``` public string MemoryBankLabel { get; set; }```
	``` public string MemoryCapacity { get; set; }```
	``` public string MemoryFormFactor { get; set; }```
	``` public string MemoryType { get; set; }```
	``` public string IsHostingBoard { get; set; }```
	``` public string PackageType { get; set; }```
	``` public string ChassisType { get; set; }```
	```}```

17.4 Asset

DASH CLI Command	```dashcli -h dash-system -u admin -P adminpass -t memory[0]/asset[0] show```
jdo Usage	```dashcli -jdo```
ji/jo Usage	```dashcli -ji input_json.txt -jo output_json.txt```
Input JSON	```{"h":"dash-system","u":"admin","P":"adminpass","t":"memory[0]/asset[0]", "Commands":["show"]}```

Output JSON	```{```
	``` "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",```
	``` "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",```
	``` "CanbeFRUed" : "No",```
	``` "ElementName" : "Physical Memory Device #1",```
	``` "InstanceNumber" : 0,```
	``` "Manufacturer" : "JEDEC ID:80 CE",```
	``` "MemoryBankLabel" : "SMBIOS_003d",```
	``` "MemoryCapacity" : "2048 MB",```
	``` "MemoryFormFactor" : "DIMM",```
	``` "MemoryType" : "DDR3",```
	``` "Model" : "N/A",```
	``` "Name" : "PhysicalAsset",```
	``` "PartNumber" : "M378B5673FH0-CH9",```
	``` "SKU" : "N/A",```
	``` "SerialNumber" : "822D9E63",```
	``` "Tag" : "BRCM:5.1"```
	```}```

| Output Class | ```csharp
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
    public List<string> ConnectorType { get; set; }
    public string ElementName { get; set; }
    public int InstanceNumber { get; set; }
    public string Manufacturer { get; set; }
    public string Model { get; set; }
    public string Name { get; set; }
    public string PartNumber { get; set; }
    public string SKU { get; set; }
    public string SerialNumber { get; set; }
    public int SlotNumber { get; set; }
    public string Tag { get; set; }
    public string CanbeFRUed { get; set; }
    public string MemoryBankLabel { get; set; }
    public string MemoryCapacity { get; set; }
    public string MemoryFormFactor { get; set; }
    public string MemoryType { get; set; }
    public string IsHostingBoard { get; set; }
    public string PackageType { get; set; }
    public string ChassisType { get; set; }
}
``` |

18 Network Port

18.1 Enumerate Network Port

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate networkport`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","networkport"]}`
Output JSON	```{
"@odata.id" : "/DASH/v1/NetworkPortCollection",
"@odata.type" : "#NetworkPortCollection.v1_0_0.NetworkPortCollection",
"Id" : "NetworkPortCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/NetworkPortCollection/NetworkPort",
"@odata.type" : "#NetworkPort.v1_0_0.NetworkPort",
"DeviceID" : "BRCM:34",
"ElementName" : "Ethernet Port",
"EnabledState" : "Not Applicable",
"InstanceNumber" : 0,
"LinkTechnology" : "Ethernet",
"MACAddress" : "64315031BE9D",
"MaximumSpeed" : "1 Gbps",
"Name" : "EthernetPort",
"RequestedSpeed" : "N/A",
"RequestedState" : "Not Applicable",
"Speed" : "1 Gbps"
}
],
"Name" : "Network Port Collection"
}```
| Output Class | ```csharp
public class NetworkPortCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<NetworkPortMember> Members { get; set; }
    public string Name { get; set; }
}
public class NetworkPortMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public int InstanceNumber { get; set; }
    public string LinkTechnology { get; set; }
    public string MACAddress { get; set; }
    public string MaximumSpeed { get; set; }
    public string Name { get; set; }
    public string RequestedSpeed { get; set; }
    public string RequestedState { get; set; }
    public string Speed { get; set; }
}
``` |

18.2 Network Port Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t networkport[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"networkport[0]", "Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/NetworkPortCollection/NetworkPort",
	    "@odata.type" : "#NetworkPort.v1_0_0.NetworkPort",
	    "DeviceID" : "BRCM:34",
	    "ElementName" : "Ethernet Port",
	    "EnabledState" : "Not Applicable",
	    "InstanceNumber" : 0,
	    "LinkTechnology" : "Ethernet",
	    "MACAddress" : "64315031BE9D",
	    "MaximumSpeed" : "1 Gbps",
	    "Name" : "EthernetPort",
	    "RequestedSpeed" : "N/A",
	    "RequestedState" : "Not Applicable",
	    "Speed" : "1 Gbps"
	}</pre>

Output Class	<pre>public class NetworkPortMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string LinkTechnology { get; set; }
	    public string MACAddress { get; set; }
	    public string MaximumSpeed { get; set; }
	    public string Name { get; set; }
	    public string RequestedSpeed { get; set; }
	    public string RequestedState { get; set; }
	    public string Speed { get; set; }
	}</pre>

19 Operating System

19.1 Enumerate Operating System

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate operatingsystem`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","operatingsystem"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/OperatingSystemCollection",
"@odata.type" :
"#OperatingSystemCollection.v1_0_0.OperatingSystemCollection",
"Id" : "OperatingSystemCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/OperatingSystemCollection/OperatingSystem",
"@odata.type" : "#OperatingSystem.v1_0_0.OperatingSystem",
"AvailableRequestedStates" : "N/A",
"EnabledState" : "Enabled",
"InstanceNumber" : 0,
"Name" : "Microsoft Windows 10 Enterprise",
"OSType" : "Microsoft Windows 10 64-bit",
"RequestedState" : "No Change",
"TransitioningToState" : "N/A"
}
],
"Name" : "Operating System Collection"
}</pre>
Output Class	<pre>public class OperatingSystemCollection {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
public string Id { get; set; }
[JsonProperty("Members")]
public List<OperatingSystemMember> Members { get; set; }
public string Name { get; set; }
}
public class OperatingSystemMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string odatatype { get; set; }
public List<string> AvailableRequestedStates { get; set; }
public string EnabledState { get; set; }
public int InstanceNumber { get; set; }
public string Name { get; set; }
public string OSType { get; set; }
public string RequestedState { get; set; }
public string TransitioningToState { get; set; }
}</pre>

19.2 Operating System Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t operatingsystem[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"operatingsystem[0]", "Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/OperatingSystemCollection/OperatingSystem",
	    "@odata.type" : "#OperatingSystem.v1_0_0.OperatingSystem",
	    "AvailableRequestedStates" : "N/A",
	    "EnabledState" : "Enabled",
	    "InstanceNumber" : 0,
	    "Name" : "Microsoft Windows 10 Enterprise",
	    "OSType" : "Microsoft Windows 10 64-bit",
	    "RequestedState" : "No Change",
	    "TransitioningToState" : "N/A"
	}</pre>

Output Class	<pre>public class OperatingSystemMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public List<string> AvailableRequestedStates { get; set; }
	    public string EnabledState { get; set; }
	    public int InstanceNumber { get; set; }
	    public string Name { get; set; }
	    public string OSType { get; set; }
	    public string RequestedState { get; set; }
	    public string TransitioningToState { get; set; }
	}</pre>

20 Power Supply

20.1 Enumerate Power Supply

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate powersupply`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","powersupply"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/PowerSupplyCollection",
"@odata.type" : "#PowerSupplyCollection.v1_0_0.PowerSupplyCollection",
"Id" : "PowerSupplyCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/PowerSupplyCollection/PowerSupply",
"@odata.type" : "#PowerSupply.v1_0_0.PowerSupply",
"DeviceID" : "BRCM:9.1",
"ElementName" : "Power Supply #1",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",
"InstanceNumber" : 0,
"Name" : "Power Supply",
"OperationalState" : ["Unknown"],
"RequestedState" : "Not Applicable",
"TotalPower" : 0
}
],
"Name" : "Power Supply Collection"
}</pre>
Output Class	<pre>public class PowerSupplyCollection {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
public string Id { get; set; }
[JsonProperty("Members")]
public List<PowerSupplyMember> Members { get; set; }
public string Name { get; set; }
}
public class PowerSupplyMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string odatatype { get; set; }
public string DeviceID { get; set; }
public string ElementName { get; set; }
public string EnabledState { get; set; }
public string HealthState { get; set; }
public int InstanceNumber { get; set; }
public string Name { get; set; }
public List<string> OperationalState { get; set; }
public string RequestedState { get; set; }
public int TotalPower { get; set; }
}</pre>

20.2 Power Supply Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t powersupply[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"powersupply[0]",` `"Commands":["show"]}`

| Output JSON | ```json
{
    "@odata.id" : "/DASH/v1/PowerSupplyCollection/PowerSupply",
    "@odata.type" : "#PowerSupply.v1_0_0.PowerSupply",
    "DeviceID" : "BRCM:9.1",
    "ElementName" : "Power Supply #1",
    "EnabledState" : "Enabled",
    "HealthState" : "Unknown",
    "InstanceNumber" : 0,
    "Name" : "Power Supply",
    "OperationalState" : [ "Unknown" ],
    "RequestedState" : "Not Applicable",
    "TotalPower" : 0
}
``` |
| Output Class | ```csharp
public class PowerSupplyMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public string RequestedState { get; set; }
    public int TotalPower { get; set; }
}
``` |

20.3 Enumerate Asset

| DASH CLI Command | ```
dashcli -h dash-system -u admin -P adminpass -t powersupply[0] enumerate asset
``` |
| jdo Usage | ```
dashcli -jdo
``` |
| ji/jo Usage | ```
dashcli -ji input_json.txt -jo output_json.txt
``` |
| Input JSON | ```
{"h":"dash-system","u":"admin","P":"adminpass","t":"powersupply[0]",
"Commands":["enumerate","asset"]}
``` |
| Output JSON | ```json
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",
    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",
    "Id" : "PhysicalAssetCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "Yes",
            "ElementName" : "BaseBoard:0",
            "InstanceNumber" : 0,
            "IsHostingBoard" : "Yes",
            "Manufacturer" : "LENOVO",
            "Model" : ".MFG_IN_GO",
            "Name" : "PhysicalAsset",
            "PartNumber" : "Not Defined",
            "SKU" : "NULL",
            "SerialNumber" : "L1HF8B1000S",
            "Tag" : "Card:0"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ChassisType" : "Desktop",
            "ElementName" : "Chassis:0",
            "InstanceNumber" : 1,
            "Manufacturer" : "LENOVO",
            "Model" : ".MFG_IN_GO",
``` |

```
               "Name" : "PhysicalAsset",
               "PackageType" : "Chassis/Frame",
               "PartNumber" : "None",
               "SKU" : "LENOVO_MT_.MFG_BU_Think_FM_ThinkPad T495",
               "SerialNumber" : "ING.",
               "Tag" : "Chassis:0",
               "Version" : "None"
            },
            {
               "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
               "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
               "CanbeFRUed" : "No",
               "ElementName" : "Processor:0",
               "InstanceNumber" : 2,
               "Manufacturer" : "Advanced Micro Devices, Inc.",
               "Model" : "AMD Eng Sample: ZM350SC4T4MFG_36/20_Y              ",
               "Name" : "PhysicalAsset",
               "PartNumber" : "None",
               "SKU" : "NULL",
               "SerialNumber" : "None",
               "Tag" : "Processor:0"
            },
            {
               "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
               "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
               "CanbeFRUed" : "No",
               "ElementName" : "Memory:0",
               "InstanceNumber" : 3,
               "Manufacturer" : "Samsung",
               "MemoryBankLabel" : "P0 CHANNEL A",
               "MemoryCapacity" : "8192 MB",
               "MemoryFormFactor" : "DIMM",
               "MemorySpeed" : "2400 nanosecond",
               "MemoryType" : "DDR4",
               "Model" : "N/A",
               "Name" : "PhysicalAsset",
               "PartNumber" : "M471A1G44AB0-CTD    ",
               "SKU" : "N/A",
               "SerialNumber" : "00000000",
               "Tag" : "Mem:0"
            },
            {
               "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
               "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
               "ConnectorLayout" : "Slot",
               "ConnectorType" : [ "Other" ],
               "ElementName" : "Slot:0",
               "InstanceNumber" : 4,
               "Manufacturer" : "N/A",
               "Model" : "PCI-E x1 (J3600)",
               "Name" : "PhysicalAsset",
               "PartNumber" : "N/A",
               "SKU" : "N/A",
               "SerialNumber" : "N/A",
               "Tag" : "Slot:0"
            },
            {
               "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
               "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
               "ConnectorLayout" : "Slot",
               "ConnectorType" : [ "Other" ],
               "ElementName" : "Slot:1",
               "InstanceNumber" : 5,
               "Manufacturer" : "N/A",
               "Model" : "PCI-E x8 (J3605)",
               "Name" : "PhysicalAsset",
               "PartNumber" : "N/A",
               "SKU" : "N/A",
               "SerialNumber" : "N/A",
```

```
                "Tag" : "Slot:1"
            },
            {
                "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                "ConnectorLayout" : "Slot",
                "ConnectorType" : [ "Other" ],
                "ElementName" : "Slot:2",
                "InstanceNumber" : 6,
                "Manufacturer" : "N/A",
                "Model" : "M.2 PCI-E Connector (J3700)",
                "Name" : "PhysicalAsset",
                "PartNumber" : "N/A",
                "SKU" : "N/A",
                "SerialNumber" : "N/A",
                "Tag" : "Slot:2"
            },
            {
                "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                "ConnectorLayout" : "Slot",
                "ConnectorType" : [ "Other" ],
                "ElementName" : "Slot:3",
                "InstanceNumber" : 7,
                "Manufacturer" : "N/A",
                "Model" : "M.2 WWAN Connector (J3702)",
                "Name" : "PhysicalAsset",
                "PartNumber" : "N/A",
                "SKU" : "N/A",
                "SerialNumber" : "N/A",
                "Tag" : "Slot:3"
            },
            {
                "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                "ConnectorLayout" : "Slot",
                "ConnectorType" : [ "Other" ],
                "ElementName" : "Slot:4",
                "InstanceNumber" : 8,
                "Manufacturer" : "N/A",
                "Model" : "M.2 WLAN/BT Connector (J3703)",
                "Name" : "PhysicalAsset",
                "PartNumber" : "N/A",
                "SKU" : "N/A",
                "SerialNumber" : "N/A",
                "Tag" : "Slot:4"
            },
            {
                "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                "ConnectorLayout" : "Slot",
                "ConnectorType" : [ "Other" ],
                "ElementName" : "Slot:5",
                "InstanceNumber" : 9,
                "Manufacturer" : "N/A",
                "Model" : "PCIE SD_Card (J4000)",
                "Name" : "PhysicalAsset",
                "PartNumber" : "N/A",
                "SKU" : "N/A",
                "SerialNumber" : "N/A",
                "Tag" : "Slot:5"
            }
        ],
        "Name" : "Physical Asset Collection"
    }
```

| Output Class | ```
public class PhysicalAssetCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<PhysicalAssetMember> Members { get; set; }
    public string Name { get; set; }
}
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
    public List<string> ConnectorType { get; set; }
    public string ElementName { get; set; }
    public int InstanceNumber { get; set; }
    public string Manufacturer { get; set; }
    public string Model { get; set; }
    public string Name { get; set; }
    public string PartNumber { get; set; }
    public string SKU { get; set; }
    public string SerialNumber { get; set; }
    public int SlotNumber { get; set; }
    public string Tag { get; set; }
    public string CanbeFRUed { get; set; }
    public string MemoryBankLabel { get; set; }
    public string MemoryCapacity { get; set; }
    public string MemoryFormFactor { get; set; }
    public string MemoryType { get; set; }
    public string IsHostingBoard { get; set; }
    public string PackageType { get; set; }
    public string ChassisType { get; set; }
}
``` |

20.4 Asset

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t powersupply[0]/asset[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"powersupply[0]/asset[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
    "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
    "CanbeFRUed" : "Yes",
    "ElementName" : "BaseBoard:0",
    "InstanceNumber" : 0,
    "IsHostingBoard" : "Yes",
    "Manufacturer" : "LENOVO",
    "Model" : ".MFG_IN_GO",
    "Name" : "PhysicalAsset",
    "PartNumber" : "Not Defined",
    "SKU" : "NULL",
    "SerialNumber" : "L1HF8B1000S",
    "Tag" : "Card:0"
}
``` |
| Output Class | ```
public class PhysicalAssetMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string ConnectorLayout { get; set; }
``` |

```csharp
            public List<string> ConnectorType { get; set; }
            public string ElementName { get; set; }
            public int InstanceNumber { get; set; }
            public string Manufacturer { get; set; }
            public string Model { get; set; }
            public string Name { get; set; }
            public string PartNumber { get; set; }
            public string SKU { get; set; }
            public string SerialNumber { get; set; }
            public int SlotNumber { get; set; }
            public string Tag { get; set; }
            public string CanbeFRUed { get; set; }
            public string MemoryBankLabel { get; set; }
            public string MemoryCapacity { get; set; }
            public string MemoryFormFactor { get; set; }
            public string MemoryType { get; set; }
            public string IsHostingBoard { get; set; }
            public string PackageType { get; set; }
            public string ChassisType { get; set; }
        }
```

21 Processor

21.1 Enumerate Processor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate processor`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","processor"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/ProcessorCollection",
    "@odata.type" : "#ProcessorCollection.v1_0_0.ProcessorCollection",
    "Id" : "ProcessorCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/ProcessorCollection/Processor",
            "@odata.type" : "#Processor.v1_0_0.Processor",
            "CPUStatus" : "CPU Enabled",
            "CurClockSpeed" : "3000 MHz",
            "DeviceID" : "BRCM:7.1",
            "ElementName" : "Processor #1",
            "EnabledState" : "Enabled",
            "ExtBusSpeed" : "200 MHz",
            "Family" : "AMD Phenom(TM) II Processor Family",
            "HealthState" : "Unknown",
            "InstanceNumber" : 0,
            "LoadPercent" : "N/A",
            "MaxClockSpeed" : "3000 MHz",
            "Name" : "Processor",
            "OperationalState" : [ "Unknown" ],
            "RequestedState" : "Not Applicable"
        }
    ],
    "Name" : "Processor Collection"
}
``` |
| Output Class | ```
public class ProcessorCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<ProcessorMember> Members { get; set; }
    public string Name { get; set; }
}
public class ProcessorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string CPUStatus { get; set; }
    public string CurClockSpeed { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string ExtBusSpeed { get; set; }
    public string Family { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public int LoadPercent { get; set; }
    public string MaxClockSpeed { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public string RequestedState { get; set; }
}
``` |

21.2 Processor Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]",` `"Commands":["show"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/ProcessorCollection/Processor",
	    "@odata.type" : "#Processor.v1_0_0.Processor",
	    "CPUStatus" : "CPU Enabled",
	    "CurClockSpeed" : "3000 MHz",
	    "DeviceID" : "BRCM:7.1",
	    "ElementName" : "Processor #1",
	    "EnabledState" : "Enabled",
	    "ExtBusSpeed" : "200 MHz",
	    "Family" : "AMD Phenom(TM) II Processor Family",
	    "HealthState" : "Unknown",
	    "InstanceNumber" : 0,
	    "LoadPercent" : "N/A",
	    "MaxClockSpeed" : "3000 MHz",
	    "Name" : "Processor",
	    "OperationalState" : ["Unknown"],
	    "RequestedState" : "Not Applicable"
	}</pre>

Output Class	<pre>public class ProcessorMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }
	    public string CPUStatus { get; set; }
	    public string CurClockSpeed { get; set; }
	    public string DeviceID { get; set; }
	    public string ElementName { get; set; }
	    public string EnabledState { get; set; }
	    public string ExtBusSpeed { get; set; }
	    public string Family { get; set; }
	    public string HealthState { get; set; }
	    public int InstanceNumber { get; set; }
	    public int LoadPercent { get; set; }
	    public string MaxClockSpeed { get; set; }
	    public string Name { get; set; }
	    public List<string> OperationalState { get; set; }
	    public string RequestedState { get; set; }
	}</pre>

21.3 Enumerate Asset

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0] enumerate asset`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]",` `"Commands":["enumerate","asset"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/PhysicalAssetCollection",
	    "@odata.type" : "#PhysicalAssetCollection.v1_0_0.PhysicalAssetCollection",
	    "Id" : "PhysicalAssetCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
	            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
	            "CanbeFRUed" : "Yes",
	            "ElementName" : "BaseBoard:0",
	            "InstanceNumber" : 0,
	            "IsHostingBoard" : "Yes",</pre>

```
            "Manufacturer" : "LENOVO",
            "Model" : ".MFG_IN_GO",
            "Name" : "PhysicalAsset",
            "PartNumber" : "Not Defined",
            "SKU" : "NULL",
            "SerialNumber" : "L1HF8B1000S",
            "Tag" : "Card:0"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ChassisType" : "Desktop",
            "ElementName" : "Chassis:0",
            "InstanceNumber" : 1,
            "Manufacturer" : "LENOVO",
            "Model" : ".MFG_IN_GO",
            "Name" : "PhysicalAsset",
            "PackageType" : "Chassis/Frame",
            "PartNumber" : "None",
            "SKU" : "LENOVO_MT_.MFG_BU_Think_FM_ThinkPad T495",
            "SerialNumber" : "ING.",
            "Tag" : "Chassis:0",
            "Version" : "None"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ElementName" : "Processor:0",
            "InstanceNumber" : 2,
            "Manufacturer" : "Advanced Micro Devices, Inc.",
            "Model" : "AMD Eng Sample: ZM350SC4T4MFG_36/20_Y           ",
            "Name" : "PhysicalAsset",
            "PartNumber" : "None",
            "SKU" : "NULL",
            "SerialNumber" : "None",
            "Tag" : "Processor:0"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "CanbeFRUed" : "No",
            "ElementName" : "Memory:0",
            "InstanceNumber" : 3,
            "Manufacturer" : "Samsung",
            "MemoryBankLabel" : "P0 CHANNEL A",
            "MemoryCapacity" : "8192 MB",
            "MemoryFormFactor" : "DIMM",
            "MemorySpeed" : "2400 nanosecond",
            "MemoryType" : "DDR4",
            "Model" : "N/A",
            "Name" : "PhysicalAsset",
            "PartNumber" : "M471A1G44AB0-CTD    ",
            "SKU" : "N/A",
            "SerialNumber" : "00000000",
            "Tag" : "Mem:0"
        },
        {
            "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
            "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
            "ConnectorLayout" : "Slot",
            "ConnectorType" : [ "Other" ],
            "ElementName" : "Slot:0",
            "InstanceNumber" : 4,
            "Manufacturer" : "N/A",
            "Model" : "PCI-E x1 (J3600)",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
```

```
                                        "SKU" : "N/A",
                                        "SerialNumber" : "N/A",
                                        "Tag" : "Slot:0"
                                },
                                {
                                        "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                                        "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                                        "ConnectorLayout" : "Slot",
                                        "ConnectorType" : [ "Other" ],
                                        "ElementName" : "Slot:1",
                                        "InstanceNumber" : 5,
                                        "Manufacturer" : "N/A",
                                        "Model" : "PCI-E x8 (J3605)",
                                        "Name" : "PhysicalAsset",
                                        "PartNumber" : "N/A",
                                        "SKU" : "N/A",
                                        "SerialNumber" : "N/A",
                                        "Tag" : "Slot:1"
                                },
                                {
                                        "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                                        "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                                        "ConnectorLayout" : "Slot",
                                        "ConnectorType" : [ "Other" ],
                                        "ElementName" : "Slot:2",
                                        "InstanceNumber" : 6,
                                        "Manufacturer" : "N/A",
                                        "Model" : "M.2 PCI-E Connector (J3700)",
                                        "Name" : "PhysicalAsset",
                                        "PartNumber" : "N/A",
                                        "SKU" : "N/A",
                                        "SerialNumber" : "N/A",
                                        "Tag" : "Slot:2"
                                },
                                {
                                        "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                                        "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                                        "ConnectorLayout" : "Slot",
                                        "ConnectorType" : [ "Other" ],
                                        "ElementName" : "Slot:3",
                                        "InstanceNumber" : 7,
                                        "Manufacturer" : "N/A",
                                        "Model" : "M.2 WWAN Connector (J3702)",
                                        "Name" : "PhysicalAsset",
                                        "PartNumber" : "N/A",
                                        "SKU" : "N/A",
                                        "SerialNumber" : "N/A",
                                        "Tag" : "Slot:3"
                                },
                                {
                                        "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                                        "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                                        "ConnectorLayout" : "Slot",
                                        "ConnectorType" : [ "Other" ],
                                        "ElementName" : "Slot:4",
                                        "InstanceNumber" : 8,
                                        "Manufacturer" : "N/A",
                                        "Model" : "M.2 WLAN/BT Connector (J3703)",
                                        "Name" : "PhysicalAsset",
                                        "PartNumber" : "N/A",
                                        "SKU" : "N/A",
                                        "SerialNumber" : "N/A",
                                        "Tag" : "Slot:4"
                                },
                                {
                                        "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",
                                        "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",
                                        "ConnectorLayout" : "Slot",
                                        "ConnectorType" : [ "Other" ],
```

<table>
<tr><td rowspan="2"></td><td>

```
            "ElementName" : "Slot:5",
            "InstanceNumber" : 9,
            "Manufacturer" : "N/A",
            "Model" : "PCIE SD_Card (J4000)",
            "Name" : "PhysicalAsset",
            "PartNumber" : "N/A",
            "SKU" : "N/A",
            "SerialNumber" : "N/A",
            "Tag" : "Slot:5"
        }
    ],
    "Name" : "Physical Asset Collection"
}
```
</td></tr>
</table>

| Output Class | ```
    public class PhysicalAssetCollection {
        [JsonProperty("@odata.id")]
        public string _odata_id { get; set; }
        [JsonProperty("@odata.type")]
        public string _odata_type { get; set; }
        public string Id { get; set; }
        [JsonProperty("Members")]
        public List<PhysicalAssetMember> Members { get; set; }
        public string Name { get; set; }
    }
    public class PhysicalAssetMember {
        [JsonProperty("@odata.id")]
        public string _odata_id { get; set; }
        [JsonProperty("@odata.type")]
        public string odatatype { get; set; }
        public string ConnectorLayout { get; set; }
        public List<string> ConnectorType { get; set; }
        public string ElementName { get; set; }
        public int InstanceNumber { get; set; }
        public string Manufacturer { get; set; }
        public string Model { get; set; }
        public string Name { get; set; }
        public string PartNumber { get; set; }
        public string SKU { get; set; }
        public string SerialNumber { get; set; }
        public int SlotNumber { get; set; }
        public string Tag { get; set; }
        public string CanbeFRUed { get; set; }
        public string MemoryBankLabel { get; set; }
        public string MemoryCapacity { get; set; }
        public string MemoryFormFactor { get; set; }
        public string MemoryType { get; set; }
        public string IsHostingBoard { get; set; }
        public string PackageType { get; set; }
        public string ChassisType { get; set; }
    }
``` |
|---|---|

21.4 Enumerate Fan

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0] enumerate fan`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]",` `"Commands":["enumerate","fan"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/FanCollection",
    "@odata.type" : "#FanCollection.v1_0_0.FanCollection",
    "Id" : "FanCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/FanCollection/Fan",
            "@odata.type" : "#Fan.v1_0_0.Fan",
``` |

| | ```
            "DesiredSpeed" : "N/A",
            "DeviceID" : "Fan:0",
            "ElementName" : "FAN_SPEED",
            "EnabledState" : "Enabled",
            "HealthState" : "OK",
            "InstanceNumber" : 0,
            "IsActiveCooling" : "Yes",
            "IsVariableSpeed" : "No",
            "Name" : "Fan",
            "OperationalState" : [ "OK" ],
            "RequestedState" : "Not Applicable"
        }
    ],
    "Name" : "Fan Collection"
}
``` |
| Output Class | ```
    public class FanCollection {
        [JsonProperty("@odata.id")]
        public string _odata_id { get; set; }
        [JsonProperty("@odata.type")]
        public string _odata_type { get; set; }
        public string Id { get; set; }
        [JsonProperty("Members")]
        public List<FanMember> Members { get; set; }
        public string Name { get; set; }
    }
    public class FanMember {
        [JsonProperty("@odata.id")]
        public string _odata_id { get; set; }
        [JsonProperty("@odata.type")]
        public string odatatype { get; set; }
        public int DesiredSpeed { get; set; }
        public string DeviceID { get; set; }
        public string ElementName { get; set; }
        public string EnabledState { get; set; }
        public string HealthState { get; set; }
        public int InstanceNumber { get; set; }
        public string IsActiveCooling { get; set; }
        public string IsVariableSpeed { get; set; }
        public string Name { get; set; }
        public List<string> OperationalState { get; set; }
        public string RequestedState { get; set; }
    }
``` |

21.5 Enumerate Memory

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0] enumerate memory`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]", "Commands":["enumerate","memory"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/MemoryCollection",
    "@odata.type" : "#MemoryCollection.v1_0_0.MemoryCollection",
    "Id" : "MemoryCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
            "@odata.type" : "#Memory.v1_0_0.Memory",
            "AccessType" : "Read/Write Supported",
            "AvailableMemory" : "8192 MB",
            "DeviceID" : "Memory:0",
            "ElementName" : "Total System Memory:0",
            "EnabledState" : "Enabled",
            "HealthState" : "OK",
            "InstanceNumber" : 0,
            "IsVolatileMemory" : "Yes",
``` |

<table>
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```
                "Name" : "Memory",
                "RequestedState" : "Not Applicable",
                "TotalMemory" : "8192 MB"
            },
            {
                "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
                "@odata.type" : "#Memory.v1_0_0.Memory",
                "AccessType" : "Read/Write Supported",
                "AvailableMemory" : "393216 Bytes",
                "DeviceID" : "CacheMemory:1",
                "ElementName" : "L1 - Cache",
                "EnabledState" : "Enabled",
                "HealthState" : "OK",
                "InstanceNumber" : 1,
                "IsVolatileMemory" : "Yes",
                "Name" : "Memory",
                "RequestedState" : "Not Applicable",
                "TotalMemory" : "393216 Bytes"
            },
            {
                "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
                "@odata.type" : "#Memory.v1_0_0.Memory",
                "AccessType" : "Read/Write Supported",
                "AvailableMemory" : "2048 KB",
                "DeviceID" : "CacheMemory:2",
                "ElementName" : "L2 - Cache",
                "EnabledState" : "Enabled",
                "HealthState" : "OK",
                "InstanceNumber" : 2,
                "IsVolatileMemory" : "Yes",
                "Name" : "Memory",
                "RequestedState" : "Not Applicable",
                "TotalMemory" : "2048 KB"
            },
            {
                "@odata.id" : "/DASH/v1/MemoryCollection/Memory",
                "@odata.type" : "#Memory.v1_0_0.Memory",
                "AccessType" : "Read/Write Supported",
                "AvailableMemory" : "4096 KB",
                "DeviceID" : "CacheMemory:3",
                "ElementName" : "L3 - Cache",
                "EnabledState" : "Enabled",
                "HealthState" : "OK",
                "InstanceNumber" : 3,
                "IsVolatileMemory" : "Yes",
                "Name" : "Memory",
                "RequestedState" : "Not Applicable",
                "TotalMemory" : "4096 KB"
            }
        ],
        "Name" : "Memory Collection"
    }
```

</td></tr>
<tr><td>Output Class</td><td>

```csharp
public class MemoryCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<MemoryMember> Members { get; set; }
    public string Name { get; set; }
}
public class MemoryMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string AccessType { get; set; }
    public string AvailableMemory { get; set; }
```

</td></tr>
</table>

```
                    public string DeviceID { get; set; }
                    public string ElementName { get; set; }
                    public string EnabledState { get; set; }
                    public string HealthState { get; set; }
                    public int InstanceNumber { get; set; }
                    public string IsVolatileMemory { get; set; }
                    public string Name { get; set; }
                    public string RequestedState { get; set; }
                    public string TotalMemory { get; set; }
                }
```

21.6 Enumerate Sensor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0] enumerate sensor`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]",` `"Commands":["enumerate","sensor"]}`

Output JSON	<pre>{
	    "@odata.id" : "/DASH/v1/SensorCollection",
	    "@odata.type" : "#SensorCollection.v1_0_0.SensorCollection",
	    "Id" : "SensorCollection",
	    "Members" : [
	        {
	            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
	            "@odata.type" : "#Sensor.v1_0_0.Sensor",
	            "BaseUnit" : "Degrees C",
	            "CurrentState" : "Normal",
	            "DeviceID" : "Sensor:0",
	            "ElementName" : "APU_Temperature",
	            "EnabledState" : "Enabled",
	            "HealthState" : "OK",
	            "InstanceNumber" : 0,
	            "Name" : "Sensor",
	            "OperationalState" : ["OK"],
	            "PossibleStates" : ["Normal", "Unknown"],
	            "RateUnits" : "None",
	            "RequestedState" : "No Change",
	            "SensorReading" : 43,
	            "SensorType" : "Temperature",
	            "ThresholdLC" : "N/A",
	            "ThresholdLF" : "N/A",
	            "ThresholdLNC" : "N/A",
	            "ThresholdUC" : "N/A",
	            "ThresholdUF" : "N/A",
	            "ThresholdUNC" : "N/A",
	            "UnitModifier" : 0
	        }
	    ],
	    "Name" : "Sensor Collection"
	}</pre>

Output Class	<pre>public class SensorCollection {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string _odata_type { get; set; }
	    public string Id { get; set; }
	    [JsonProperty("Members")]
	    public List<SensorMember> Members { get; set; }
	    public string Name { get; set; }
	}
	public class SensorMember {
	    [JsonProperty("@odata.id")]
	    public string _odata_id { get; set; }
	    [JsonProperty("@odata.type")]
	    public string odatatype { get; set; }</pre>

```
            public string BaseUnit { get; set; }
            public string CurrentState { get; set; }
            public string DeviceID { get; set; }
            public string ElementName { get; set; }
            public string EnabledState { get; set; }
            public string HealthState { get; set; }
            public int InstanceNumber { get; set; }
            public string Name { get; set; }
            public List<string> OperationalState { get; set; }
            public List<string> PossibleStates { get; set; }
            public string RateUnits { get; set; }
            public string RequestedState { get; set; }
            public int SensorReading { get; set; }
            public string SensorType { get; set; }
            public int ThresholdLC { get; set; }
            public int ThresholdLF { get; set; }
            public int ThresholdLNC { get; set; }
            public int ThresholdUC { get; set; }
            public int ThresholdUF { get; set; }
            public int ThresholdUNC { get; set; }
            public int UnitModifier { get; set; }
        }
```

21.7 Asset

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0]/asset[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/asset[0]", "Commands":["show"]}`

Output JSON	`{`
	`   "@odata.id" : "/DASH/v1/PhysicalAssetCollection/PhysicalAsset",`
	`   "@odata.type" : "#PhysicalAsset.v1_0_0.PhysicalAsset",`
	`   "CanbeFRUed" : "No",`
	`   "ElementName" : "Processor #1",`
	`   "InstanceNumber" : 0,`
	`   "Manufacturer" : "AMD",`
	`   "Model" : "AMD Phenom(tm) II X4 B95 Processor",`
	`   "Name" : "PhysicalAsset",`
	`   "PartNumber" : "N/A",`
	`   "SKU" : "N/A",`
	`   "SerialNumber" : "N/A",`
	`   "Tag" : "BRCM:4.1"`
	`}`

Output Class	`public class PhysicalAssetMember {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string odatatype { get; set; }`
	`    public string ConnectorLayout { get; set; }`
	`    public List<string> ConnectorType { get; set; }`
	`    public string ElementName { get; set; }`
	`    public int InstanceNumber { get; set; }`
	`    public string Manufacturer { get; set; }`
	`    public string Model { get; set; }`
	`    public string Name { get; set; }`
	`    public string PartNumber { get; set; }`
	`    public string SKU { get; set; }`
	`    public string SerialNumber { get; set; }`
	`    public int SlotNumber { get; set; }`
	`    public string Tag { get; set; }`
	`    public string CanbeFRUed { get; set; }`
	`    public string MemoryBankLabel { get; set; }`
	`    public string MemoryCapacity { get; set; }`
	`    public string MemoryFormFactor { get; set; }`

```
                            public string MemoryType { get; set; }
                            public string IsHostingBoard { get; set; }
                            public string PackageType { get; set; }
                            public string ChassisType { get; set; }
                        }
```

21.8 Fan

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0]/fan[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/fan[0]", "Commands":["show"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/FanCollection/Fan",`
	`    "@odata.type" : "#Fan.v1_0_0.Fan",`
	`    "DesiredSpeed" : "N/A",`
	`    "DeviceID" : "BRCM:10.1",`
	`    "ElementName" : "Fan #1",`
	`    "EnabledState" : "Not Applicable",`
	`    "HealthState" : "OK",`
	`    "InstanceNumber" : 0,`
	`    "IsActiveCooling" : "Yes",`
	`    "IsVariableSpeed" : "Yes",`
	`    "Name" : "Fan",`
	`    "OperationalState" : [ "OK" ],`
	`    "RequestedState" : "Not Applicable"`
	`}`

Output Class	`    public class FanMember {`
	`        [JsonProperty("@odata.id")]`
	`        public string _odata_id { get; set; }`
	`        [JsonProperty("@odata.type")]`
	`        public string odatatype { get; set; }`
	`        public int DesiredSpeed { get; set; }`
	`        public string DeviceID { get; set; }`
	`        public string ElementName { get; set; }`
	`        public string EnabledState { get; set; }`
	`        public string HealthState { get; set; }`
	`        public int InstanceNumber { get; set; }`
	`        public string IsActiveCooling { get; set; }`
	`        public string IsVariableSpeed { get; set; }`
	`        public string Name { get; set; }`
	`        public List<string> OperationalState { get; set; }`
	`        public string RequestedState { get; set; }`
	`    }`

Note: List of Fan commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/fan[0]", "Commands":["show"]}`
Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/fan[0]", "Commands":["enumerate","asset"]}`
Asset Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/fan[0]/asset[0]", "Commands":["show"]}`

21.9 Memory

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0]/memory[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/memory[0]",`

	`"Commands":["show"]}`
Output JSON	```{
"@odata.id" : "/DASH/v1/MemoryCollection/Memory",
"@odata.type" : "#Memory.v1_0_0.Memory",
"AccessType" : "Read/Write Supported",
"AvailableMemory" : "4096 MB",
"DeviceID" : "BRCM:8.1",
"ElementName" : "Total System Memory",
"EnabledState" : "Enabled",
"HealthState" : "Unknown",
"InstanceNumber" : 0,
"IsVolatileMemory" : "Yes",
"Name" : "Memory",
"RequestedState" : "Not Applicable",
"TotalMemory" : "4096 MB"
}```
Output Class	```public class MemoryMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string odatatype { get; set; }
public string AccessType { get; set; }
public string AvailableMemory { get; set; }
public string DeviceID { get; set; }
public string ElementName { get; set; }
public string EnabledState { get; set; }
public string HealthState { get; set; }
public int InstanceNumber { get; set; }
public string IsVolatileMemory { get; set; }
public string Name { get; set; }
public string RequestedState { get; set; }
public string TotalMemory { get; set; }
}```

Note: List of Memory commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/memory[0]",` `"Commands":["show"]}`
Enumerate Asset	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/memory[0]",` `"Commands":["enumerate","asset"]}`
Asset Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/memory[0]/asset[0]",` `"Commands":["show"]}`

21.10 Sensor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t processor[0]/sensor[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/sensor[0]",` `"Commands":["show"]}`
Output JSON	```{
"@odata.id" : "/DASH/v1/SensorCollection/Sensor",
"@odata.type" : "#Sensor.v1_0_0.Sensor",
"BaseUnit" : "RPM",
"CurrentState" : "Normal",
"DeviceID" : "BRCM:11.1",
"ElementName" : "Numeric Sensor #1 (Tachometer)",
"EnabledState" : "Not Applicable",
"HealthState" : "Unknown",
"InstanceNumber" : 0,
"Name" : "Sensor",
"OperationalState" : ["No Contact"],
"PossibleStates" : [
"Non-Critical",```

	`"Lower Non-Critical",`
	`"Upper Non-Critical",`
	`"Critical",`
	`"Lower Critical",`
	`"Upper Critical",`
	`"Fatal",`
	`"Lower Fatal",`
	`"Upper Fatal",`
	`"Normal",`
	`"Unknown"`
	`],`
	`"RateUnits" : "None",`
	`"RequestedState" : "No Change",`
	`"SensorReading" : 0,`
	`"SensorType" : "Tachometer",`
	`"ThresholdLC" : "N/A",`
	`"ThresholdLF" : "N/A",`
	`"ThresholdLNC" : "N/A",`
	`"ThresholdUC" : "N/A",`
	`"ThresholdUF" : "N/A",`
	`"ThresholdUNC" : "N/A",`
	`"UnitModifier" : 0`
	`}`
| Output Class | ```csharp
public class SensorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string BaseUnit { get; set; }
    public string CurrentState { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public List<string> PossibleStates { get; set; }
    public string RateUnits { get; set; }
    public string RequestedState { get; set; }
    public int SensorReading { get; set; }
    public string SensorType { get; set; }
    public int ThresholdLC { get; set; }
    public int ThresholdLF { get; set; }
    public int ThresholdLNC { get; set; }
    public int ThresholdUC { get; set; }
    public int ThresholdUF { get; set; }
    public int ThresholdUNC { get; set; }
    public int UnitModifier { get; set; }
}
``` |

Note: List of Sensor commands

Command	Input JSON command
Show	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/sensor[0]",` `"Commands":["show"]}`
Reading	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/sensor[0]",` `"Commands":["reading"]}`
Set Threshold	`{"h":"dash-system","u":"admin","P":"adminpass","t":"processor[0]/sensor[0]",` `"Commands":["setthreshold","lnc","100"]}`

22 Record Log

22.1 Enumerate Record Log

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate recordlog`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","recordlog"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/RecordLogCollection",`
	`    "@odata.type" : "#RecordLogCollection.v1_0_0.RecordLogCollection",`
	`    "Id" : "RecordLogCollection",`
	`    "Members" : [`
	`        {`
	`            "@odata.id" : "/DASH/v1/RecordLogCollection/RecordLog",`
	`            "@odata.type" : "#RecordLog.v1_0_0.RecordLog",`
	`            "CurrentNumberOfRecords" : 75,`
	`            "ElementName" : "Event Log",`
	`            "EnabledState" : "Enabled",`
	`            "HealthState" : "N/A",`
	`            "InstanceID" : "BRCM:70.1",`
	`            "InstanceNumber" : 0,`
	`            "LogState" : "Normal",`
	`            "MaxNumberOfRecords" : 499,`
	`            "Name" : "Event Log",`
	`            "OperationalStatus" : [ 0 ],`
	`            "OverwritePolicy" : "Wraps When Full",`
	`            "RequestedState" : "Not Applicable"`
	`        }`
	`    ],`
	`    "Name" : "Record Log Collection"`
	`}`
| Output Class | ```csharp
public class RecordLogCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<RecordLogMember> Members { get; set; }
    public string Name { get; set; }
}
public class RecordLogMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public int CurrentNumberOfRecords { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string LogState { get; set; }
    public int MaxNumberOfRecords { get; set; }
    public string Name { get; set; }
    public List<int> OperationalStatus { get; set; }
    public string OverwritePolicy { get; set; }
    public string RequestedState { get; set; }
}
``` |

22.2 Record Log Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t recordlog[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"recordlog[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/RecordLogCollection/RecordLog",
    "@odata.type" : "#RecordLog.v1_0_0.RecordLog",
    "CurrentNumberOfRecords" : 75,
    "ElementName" : "Event Log",
    "EnabledState" : "Enabled",
    "HealthState" : "N/A",
    "InstanceID" : "BRCM:70.1",
    "InstanceNumber" : 0,
    "LogState" : "Normal",
    "MaxNumberOfRecords" : 499,
    "Name" : "Event Log",
    "OperationalStatus" : [ 0 ],
    "OverwritePolicy" : "Wraps When Full",
    "RequestedState" : "Not Applicable"
}
``` |
| Output Class | ```
public class RecordLogMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public int CurrentNumberOfRecords { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string LogState { get; set; }
    public int MaxNumberOfRecords { get; set; }
    public string Name { get; set; }
    public List<int> OperationalStatus { get; set; }
    public string OverwritePolicy { get; set; }
    public string RequestedState { get; set; }
}
``` |

23 Sensor

23.1 Enumerate Sensor

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate sensor`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","sensor"]}`
Output JSON	(see below)

```
{
    "@odata.id" : "/DASH/v1/SensorCollection",
    "@odata.type" : "#SensorCollection.v1_0_0.SensorCollection",
    "Id" : "SensorCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
            "@odata.type" : "#Sensor.v1_0_0.Sensor",
            "BaseUnit" : "RPM",
            "CurrentState" : "Normal",
            "DeviceID" : "BRCM:11.1",
            "ElementName" : "Numeric Sensor #1 (Tachometer)",
            "EnabledState" : "Not Applicable",
            "HealthState" : "Unknown",
            "InstanceNumber" : 0,
            "Name" : "Sensor",
            "OperationalState" : [ "No Contact" ],
            "PossibleStates" : [
                "Non-Critical",
                "Lower Non-Critical",
                "Upper Non-Critical",
                "Critical",
                "Lower Critical",
                "Upper Critical",
                "Fatal",
                "Lower Fatal",
                "Upper Fatal",
                "Normal",
                "Unknown"
            ],
            "RateUnits" : "None",
            "RequestedState" : "No Change",
            "SensorReading" : 0,
            "SensorType" : "Tachometer",
            "ThresholdLC" : "N/A",
            "ThresholdLF" : "N/A",
            "ThresholdLNC" : "N/A",
            "ThresholdUC" : "N/A",
            "ThresholdUF" : "N/A",
            "ThresholdUNC" : "N/A",
            "UnitModifier" : 0
        },
        {
            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
            "@odata.type" : "#Sensor.v1_0_0.Sensor",
            "BaseUnit" : "RPM",
            "CurrentState" : "Normal",
            "DeviceID" : "BRCM:11.2",
            "ElementName" : "Numeric Sensor #2 (Tachometer)",
            "EnabledState" : "Not Applicable",
            "HealthState" : "Unknown",
            "InstanceNumber" : 1,
            "Name" : "Sensor",
            "OperationalState" : [ "No Contact" ],
            "PossibleStates" : [
                "Non-Critical",
                "Lower Non-Critical",
                "Upper Non-Critical",
                "Critical",
```

```
                "Lower Critical",
                "Upper Critical",
                "Fatal",
                "Lower Fatal",
                "Upper Fatal",
                "Normal",
                "Unknown"
            ],
            "RateUnits" : "None",
            "RequestedState" : "No Change",
            "SensorReading" : 0,
            "SensorType" : "Tachometer",
            "ThresholdLC" : "N/A",
            "ThresholdLF" : "N/A",
            "ThresholdLNC" : "N/A",
            "ThresholdUC" : "N/A",
            "ThresholdUF" : "N/A",
            "ThresholdUNC" : "N/A",
            "UnitModifier" : 0
        },
        {
            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
            "@odata.type" : "#Sensor.v1_0_0.Sensor",
            "BaseUnit" : "Degrees C",
            "CurrentState" : "Normal",
            "DeviceID" : "BRCM:11.3",
            "ElementName" : "Numeric Sensor #3 (Chassis Temperature)",
            "EnabledState" : "Not Applicable",
            "HealthState" : "Unknown",
            "InstanceNumber" : 2,
            "Name" : "Sensor",
            "OperationalState" : [ "No Contact" ],
            "PossibleStates" : [
                "Non-Critical",
                "Lower Non-Critical",
                "Upper Non-Critical",
                "Critical",
                "Lower Critical",
                "Upper Critical",
                "Fatal",
                "Lower Fatal",
                "Upper Fatal",
                "Normal",
                "Unknown"
            ],
            "RateUnits" : "None",
            "RequestedState" : "No Change",
            "SensorReading" : 0,
            "SensorType" : "Temperature",
            "ThresholdLC" : "N/A",
            "ThresholdLF" : "N/A",
            "ThresholdLNC" : "N/A",
            "ThresholdUC" : "N/A",
            "ThresholdUF" : "N/A",
            "ThresholdUNC" : "N/A",
            "UnitModifier" : -3
        },
        {
            "@odata.id" : "/DASH/v1/SensorCollection/Sensor",
            "@odata.type" : "#Sensor.v1_0_0.Sensor",
            "BaseUnit" : "Degrees C",
            "CurrentState" : "Normal",
            "DeviceID" : "BRCM:11.4",
            "ElementName" : "Numeric Sensor #4 (CPU Temperature)",
            "EnabledState" : "Not Applicable",
            "HealthState" : "Unknown",
            "InstanceNumber" : 3,
            "Name" : "Sensor",
            "OperationalState" : [ "No Contact" ],
```

<table>
<tr><td></td><td>

```
            "PossibleStates" : [
                "Non-Critical",
                "Lower Non-Critical",
                "Upper Non-Critical",
                "Critical",
                "Lower Critical",
                "Upper Critical",
                "Fatal",
                "Lower Fatal",
                "Upper Fatal",
                "Normal",
                "Unknown"
            ],
            "RateUnits" : "None",
            "RequestedState" : "No Change",
            "SensorReading" : 0,
            "SensorType" : "Temperature",
            "ThresholdLC" : "N/A",
            "ThresholdLF" : "N/A",
            "ThresholdLNC" : "N/A",
            "ThresholdUC" : "N/A",
            "ThresholdUF" : "N/A",
            "ThresholdUNC" : "N/A",
            "UnitModifier" : -3
        }
    ],
    "Name" : "Sensor Collection"
}
```

</td></tr>
<tr><td>Output Class</td><td>

```
public class SensorCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<SensorMember> Members { get; set; }
    public string Name { get; set; }
}
public class SensorMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string BaseUnit { get; set; }
    public string CurrentState { get; set; }
    public string DeviceID { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public string HealthState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OperationalState { get; set; }
    public List<string> PossibleStates { get; set; }
    public string RateUnits { get; set; }
    public string RequestedState { get; set; }
    public int SensorReading { get; set; }
    public string SensorType { get; set; }
    public int ThresholdLC { get; set; }
    public int ThresholdLF { get; set; }
    public int ThresholdLNC { get; set; }
    public int ThresholdUC { get; set; }
    public int ThresholdUF { get; set; }
    public int ThresholdUNC { get; set; }
    public int UnitModifier { get; set; }
}
```

</td></tr>
</table>

23.2 Sensor Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t sensor[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"sensor[0]",` `"Commands":["show"]}`
Output JSON	``` { "@odata.id" : "/DASH/v1/SensorCollection/Sensor", "@odata.type" : "#Sensor.v1_0_0.Sensor", "BaseUnit" : "RPM", "CurrentState" : "Normal", "DeviceID" : "BRCM:11.1", "ElementName" : "Numeric Sensor #1 (Tachometer)", "EnabledState" : "Not Applicable", "HealthState" : "Unknown", "InstanceNumber" : 0, "Name" : "Sensor", "OperationalState" : ["No Contact"], "PossibleStates" : ["Non-Critical", "Lower Non-Critical", "Upper Non-Critical", "Critical", "Lower Critical", "Upper Critical", "Fatal", "Lower Fatal", "Upper Fatal", "Normal", "Unknown"], "RateUnits" : "None", "RequestedState" : "No Change", "SensorReading" : 0, "SensorType" : "Tachometer", "ThresholdLC" : "N/A", "ThresholdLF" : "N/A", "ThresholdLNC" : "N/A", "ThresholdUC" : "N/A", "ThresholdUF" : "N/A", "ThresholdUNC" : "N/A", "UnitModifier" : 0 } ```
Output Class	``` public class SensorMember { [JsonProperty("@odata.id")] public string _odata_id { get; set; } [JsonProperty("@odata.type")] public string odatatype { get; set; } public string BaseUnit { get; set; } public string CurrentState { get; set; } public string DeviceID { get; set; } public string ElementName { get; set; } public string EnabledState { get; set; } public string HealthState { get; set; } public int InstanceNumber { get; set; } public string Name { get; set; } public List<string> OperationalState { get; set; } public List<string> PossibleStates { get; set; } public string RateUnits { get; set; } public string RequestedState { get; set; } public int SensorReading { get; set; } public string SensorType { get; set; } public int ThresholdLC { get; set; } public int ThresholdLF { get; set; } public int ThresholdLNC { get; set; } public int ThresholdUC { get; set; } ```

```
                        public int ThresholdUF { get; set; }
                        public int ThresholdUNC { get; set; }
                        public int UnitModifier { get; set; }
                    }
```

23.3 Sensor Reading

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t sensor[0] reading`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"sensor[0]",` `"Commands":["reading"]}`

Output JSON	`{`
	`    "BaseUnit" : "RPM",`
	`    "CurrentReading" : 0`
	`}`

Output Class	`    public class SensorReading {`
	`        public string BaseUnit { get; set; }`
	`        public int CurrentReading { get; set; }`
	`    }`

23.4 Sensor Set Threshold

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t sensor[0] setthreshold lnc` `100`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"sensor[0]",` `"Commands":["setthreshold","lnc","100"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "Threshold Set Successfully"`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

24 Software

24.1 Enumerate Software

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate software`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","software"]}`
Output JSON	(see below)

```
{
    "@odata.id" : "/DASH/v1/SoftwareCollection",
    "@odata.type" : "#SoftwareCollection.v1_0_0.SoftwareCollection",
    "Id" : "SoftwareCollection",
    "Members" : [
        {
            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
            "@odata.type" : "#Software.v1_0_0.Software",
            "BuildNumber" : "N/A",
            "ElementName" : "System Firmware Information",
            "IdentityInfoType" : "N/A",
            "IdentityInfoValue" : "N/A",
            "InstanceID" : "BRCM:29.1",
            "InstanceNumber" : 0,
            "IsEntity" : "True",
            "MajorVersion" : 1,
            "Manufacturer" : "Hewlett-Packard",
            "MinorVersion" : 11,
            "Name" : "Software",
            "OperationalStatus" : [ "Unknown" ],
            "RevisionNumber" : "N/A",
            "SoftwareClassifications" : [ "Firmware", "Firmware/BIOS",
"BIOS/FCode" ],
            "TargetedOperatingSystems" : "N/A",
            "VersionString" : "786G6 v01.11"
        },
        {
            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
            "@odata.type" : "#Software.v1_0_0.Software",
            "BuildNumber" : 1,
            "ElementName" : "Management Controller Firmware Information",
            "IdentityInfoType" : "N/A",
            "IdentityInfoValue" : "N/A",
            "InstanceID" : "BRCM:29.2",
            "InstanceNumber" : 1,
            "IsEntity" : "True",
            "MajorVersion" : 1,
            "Manufacturer" : "Broadcom Corporation",
            "MinorVersion" : 40,
            "Name" : "Software",
            "OperationalStatus" : [ "Degraded" ],
            "RevisionNumber" : 0,
            "SoftwareClassifications" : [ "Firmware" ],
            "TargetedOperatingSystems" : "N/A",
            "VersionString" : "DASH 1.40.0.1"
        },
        {
            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
            "@odata.type" : "#Software.v1_0_0.Software",
            "BuildNumber" : "N/A",
            "ElementName" : "Network Controller Firmware Information",
            "IdentityInfoType" : "N/A",
            "IdentityInfoValue" : "N/A",
            "InstanceID" : "BRCM:29.3",
            "InstanceNumber" : 2,
            "IsEntity" : "True",
            "MajorVersion" : 3,
            "Manufacturer" : "Broadcom Corporation",
            "MinorVersion" : 77,
```

<table>
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```json
            "Name" : "Software",
            "OperationalStatus" : [ "OK" ],
            "RevisionNumber" : "N/A",
            "SoftwareClassifications" : [ "Firmware" ],
            "TargetedOperatingSystems" : "N/A",
            "VersionString" : "N/A"
        },
        {
            "@odata.id" : "/DASH/v1/SoftwareCollection/Software",
            "@odata.type" : "#Software.v1_0_0.Software",
            "BuildNumber" : 0,
            "ElementName" : "Network Controller Driver Information",
            "IdentityInfoType" : "N/A",
            "IdentityInfoValue" : "N/A",
            "InstanceID" : "BRCM:29.4",
            "InstanceNumber" : 3,
            "IsEntity" : "True",
            "MajorVersion" : 3,
            "Manufacturer" : "Broadcom Corporation",
            "MinorVersion" : 137,
            "Name" : "Software",
            "OperationalStatus" : [ "OK" ],
            "RevisionNumber" : 0,
            "SoftwareClassifications" : [ "Driver" ],
            "TargetedOperatingSystems" : "N/A",
            "VersionString" : "N/A"
        }
    ],
    "Name" : "Software Collection"
}
```
</td></tr>
<tr><td>Output Class</td><td>

```csharp
public class SoftwareCollection {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string _odata_type { get; set; }
    public string Id { get; set; }
    [JsonProperty("Members")]
    public List<SoftwareMember> Members { get; set; }
    public string Name { get; set; }
}
public class SoftwareMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public int BuildNumber { get; set; }
    public string ElementName { get; set; }
    public string IdentityInfoType { get; set; }
    public string IdentityInfoValue { get; set; }
    public string InstanceID { get; set; }
    public int InstanceNumber { get; set; }
    public string IsEntity { get; set; }
    public int MajorVersion { get; set; }
    public string Manufacturer { get; set; }
    public int MinorVersion { get; set; }
    public string Name { get; set; }
    public List<string> OperationalStatus { get; set; }
    public int RevisionNumber { get; set; }
    public List<string> SoftwareClassifications { get; set; }
    public string TargetedOperatingSystems { get; set; }
    public string VersionString { get; set; }
}
```
</td></tr>
</table>

24.2 Software Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t software[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"software[0]",` `"Commands":["show"]}`
Output JSON	```{` ` "@odata.id" : "/DASH/v1/SoftwareCollection/Software",` ` "@odata.type" : "#Software.v1_0_0.Software",` ` "BuildNumber" : "N/A",` ` "ElementName" : "System Firmware Information",` ` "IdentityInfoType" : "N/A",` ` "IdentityInfoValue" : "N/A",` ` "InstanceID" : "BRCM:29.1",` ` "InstanceNumber" : 0,` ` "IsEntity" : "True",` ` "MajorVersion" : 1,` ` "Manufacturer" : "Hewlett-Packard",` ` "MinorVersion" : 11,` ` "Name" : "Software",` ` "OperationalStatus" : ["Unknown"],` ` "RevisionNumber" : "N/A",` ` "SoftwareClassifications" : ["Firmware", "Firmware/BIOS", "BIOS/FCode"],` ` "TargetedOperatingSystems" : "N/A",` ` "VersionString" : "786G6 v01.11"` `}```
Output Class	```public class SoftwareMember {` ` [JsonProperty("@odata.id")]` ` public string _odata_id { get; set; }` ` [JsonProperty("@odata.type")]` ` public string odatatype { get; set; }` ` public object BuildNumber { get; set; }` ` public string ElementName { get; set; }` ` public string IdentityInfoType { get; set; }` ` public string IdentityInfoValue { get; set; }` ` public string InstanceID { get; set; }` ` public int InstanceNumber { get; set; }` ` public string IsEntity { get; set; }` ` public int MajorVersion { get; set; }` ` public string Manufacturer { get; set; }` ` public int MinorVersion { get; set; }` ` public string Name { get; set; }` ` public List<string> OperationalStatus { get; set; }` ` public object RevisionNumber { get; set; }` ` public List<string> SoftwareClassifications { get; set; }` ` public string TargetedOperatingSystems { get; set; }` ` public string VersionString { get; set; }` `}```

24.3 Software Install

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t software[0] install` `http://10.138.141.209/xampp/bin/5762tm3.05`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"software[0]",` `"Commands":["install","http://10.138.141.209/xampp/bin/5762tm3.05"]}`
Output JSON	```{` ` "ErrorCode" : 0,` ` "ErrorMessage" : "Software installation completed"` `}```
Output Class	```public class CommandError {` ` public int ErrorCode { get; set; }` ` public string ErrorMessage { get; set; }` `}```

25 Software Update

25.1 Software Update Start

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass softwareupdate start`
	`        Choose valid instance number from the above list : 1`
	`        Provide the File Path [http://{ip-address}[:{port}]/{path-to-`
	`        firmware}/{firmware}] :http://10.138.141.209/xampp/bin/5762tm3.05`

jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`

ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass",`
	`"Commands":["softwareupdate","start","1","http://10.138.141.209/xampp/bin/5762tm3.0`
	`5"]}`

Output JSON	`{`
	`   "ErrorCode" : 0,`
	`   "ErrorMessage" : "Software installation completed"`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

26 Text Redirection

26.1 Enumerate Text Redirection

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate textredirection`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","textredirection"]}`

Output JSON	`{`
	`    "@odata.id" : "/DASH/v1/TextRedirectionCollection",`
	`    "@odata.type" :`
	`"#TextRedirectionCollection.v1_0_0.TextRedirectionCollection",`
	`    "Id" : "TextRedirectionCollection",`
	`    "Members" : [`
	`        {`
	`            "@odata.id" : "/DASH/v1/TextRedirectionCollection/TextRedirection",`
	`            "@odata.type" : "#TextRedirection.v1_0_0.TextRedirection",`
	`            "EnabledName" : "Text Redirection SAP for the Telnet Service",`
	`            "EnabledState" : "Disabled",`
	`            "InstanceNumber" : 0,`
	`            "Name" : "TextRedirectionSAP:1",`
	`            "PortNumber" : 87,`
	`            "ProtocolType" : "Telnet",`
	`            "RequestedState" : "Disabled",`
	`            "TextFlowType" : "Terminal Mode"`
	`        },`
	`        {`
	`            "@odata.id" : "/DASH/v1/TextRedirectionCollection/TextRedirection",`
	`            "@odata.type" : "#TextRedirection.v1_0_0.TextRedirection",`
	`            "EnabledName" : "Text Redirection SAP for the SSH Service",`
	`            "EnabledState" : "Disabled",`
	`            "InstanceNumber" : 1,`
	`            "Name" : "TextRedirectionSAP:2",`
	`            "PortNumber" : 57,`
	`            "ProtocolType" : "SSH",`
	`            "RequestedState" : "Disabled",`
	`            "TextFlowType" : "Terminal Mode"`
	`        }`
	`    ],`
	`    "Name" : "Text Redirection Collection"`
	`}`

Output Class	`public class TextRedirectionCollection {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string _odata_type { get; set; }`
	`    public string Id { get; set; }`
	`    [JsonProperty("Members")]`
	`    public List<TextRedirectionMember> Members { get; set; }`
	`    public string Name { get; set; }`
	`}`
	`public class TextRedirectionMember {`
	`    [JsonProperty("@odata.id")]`
	`    public string _odata_id { get; set; }`
	`    [JsonProperty("@odata.type")]`
	`    public string odatatype { get; set; }`
	`    public string EnabledName { get; set; }`
	`    public string EnabledState { get; set; }`
	`    public int InstanceNumber { get; set; }`
	`    public string Name { get; set; }`
	`    public int PortNumber { get; set; }`
	`    public string ProtocolType { get; set; }`
	`    public string RequestedState { get; set; }`
	`    public string TextFlowType { get; set; }`
	`}`

26.2 Text Redirection Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t textredirection[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"textredirection[0]", "Commands":["show"]}`
| Output JSON | ```
{
    "@odata.id" : "/DASH/v1/TextRedirectionCollection/TextRedirection",
    "@odata.type" : "#TextRedirection.v1_0_0.TextRedirection",
    "EnabledName" : "Text Redirection SAP for the Telnet Service",
    "EnabledState" : "Disabled",
    "InstanceNumber" : 0,
    "Name" : "TextRedirectionSAP:1",
    "PortNumber" : 87,
    "ProtocolType" : "Telnet",
    "RequestedState" : "Disabled",
    "TextFlowType" : "Terminal Mode"
}
``` |
| Output Class | ```
public class TextRedirectionMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public string EnabledName { get; set; }
    public string EnabledState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public int PortNumber { get; set; }
    public string ProtocolType { get; set; }
    public string RequestedState { get; set; }
    public string TextFlowType { get; set; }
}
``` |

26.3 Text Redirection Actions

	<<option>>	
jdo Usage		`dashcli -jdo`
ji/jo Usage		`dashcli -ji input_json.txt -jo output_json.txt`
DASH CLI Command		`dashcli -h dash-system -u admin -P adminpass -t textredirection[0] <<option>>`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass","t":"textredirection[0]", "Commands":["<<option>>"]}`

Output JSON	activate	`{`
		`   "ErrorCode" : 0,`
		`   "ErrorMessage" : "Session activated successfully"`
		`}`

	disable	`{`
		`   "ErrorCode" : 0,`
		`   "ErrorMessage" : "Session disabled successfully"`
		`}`

	start	`{`
		`   "ErrorCode" : 0,`
		`   "ErrorMessage" : "Session Started successfully"`
		`}`

DASH CLI Command		`dashcli -h dash-system -u admin -P adminpass textredirection <<option>>` `        Choose valid instance number from the above list :0`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":[" textredirection","<<option>>","0"]}`

Output JSON	connect	`{`
		`   "ErrorCode" : 0,`
		`   "ErrorMessage" : "Session Started successfully"`
		`}`

	disconnect	`{`
		`   "ErrorCode" : 0,`
		`   "ErrorMessage" : "Session disabled successfully"`
		`}`

Output Class		`public class CommandError {`
		`    public int ErrorCode { get; set; }`
		`    public string ErrorMessage { get; set; }`
		`}`

27 USB Redirection

27.1 Enumerate USB Redirection

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate usbredirection`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","usbredirection"]}`
Output JSON	```{` ` "@odata.id" : "/DASH/v1/USBRedirectionCollection",` ` "@odata.type" :` `"#USBRedirectionCollection.v1_0_0.USBRedirectionCollection",` ` "Id" : "USBRedirectionCollection",` ` "Members" : [` ` {` ` "@odata.id" : "/DASH/v1/USBRedirectionCollection/USBRedirection",` ` "@odata.type" : "#USBRedirection.v1_0_0.USBRedirection",` ` "AccessURI" : "image",` ` "ConnectionMode" : "Connect",` ` "CreationClassName" : "CIM_USBRedirectionSAP",` ` "ElementName" : "USB Redirection SAP",` ` "EnabledState" : "Disabled",` ` "InstanceNumber" : 0,` ` "Name" : "USB Redirection",` ` "RedirectionName" : "USBRedirectionSAP",` ` "RequestedState" : "Disabled",` ` "SystemCreationClassName" : "CIM_ComputerSystem",` ` "SystemName" : "10.136.6.63"` ` }` `],` ` "Name" : "USB Redirection Collection"` `}```
Output Class	```public class USBRedirectionCollection {` ` [JsonProperty("@odata.id")]` ` public string _odata_id { get; set; }` ` [JsonProperty("@odata.type")]` ` public string _odata_type { get; set; }` ` public string Id { get; set; }` ` [JsonProperty("Members")]` ` public List<USBRedirectionMember> Members { get; set; }` ` public string Name { get; set; }` `}` `public class USBRedirectionMember {` ` [JsonProperty("@odata.id")]` ` public string _odata_id { get; set; }` ` [JsonProperty("@odata.type")]` ` public string odatatype { get; set; }` ` public string AccessURI { get; set; }` ` public string ConnectionMode { get; set; }` ` public string CreationClassName { get; set; }` ` public string ElementName { get; set; }` ` public string EnabledState { get; set; }` ` public int InstanceNumber { get; set; }` ` public string Name { get; set; }` ` public string RedirectionName { get; set; }` ` public string RequestedState { get; set; }` ` public string SystemCreationClassName { get; set; }` ` public string SystemName { get; set; }` `}```

27.2 USB Redirection Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t usbredirection[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"usbredirection[0]",` `"Commands":["show"]}`
Output JSON	```{` ` "@odata.id" : "/DASH/v1/USBRedirectionCollection/USBRedirection",` ` "@odata.type" : "#USBRedirection.v1_0_0.USBRedirection",` ` "AccessURI" : "image",` ` "ConnectionMode" : "Connect",` ` "CreationClassName" : "CIM_USBRedirectionSAP",` ` "ElementName" : "USB Redirection SAP",` ` "EnabledState" : "Disabled",` ` "InstanceNumber" : 0,` ` "Name" : "USB Redirection",` ` "RedirectionName" : "USBRedirectionSAP",` ` "RequestedState" : "Disabled",` ` "SystemCreationClassName" : "CIM_ComputerSystem",` ` "SystemName" : "10.136.6.63"` `}```
Output Class	```public class USBRedirectionMember {` ` [JsonProperty("@odata.id")]` ` public string _odata_id { get; set; }` ` [JsonProperty("@odata.type")]` ` public string odatatype { get; set; }` ` public string AccessURI { get; set; }` ` public string ConnectionMode { get; set; }` ` public string CreationClassName { get; set; }` ` public string ElementName { get; set; }` ` public string EnabledState { get; set; }` ` public int InstanceNumber { get; set; }` ` public string Name { get; set; }` ` public string RedirectionName { get; set; }` ` public string RequestedState { get; set; }` ` public string SystemCreationClassName { get; set; }` ` public string SystemName { get; set; }` `}```

27.3 USB Redirection Actions

	<<option>>	
jdo Usage		`dashcli -jdo`
ji/jo Usage		`dashcli -ji input_json.txt -jo output_json.txt`
DASH CLI Command		`dashcli -h dash-system -u admin -P adminpass -t usbredirection[0] <<option>>`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass","t":"usbredirection[0]", "Commands":["<<option>>"]}`

Output JSON	activate	`{`
		 `    "ErrorCode" : 0,`
		 `    "ErrorMessage" : "Session Activated successfully"`
		 `}`

	disable	`{`
		 `    "ErrorCode" : 0,`
		 `    "ErrorMessage" : "USB Redirection Service is Disabled Successfully"`
		 `}`

DASH CLI Command	startvmr	`dashcli -h dash-system -u admin -P adminpass -t usbredirection[0] startvmr http://10.138.141.209/xampp/iso/dos6.iso false`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass","t":"usbredirection[0]", "Commands":["startvmr","http://10.138.141.209/xampp/iso/dos6.iso","false"]}`

Output JSON		`{`
		 `    "ErrorCode" : 0,`
		 `    "ErrorMessage" : "USB Redirection Configuration has been successfully completed."`
		 `}`

DASH CLI Command	connect	`dashcli -h dash-system -u admin -P adminpass usbredirection connect`
		 `        Choose valid instance number from the above list :0`
		 `        Using Integrate Web Server(Y/N) :n`
		 `        Provide the File Path [http://{ip-address}[:{port}]/{path-to-image}/{image}.iso]   :http://10.138.141.209/xampp/iso/dos6.iso`

Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass", "Commands":["usbredirection","connect","0","n","http://10.138.141.209/xampp/iso/dos6.iso"]}`

Output JSON		`{`
		 `    "ErrorCode" : 0,`
		 `    "ErrorMessage" : "USB Redirection Configuration has been successfully completed."`
		 `}`

DASH CLI Command	disconnect	`dashcli -h dash-system -u admin -P adminpass usbredirection disconnect` `        Choose valid instance number from the above list :0`
Input JSON		`{"h":"dash-system","u":"admin","P":"adminpass", "Commands":["usbredirection","disconnect","0"]}`

Output JSON		`{`
		 `    "ErrorCode" : 0,`
		 `    "ErrorMessage" : "USB Redirection Service is Disabled Successfully"`
		 `}`

Output Class		`public class CommandError {`
		 `    public int ErrorCode { get; set; }`
		 `    public string ErrorMessage { get; set; }`
		 `    }`

28 User

28.1 Enumerate User

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass enumerate user`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass",` `"Commands":["enumerate","user"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/AccountService/ManagerAccountCollection",
"@odata.type" :
"#ManagerAccountCollection.v1_0_0.ManagerAccountCollection",
"Id" : "ManagerAccountCollection",
"Members" : [
{
"@odata.id" : "/DASH/v1/ManagerAccountCollection/ManagerAccount",
"@odata.type" : "#ManagerAccount.v1_0_0.ManagerAccount",
"AssociatedRoles" : ["Admin", "Redirection", "Basic"],
"ElementName" : "Account",
"EnabledState" : "Not Applicable",
"InstanceNumber" : 0,
"Name" : "Administrator",
"OrganizationName" : ["DMTF"],
"RequestedState" : "Not Applicable",
"UserId" : "Administrator"
}
],
"Name" : "Manager Account Collection"
}</pre>
Output Class	<pre>public class UserCollection {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string _odata_type { get; set; }
public string Id { get; set; }
[JsonProperty("Members")]
public List<UserMember> Members { get; set; }
public string Name { get; set; }
}
public class UserMember {
[JsonProperty("@odata.id")]
public string _odata_id { get; set; }
[JsonProperty("@odata.type")]
public string odatatype { get; set; }
public List<string> AssociatedRoles { get; set; }
public string ElementName { get; set; }
public string EnabledState { get; set; }
public int InstanceNumber { get; set; }
public string Name { get; set; }
public List<string> OrganizationName { get; set; }
public string RequestedState { get; set; }
public string UserId { get; set; }
}</pre>

28.2 User Show

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[0] show`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[0]",` `"Commands":["show"]}`
Output JSON	<pre>{
"@odata.id" : "/DASH/v1/ManagerAccountCollection/ManagerAccount",
"@odata.type" : "#ManagerAccount.v1_0_0.ManagerAccount",</pre>

| | ```
    "AssociatedRoles" : [ "Admin", "Redirection", "Basic" ],
    "ElementName" : "Account",
    "EnabledState" : "Not Applicable",
    "InstanceNumber" : 0,
    "Name" : "Administrator",
    "OrganizationName" : [ "DMTF" ],
    "RequestedState" : "Not Applicable",
    "UserId" : "Administrator"
}
``` |
| Output Class | ```
public class UserMember {
    [JsonProperty("@odata.id")]
    public string _odata_id { get; set; }
    [JsonProperty("@odata.type")]
    public string odatatype { get; set; }
    public List<string> AssociatedRoles { get; set; }
    public string ElementName { get; set; }
    public string EnabledState { get; set; }
    public int InstanceNumber { get; set; }
    public string Name { get; set; }
    public List<string> OrganizationName { get; set; }
    public string RequestedState { get; set; }
    public string UserId { get; set; }
}
``` |

28.3 User Add

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t computersystem[0] user add userName userPassword organizationName`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
Input JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"computersystem[0]", "Commands":["user","add","userName","userPassword","organizationName"]}`
| Output JSON | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "User Added Successfully"
}
``` |
| Output Class | ```
public class CommandError {
    public int ErrorCode { get; set; }
    public string ErrorMessage { get; set; }
}
``` |

28.4 User Enable

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[2] enable`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[2]", "Commands":["enable"]}`
| Output JSON | ```
{
    "ErrorCode" : 0,
    "ErrorMessage" : "User Enabled Successfully."
}
``` |
| Output Class | ```
public class CommandError {
    public int ErrorCode { get; set; }
    public string ErrorMessage { get; set; }
}
``` |

28.5 User Disable

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[2] disable`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`

ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[2]", "Commands":["disable"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "User Disabled Successfully."`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

28.6 User Assign Roles

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[2] assignroles Role:0 Role:1`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[2]", "Commands":["assignroles","Role:0","Role:1"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "Roles assigned Successfully."`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

28.7 User Remove Roles

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[2] removeroles Role:1`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[2]", "Commands":["removeroles","Role:1"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "Roles removed Successfully."`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

28.8 User Delete

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -t user[2] delete`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","t":"user[2]", "Commands":["delete"]}`

Output JSON	`{`
	`    "ErrorCode" : 0,`
	`    "ErrorMessage" : "User Deleted Successfully."`
	`}`

Output Class	`    public class CommandError {`
	`        public int ErrorCode { get; set; }`
	`        public string ErrorMessage { get; set; }`
	`    }`

Appendix

DASH CLI developer mode

1) JSON data organization into Key-Value pair, makes it easier to fetch Attribute data by referencing keys
   a) Logic to fetch key is easier to modify than writing parsers to match each key
2) Management console can be in any language
   a) Dashcli.exe binary can be executed by most programming languages.
   b) Faster implementation of DASH in management console.
3) DASH component is de-coupled from management console.
   a) DASH implementation is encapsulated in separate binary executable.
   b) Reduced risk to console developers.
4) Every DASH CLI release gets installed in separate folder
   a) Developer has to switch to new path to test new features.
   b) Faster release cycle of DASH features & patches.

HTTPS Sample commands

For Authentication scheme "S", and port "p", please surround the option with square brackets when running HTTPS commands. The default ports are:

Scheme	Port
HTTP	623
HTTPS	664

1) For ignoring self-signed certificates, please try the command with "C" as 1:

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -S https -p 664 -C enumerate computersystem`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system","u":"admin","P":"adminpass","S":["https"],"p":["664"],"C":1, "Commands":["enumerate","computersystem"]}`

2) For trusting self-signed certificates, please try the command with "C" as 0:

DASH CLI Command	`dashcli -h dash-system -u admin -P adminpass -S https -p 664 enumerate computersystem`
jdo Usage	`dashcli -jdo`
ji/jo Usage	`dashcli -ji input_json.txt -jo output_json.txt`
ji JSON	`{"h":"dash-system ","u":"admin","P":"adminpass","S":["https"],"p":["664"],"C":0, "Commands":["enumerate","computersystem"]}`

Refer Linux DASH CLI release notes for support information.