Inventory Management

The Inventory Management feature provides any external client that can use the REST API, such as the EMS, access to static inventory data for the DSC 8000 and the DSC SWe network elements. For a list of all the elements captured, see table Inventory List.

The DSC inventory data has the following characteristics:

- is independent of the operation status of the related equipment/units
- does not change frequently during the normal operation
- cannot be changed through the external client interface
- is independent of configuration management
- may include data showing static physical relations between equipment or units (for example, card A is in slot B)
- does not provide information for cards that are unavailable

To receive inventory data, the external client must be configured to use the DSC REST API and the REST API attribute enabled on the DSC. For more information about configuring the DSC REST API, refer to Authentication.

The data model for the Hardware Monitor (YIN file) is not automatically generated for the REST API resources. Instead, a custom resource with URL **/api/inventory** has been added to DSC REST API. For more information about data models, refer to Generation of REST API and DSC Data Models.

After the REST API is configured for both the external client and DSC, you can use the custom URL **/api/inventory** to return the inventory data. The URL must include Basic authorization, see the following HTTP GET example:

```
curl -k -u username:password -X GET \
https://{{service_ip}}:{{service_port}}/api/inventory
```

The inventory handler collects the information and performs a sanity check. If the sanity check fails, an error is returned. If the sanity check is successful, the inventory data is returned with the status code 200.

The following table lists the data attributes that the external client receives or can obtain from the DSC response:

> For more detailed information about the hardware listed on the following table, refer to the appropriate DSC Installation Guide.

Table 1: Inventory List

Data	DSC 8000	DSC SWe	Notes
Serial Number	YES	YES	Equipment unique serial number. For a modular system, this is the chassis. • DSC 8000: Serial number of chassis. • DSC SWe: UUID of management slot receiving the request.
Node Type	YES	YES	The node type.
Software Version	YES	YES	DSC Software version.
Host ID	YES	YES	Information from the Management slot receiving the request is returned • DSC 8000: MAC address of the interface p19p1 • DSC SWe: MAC address of the interface ha0
Host Name	YES	YES	Management slot hostname. Information from the Management slot receiving the request is returned.
OS	YES	YES	Name of the operating system • DSC 8000: PT Linux • DSC SWe: Ribbon Linux
OS Release	YES	YES	Version and patch level of the operating system.
Firmware Version	YES	NO	The MMC and boot code versions per slot.
Hard Drives	YES	YES	Number and size of hard drives per slot.
Hardware Revision	YES	NO	FRU records for slots, fan trays, and power supplies in the DSC 8000.
Slots	YES	YES	Slot type and slot key number that indicates the position of a slot on the chassis.
CPUs	YES	YES	Number and type of CPU cores per each slot
RAM	YES	YES	Amount of RAM per each slot