

## dcTrack – Dell OpenManage Enterprise (OME) Integration

The dcTrack – Dell OpenManage Enterprise (OME) integration automatically synchronizes hardware inventory information from Dell OpenManage Enterprise (OME) into dcTrack.

This integration retrieves server hardware details discovered in OME and populates the corresponding asset records in dcTrack. The integration runs on a scheduled polling interval and ensures asset information remains accurate without manual updates.

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### Integration Direction

Data flows in one direction only:

Dell OpenManage Enterprise to dcTrack

The integration is read-only:

- dcTrack retrieves hardware information from Dell OME
- No configuration changes are made to devices in Dell OME
- No data is pushed from dcTrack to Dell OME

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### Integration Components

The integration consists of the following components:

Component	Description
XML Connector Configuration	Defines the API calls, field mappings, and integration logic
Custom Fields	dcTrack fields used to store hardware information
Polling Schedule	Defines how often the integration runs
dcTrack Rule	Populates the Connectors field to identify integrated systems

The XML connector configuration file controls how data is retrieved and mapped between systems.

Example configuration file:

Dell OME - Base Connector.xml

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### Polling Schedule

The integration runs automatically based on the polling interval configured in the connector.

Example:

If the polling interval is set to 60 minutes, the integration runs once every hour.

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## **Data Collected from OME**

The integration retrieves several types of hardware information.

### **Device Information**

- Server Name
- Serial Number
- Manufacturer
- Model

### **Warranty Information**

- Warranty Start Date
- Warranty End Date

### **Environmental Metrics**

- Power Consumption
- Temperature
- Fan Status

### **Hardware Configuration**

- CPU Model
- CPU Core Count
- CPU Socket Count
- RAM Slots
- RAM Summary
- Disk Count
- Disk Summary
- PCI Card Count
- PCI Card Summary
- Power Supply Count
- Power Supply Summary

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## **Custom Fields in dcTrack**

Several custom fields must be created in dcTrack before enabling the integration.

These fields allow hardware data from OME to be stored in dcTrack asset records.

Examples include:

- Virtual Console IP
- Virtual Console URL
- PSU Count
- PSU Summary
- Drive Count
- Drive Summary
- RAM Slots
- RAM Summary
- PCI Card Count
- PCI Card Summary
- Fan Summary
- Inlet Temperature (C)
- Actual Power (W)

Refer to the Custom Fields Excel document for the complete list of required fields.

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## **Viewing Integration Data in dcTrack**

Assets synchronized through integrations display additional information in the Integrations tab within the asset record.

This tab shows data automatically populated by external systems through dcTrack connectors.

The documentation includes a screenshot demonstrating how integration data appears within the asset record.

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## **Connectors Field**

The Connectors field identifies which external systems provide data for the asset.

Example:

Dell OME Connector

This indicates the asset record receives information from integrated systems.

The field is automatically populated by a dcTrack rule and does not require manual input.

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## **Automatically Populated Fields**

When the integration runs, dcTrack automatically populates several fields in the asset record. These fields are grouped into sections within the Integrations tab.

### **Access**

Fields related to server management access.

Examples:

- Virtual Console IP
- Virtual Console URL

These values reference the server iDRAC management interface.

### **Maintenance**

Fields related to support and warranty information.

Examples:

- Contract Start Date
- Contract End Date

These values are retrieved from Dell OpenManage Enterprise warranty data.

### **Measurements**

Operational metrics collected from the server.

Examples:

- Inlet Temperature (C)
- Actual Power (W)
- Fan Summary

These values provide visibility into hardware operating conditions.

### **Configuration**

Hardware inventory details discovered from the server.

Examples:

- CPU Type
- CPU Quantity
- CPU Cores per Socket
- RAM (GB)
- RAM Slots

- Disk Capacity
- Drive Count
- PSU Count
- PCI Card Count

These fields reflect the physical configuration of the server hardware.

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## How the Integration Works

The integration performs the following steps:

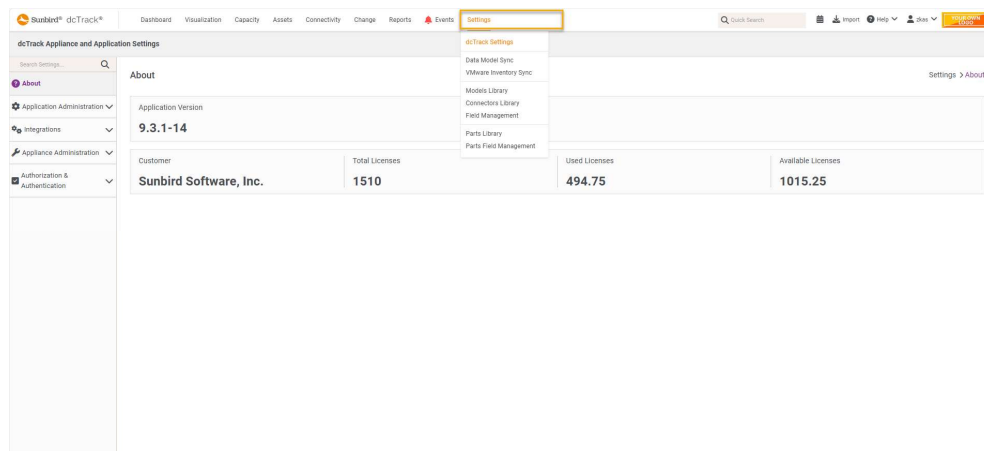
1. Authenticate to Dell OpenManage Enterprise
2. Retrieve a list of discovered devices
3. Query detailed hardware inventory for each device
4. Extract hardware and environmental metrics
5. Map the retrieved data to dcTrack fields
6. Update asset records in dcTrack

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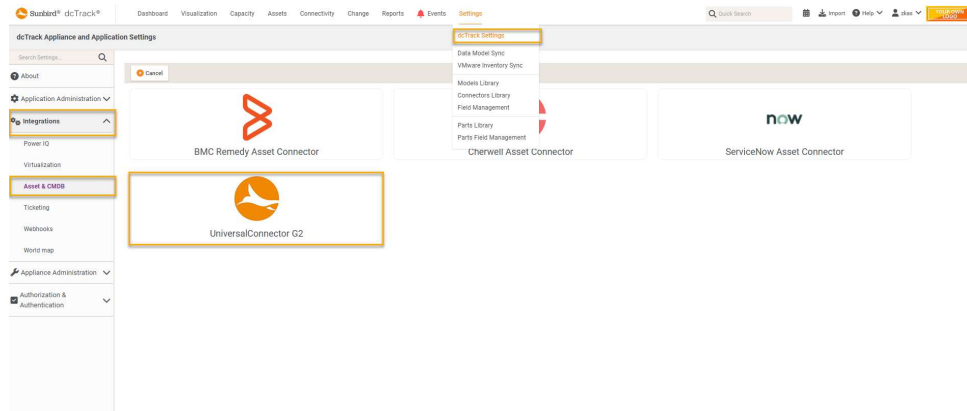
## Connection / Authentication

dcTrack provides several out of the box connectors available from the Connector Gallery. The following steps apply to each connector, including the Universal Connector.

1. From Settings > dcTrack Settings > Integrations > Asset & CMDB, select UniversalConnectorG2.



2. After selection, the Configuration screen for the selected connector type appears.



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## Integration Configuration Steps

### Connector Type

- The Connector Type field is pre-populated based on the connector selected on the previous page. It can be changed to any other type available in the Gallery.

### External System

- Specify a user-defined name to identify this connector.

### IP Address / Hostname

- Specify the IP address or host name of the Dell application for integration.

### Username

- Specify the username of the service account created in Dell OME for this integration. This account is for integration use only. Users should not log into this account.

### Password

- Specify the password for the service account.

### Auto-sync Username

- Specify the username of a valid dcTrack account. Use an account with at least the Gatekeeper role designated for integration. Users should not log into this account. Transactions performed by a regular user logged into this account are not pushed to the external system.

## Enable Integration

- This option determines if items are integrated between dcTrack and the Dell OME application based on the fields defined in the configuration XML. API calls between the remote system and dcTrack are triggered only when this option is enabled. Once enabled, this setting should remain enabled to ensure assets remain synchronized between the two

## How to Upload the Server Management Integration Rule

### Overview

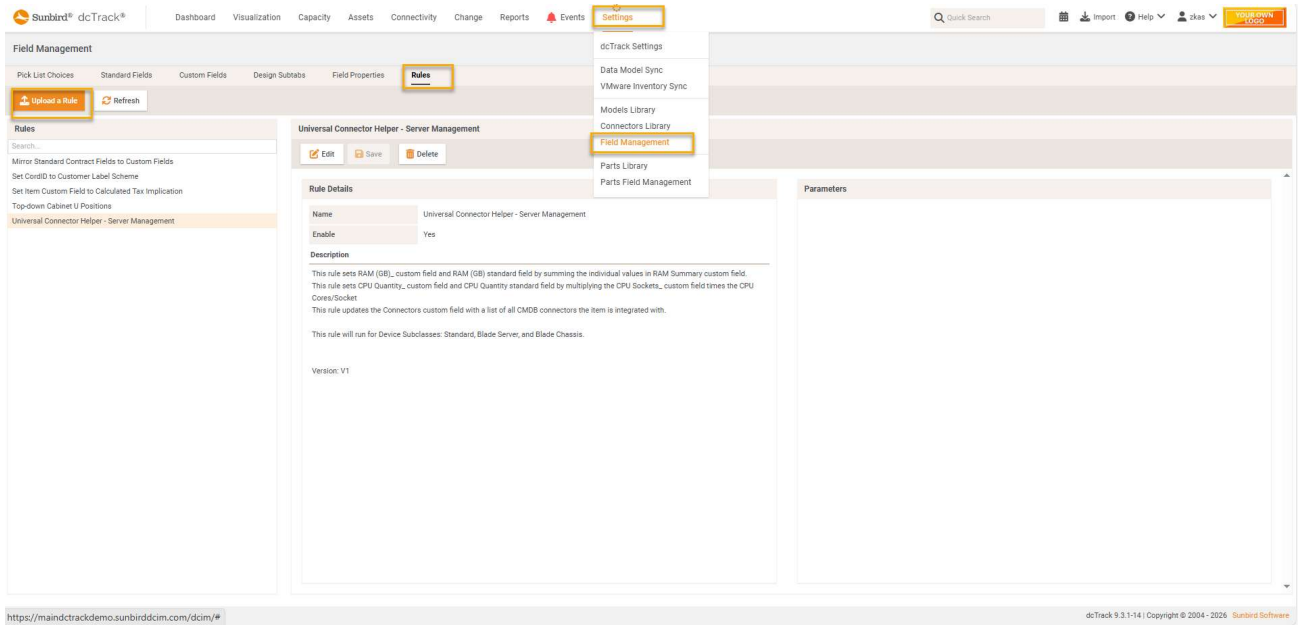
The Server Management Integration Connector Helper Rule is used to automatically update and calculate key fields in dcTrack for assets integrated with external systems.

This rule ensures that:

- RAM (GB)\_ custom field and RAM (GB) standard field by summing the individual values in RAM Summary custom field.
- rule sets CPU Quantity\_ custom field and CPU Quantity standard field by multiplying the CPU Sockets\_ custom field times the CPU Cores/Socket
- This rule updates the Connectors custom field with a list of all CMDB connectors the item is integrated with.
- This rule will run for Device Subclasses: Standard, Blade Server, and Blade Chassis.

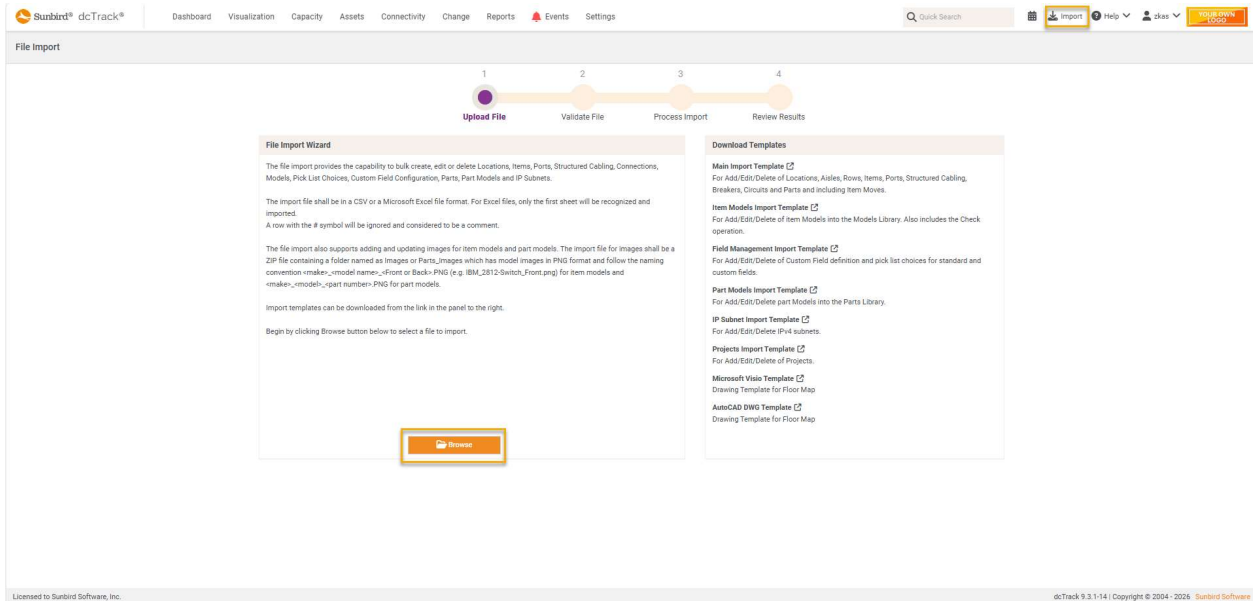
### Steps to Upload the Rule

1. Go to Settings -> Field Management -> Rules
2. Click Upload a Rule
  - a. Select the file **server\_mgmt\_integration\_connector\_helper.rule**
3. Click Open/Upload



The screenshot shows the Sunbird dcTrack interface. The top navigation bar includes Dashboard, Visualization, Capacity, Assets, Connectivity, Change, Reports, Events, and Settings. The Settings menu is open, showing options like dcTrack Settings, Data Model Sync, VMware Inventory Sync, Models Library, Connectors Library, Field Management (highlighted), Parts Library, and Parts Field Management. The main content area is titled 'Field Management' and includes a 'Rules' tab. The 'Rules' tab shows a list of rules, with 'Universal Connector Helper - Server Management' selected. The 'Rule Details' section for this rule shows its name, enable status, description, and version. The 'Parameters' section is empty.

1. Click on import -> Browse -> Select **Server Management Custom Fields and Discovered Items Location** csv file to validate and upload
2. Click on next to process import
3. Verify import is complete without errors



The screenshot shows the Sunbird dcTrack File Import Wizard interface. The top navigation bar includes Dashboard, Visualization, Capacity, Assets, Connectivity, Change, Reports, Events, and Settings. The 'Import' button is highlighted. The main content area is titled 'File Import' and shows a progress bar with four steps: 1. Upload File, 2. Validate File, 3. Process Import, and 4. Review Results. The 'File Import Wizard' section provides instructions on how to use the file import feature, including supported file formats (CSV or Microsoft Excel), file naming conventions, and the location of the file import button. The 'Download Templates' section lists various templates available for download, including Main Import Template, Item Models Import Template, Field Management Import Template, Part Models Import Template, IP Subnet Import Template, Projects Import Template, Microsoft Visio Template, and AutoCAD DWG Template.