

Vendor EDI - GUS Troubleshooting Guide

Diagnose and correct issues in Vendor EDI uploads to Assetforce

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Introduction

This guide is for internal Salesforce admins who work in asset management. It describes problems that can occur during synchronization between a Vendor EDI org and Assetforce, and their resolution.

The complementary steps executed by the vendor are described in [Vendor EDI Org: Admin Setup Guide](#) and [Vendor EDI Org: User Guide](#). Internal Salesforce admins should be familiar with vendor setup requirements.

Terminology

- **External Asset** -- An asset Salesforce purchases, tags, and ships to an integrator to install into a rack. External assets have a blank or n/a value for the Salesforce SKU Id.
- **Vendor Asset** -- An asset Salesforce purchased from the vendor that has not yet been shipped to Salesforce. A vendor asset's Tech Asset Location field will be named with the syntax: `Import - <vendor> - <blank> - <blank> - <BLANK>`.
- **Tech Asset** -- An asset that is in Salesforce's possession in a data center. External and vendor assets are referred to as tech assets after they are received.
- **Non-Tracked Asset** -- An asset that is not tracked in Assetforce. As a rule-of-thumb, assets that are not represented in Tech Asset Type records are not tracked. Assets that cannot receive an asset-tracking sticker are not tracked. Cables are an example of non-tracked assets.
- **RnR** -- Acronym for Rack and Roll
- **Serial Number** -- a unique identifier for an asset, assigned by the manufacturer.
- **Asset Number** -- a unique identifier for an asset, assigned by Salesforce.
- **Salesforce SKU Id** - Represents a particular Tech Asset Type in Assetforce.

Principles of Assetforce Error Diagnosis

Vendor EDI Org vs. Assetforce

Assetforce admins should be familiar with the Vendor EDI org. While both systems are used to track tech assets, Assetforce has more stringent data requirements. For example:

In Assetforce:

- Every record requires a serial number and an asset number. They cannot be blank.
- Serial and asset numbers must be unique.
- There must be a 1 to 1 correspondence between serial and asset numbers.

In Vendor EDI org:

- A record can sometimes be created with a blank asset number.

A Vendor EDI org record that does not meet Assetforce's requirements cannot be uploaded to Assetforce and generates an error message during sync. The Assetforce admin must review and resolve these errors.

Validation and Sync Status Error Messages

- Validation Error Message - Validation is the first level of data checking, and focuses on the shape of the data. That is, it checks to make sure the expected data is present and in the correct format.
- Sync Status Messages - The Sync Status check goes into greater depth about the validity of the data.

Some validation is done in the Vendor EDI org when the vendor creates records. However, some tests can only be executed in Assetforce, because the Vendor EDI org lacks the necessary information. For example, the uniqueness of a serial number cannot be validated in the vendor EDI org, because it does not contain every serial number tracked by Assetforce.

Correcting Errors -- Vendor EDI org or Assetforce?

The location of the data determines where the correction should be made.

If the record is still in the Vendor EDI org and has failed to upload, then the fix must be made in the Vendor EDI org. Work with the vendor to help them make the correction, or in urgent cases, log into the vendor org with [the shared credentials](#) and make the fix yourself.

If the record is already in Assetforce, then the data can be corrected in Assetforce. Correcting the PO number is an example of a common Assetforce fix.

Error vs. Ignore

Records that failed to upload during a sync operation are retried on the next sync operation.

If the errors have been corrected, the sync will succeed.

Sometimes vendors enter data into the Vendor EDI org that should never be uploaded to Assetforce, such as [non-tracked assets](#). To avoid generating an error with every sync,

Assetforce pushes a Sync Status message to the record in the Vendor EDI org with the keyword "Ignored". This message prevents Assetforce from attempting any future uploads of that record.

It is important to review records marked for ignore to validate that the record is safe to ignore.

If you are working with a responsive vendor, consider asking them to remove those records from their org, to lessen noise in the error feed.

Special Case for External Assets

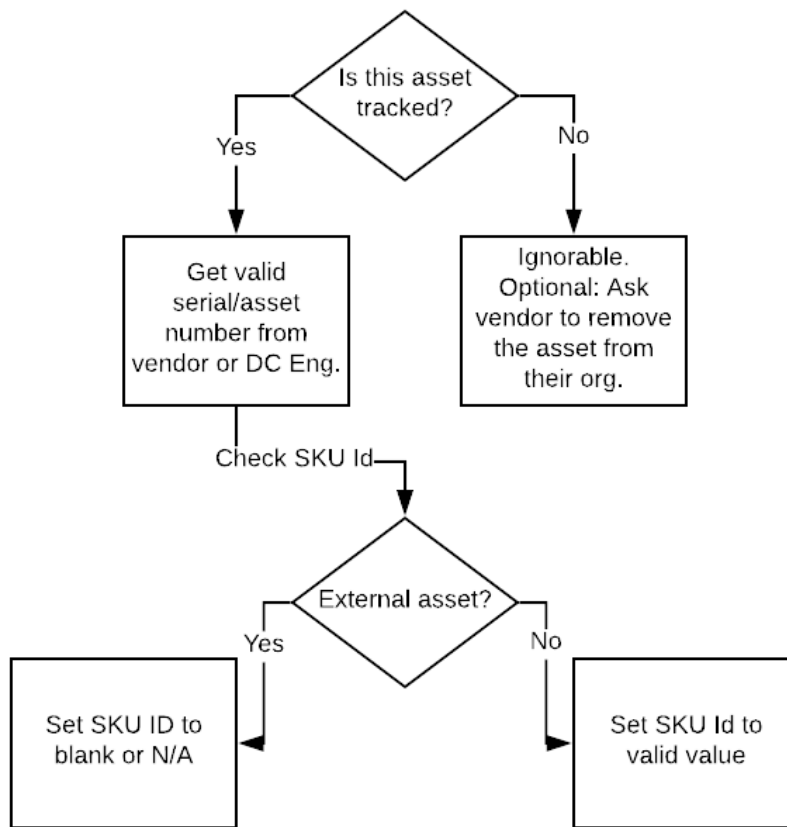
Any asset that has a SKU Id is meant to be tracked, and must have an asset number.

An asset that does not have a SKU Id might be an [external asset](#), or it might be a [non-tracked asset](#). To determine which is true, Assetforce checks the asset number. If the asset number is also blank, Assetforce assumes that it is an untracked asset and marks the record to be ignored.

You should verify with the vendor that neither value was left blank in error.

Blank Serial or Asset Number

This diagram outlines the basic decision tree for resolving errors involving blank serial numbers and asset numbers. You may be able to determine if an asset is vendor, external, or non-tracked asset by checking other properties in Assetforce, or you may need to consult with the vendor or DC Engineer directly.



Duplicate Serial or Asset Number

Serial numbers and Asset Numbers must be unique within Assetforce, and must have a one-to-one relationship. Diagnosing duplicate serial or asset number errors must be done on a case-by-case basis.

Here are some possible reasons why these errors could occur.

The vendor has re-used an existing CSV file.

The vendor may have reused all or part of a CSV file that was already processed. Normally, this should cause a validation error in the vendor org, but there may be conditions where the error occurs on the GUS side.

The value was entered incorrectly.

The vendor might have entered the value incorrectly. This often occurs when similar-looking characters, such as 0 vs. O (zero vs. capital letter O) are confused. It is

uncommon, but another serial or asset number may be entered later that is a duplicate of the mistaken entry.

Two variants of the same serial number.

Some vendors print a different serial number on the external box vs. the chassis of the physical asset. For example, the box for a Cisco switch shows a serial number that starts with the letter 'S', but the serial number on the chassis does not include the leading 'S'. The correct serial number is always the one on the physical asset, but sometimes the serial number on the box is scanned during receiving.

If an asset number is entered against both the correct and incorrect variants of the serial number, it will be reported as a duplicate *asset* number. Fix this error by correcting the serial number.

The asset is being returned or reused.

Duplicate serial numbers can occur when a failing asset is returned to the vendor under RMA (return merchandise authorization), and later reprocessed through the vendor's org when they ship the repaired asset back to Salesforce. A clue to this situation is that the asset's type will match the serial number already in Assetforce.

The asset arrived at Salesforce before the vendor executed an EDI sync.

When an asset arrives at Salesforce and there is no entry in Assetforce, the DC Engineer will manually create a new record as part of the receiving process. If the vendor EDI sync completes after the Assetforce record exists, the sync will report a duplicate serial or asset number against the manually created record.

This list is not exhaustive, but is meant to help you understand some of the root causes of duplicate serial or asset number errors. Each error requires case-by-case investigation.

View Data for Problem Analysis

When working to diagnose a problem with a vendor sync, it's useful to have the relevant information at your fingertips. You can leverage settings in the List View to access that information.

Load the EDI Assets Staging tab in GUS.

1. Open the App Launcher
2. Type **EDI** in the search box
3. Select **EDI Asset Staging**

In the List View controls, choose **Select Fields to Display**, and add the following fields:

- EDI Sequence
- Asset Number
- Parent Rack Asset Number
- Rack U Position
- Salesforce SKU Id
- Ship To Facility Code
- Sync Status

These fields are useful in diagnosing most errors. Add other fields as needed to diagnose errors you encounter.

GUS Validation Error Messages

When vendors upload data into their vendor EDI org, they may see validation errors. You can review the vendor-side validation errors in the [Vendor EDI Org: Troubleshooting Guide](#).

When the vendor syncs data from their org to Salesforce, additional GUS-specific validation errors can occur. This table describes the GUS validation error messages, and suggests resolutions.

Validation Error Message	Resolution
The MAC address is not in the correct format.	Check the DRAC MAC Address field and the MAC Address field. One of these two field has a value which does not match the expected format. Valid formats are: - N/A - 12 digit hexadecimal number such as 1234567890ab or 12:34:56:78:90:ab or 12-34-56-78-90-ab Verify with the vendor whether the MAC address passed validation on their org, and ask the vendor to provide the correct MAC address.
The value for the rack U position is a number between 1 and 99, blank or N/A.	Normally, this error should be detected by validation when the user uploads data into their org. If this error occurs in GUS, ask the vendor for a copy of their CSV file, and check the Rack U position in the CSV file. The value likely is out of range or is an invalid

	entry. If this field is populated, make sure that the Parent Rack Asset Number is also set. Valid entries are: • Blank field • N/A • Number between 1 and 99 • P1 to P9 for PDU Ask the vendor to correct Parent Rack asset number in their org, and then re-import the data.
The Salesforce SKU ID does not match the expected format of "SKU-0000000"	Normally, this error should be detected by validation when the user uploads data into their org. If this error occurs in GUS, ask the vendor for a copy of their CSV file, and check the Salesforce SKU Id column in the CSV file to see whether the format of the value does not match the expected format. Valid formats are: • SKU, followed by a seven-digit number. (For example, SKU-1234567) • N/A Ask the vendor to correct the SKU ID and then re-import the data.
Asset Number cannot be blank.	Determine if this is a non-tracked asset, external asset, or vendor asset. If this is a non-tracked asset, contact the vendor and ask them to remove it from their CSV file. If this is an external or vendor asset, contact the vendor and ask them to provide a valid asset number.
Ignored: Missing asset number on this entry	All assets with a valid SKU Id are meant to be tracked. External assets have the Salesforce SKU Id set to N/A. When Assetforce encounters a blank or N/A SKU Id, it must determine whether the asset is external or non-tracked. To do so, it also checks the asset number. A blank asset number is interpreted as a non-tracked asset, and the record is ignored.

	Verify with the vendor whether this is an external asset, and the asset type. If this is a non-tracked asset, then this is not an error. Ask the vendor to remove it from their CSV file to eliminate the warning. If this asset is an external asset and should be tracked, set the asset number to a valid asset number. If this is a vendor asset and the SKU Id was set to N/A in error, then enter a valid asset number and a valid SKU Id.
Serial Number cannot be blank	The Serial Number field is blank or N/A. If this is a non-tracked asset, ask the vendor to remove it from their CSV file to eliminate future errors. If this is a tracked asset, ask the vendor to provide a serial number. Verify with the vendor if this asset is an external asset. If this is an external asset, then blank or n/a the SKU Id.
Serial Number is a duplicate	The serial number is unique can cannot appear twice in the SFDC Asset list. See Duplicate Serial or Asset Numbers for possible root causes. If the serial number is a duplicate, ask the vendor to remove the duplicates from their CSV file or source system.
Asset Number is a duplicate	The asset number is unique can cannot appear twice in the SFDC Asset list. See Duplicate Serial or Asset Numbers for possible root causes. If the asset number is a duplicate, ask the vendor to remove the duplicates from their CSV file or source system. If the asset number is being reported as a duplicate because there are two versions of the serial number for the same asset, then correct the serial number.
The record has in invalid SKU: SKU-xxxxxxx. Change to a valid SKU ID'	The Salesforce SKU Id in the entry is invalid and does not exist in the Salesforce Asset system External Assets: The SKU Id is not checked. Change it to blank

	or N/A. Vendor Assets: The Salesforce SKU Id must match a SKU Id in the SFDC Asset SKU list. Ask the vendor to use an existing SKU Id. You can view available SKU Ids in Assetforce by selecting the Tech Asset Types tab and displaying the Salesforce SKU Id field. You might need to force the SKU Id list to download to the vendor org, if they do not have access to the correct SKU Id. See Force SKU and Facility Synchronization.
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Sync Status Messages

Salesforce updates the Sync Status field when it retrieves asset data from the Vendor EDI org.

If Assetforce fails to upload a record from the Vendor EDI org, it assigns a Sync Status Message with the keyword “Error” or “Ignored”.

- Error: Assetforce will attempt to upload the record again.
- Ignored: Assetforce will **not** attempt to upload the record again.

Errors should be resolved before the next sync, so that the record can be uploaded.

Ignored records should be reviewed to validate that the record is appropriate to ignore, and that the status was not given in error.

Sync Status	Description and Actions
New	This status indicates the record has been recently created and has not been pulled by Salesforce. No action required.
Ignored: Missing asset number on this entry	All assets with a valid SKU Id are meant to be tracked. External assets have the Salesforce SKU Id set to N/A. When Assetforce encounters a blank or N/A SKU Id, it must determine whether the asset is external or non-tracked. To do so, it also checks the asset number.

	A blank asset number is interpreted as a non-tracked asset, and the record is ignored. Verify with the vendor whether this is an external asset, and the asset type. If this is a non-tracked asset, then this is not an error. Ask the vendor to remove it from their CSV file to eliminate the warning. If this asset is an external asset and should be tracked, set the asset number to the same value as is present in Assetforce If this is a vendor asset and the SKU Id was set to N/A in error, then enter a valid asset number and a valid SKU Id.
Error: Duplicate Serial Number	The Serial Number is already in use within the Salesforce Asset system. Ask the vendor to confirm the serial number on the physical asset. If the serial number was not entered correctly, enter the correct serial number. If the serial number was entered correctly, find that serial number in Assetforce and compare the asset type of the record to the new asset being inserted. If the types do not match, the solution requires case-by-case investigation. Reach out to an Assetforce expert if you need help. If this is an external asset, change the Salesforce SKU Id to N/A. This will also change the operation from an insert to an update. One possible reason for duplicate serial numbers is that the asset is being re-processed after RMA.
Error: Duplicate Asset Number	The Asset Number is already in use within the Salesforce Asset system. Ask the vendor to confirm the asset number on the physical unit if the unit is in their possession. Or, if the asset is already in Salesforce's possession, ask a DC Engineer to check the asset number. If the asset number was not entered correctly, enter the correct asset number.

	If the asset number was entered correctly, search for the asset number in Assetforce and compare the asset type of the record to the new asset being inserted. If the types do not match, the solution requires case-by-case investigation. Reach out to an Assetforce expert if you need help. If this is an external asset, change the Salesforce SKU Id to N/A. This will also change the operation from an insert to an update.
Error: Invalid Salesforce SKU Id. Change to valid Id	The Salesforce SKU Id in the entry is invalid and does not exist in the Salesforce Asset system Recommended action: Verify the SKU Id. Vendor Assets: The Salesforce SKU Id must match the SKU Id in the SFDC Asset SKU list. External Assets: The SKU Id is not checked. Look for the SKU Id in Assetforce, by checking the Tech Asset Types tab, and filtering on the field Salesforce SKU Id. If the SKU Id does not exist, ask the vendor to use an existing SKU Id. If the SKU Id does exist, check the vendor's org under the SFDC Asset SKU tab to see whether the SKU has been pushed into their org. If the SKU Id is not in the vendor's org, you need to force the SKU Id list to download to the vendor org. See Force SKU and Facility Synchronization.
Error: Cannot locate existing record to update	This error message is valid only for external assets. The asset could not be found in the Salesforce Asset Management system. Ask the vendor to verify the Asset Number on the physical asset, if the asset is in their possession. Or, if the asset is in Salesforce's possession, ask a DC Engineer to check the asset number. Check Assetforce for that asset using the asset number and serial number. If the asset is a vendor asset then change the Salesforce SKU Id to a valid Salesforce SKU Id. This will also change the operation from an update to an insert.

	The reason for this error can vary and must be investigated on a case-by-case basis. For example, this error can occur for consignment assets, or assets that are being re-used.
Error: Cannot locate parent asset number. Verify the asset number exists.	The value in the Parent Asset Number is invalid and does not refer to an existing asset. Check whether the Parent Asset Number exists in Assetforce. If the new asset is a vendor asset, check if it has been entered in the vendor's org or into Assetforce. The rack entry's Parent Asset Number should be blank, N/A, or match the rack asset number. If the parent asset has not yet been inserted, then the child assets cannot be inserted. Ask the vendor to create the parent asset in their org, or insert it yourself in Assetforce.
Ignored: Duplicate Serial Number	The Serial Number matched an existing asset in Assetforce but the Asset Number did not match. The entry was ignored. One cause for this warning is that the entry was created manually, prior to the vendor sync. Check all values in the asset and correct any errors.
Ignored: Duplicate Asset Number	The Asset Number matched an existing asset in Assetforce but the Serial Number did not match. The entry was ignored. One cause for this warning is that the entry was created manually, prior to the vendor sync. Check all values in the asset and correct any errors.
Ignored: Invalid Facility	The Ship to Facility Code was invalid and the in transit to was left blank. The Tech Asset was still inserted or updated. Correct the Facility Code, and follow the instructions in Force SKU and Facility Synchronization to ensure that the vendor has the current valid set of facility codes.
Ignored: Already in	The serial number and asset number of the asset being synced match

Assetforce	an existing record in Assetforce. All other field data matches, so no update occurred. No action is required.
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Mapping of Fields from Vendor EDI to Assetforce

The Vendor EDI app and Assetforce use different names for some fields. This table shows the mapping of field names from the Vendor EDI to Assetforce, and indicates which fields are affected when a new asset record is created in Assetforce, or when an existing asset record is updated.

During an update, only some fields are modified.

Updates to existing records occur in circumstances such as:

- The asset arrives at Salesforce and is received. The Tech Asset Location is changed.
- The asset is being recycled for a new purpose. For example, a console that was removed from a decommed rack in PHX is re-installed into a rack in DFW.

EDI Field	Assetforce Field	New Asset Notes	Update Asset Notes
Asset Number	Asset Number	Added to Assetforce	Not updated. Used as a key to identify an existing Tech Asset
Serial Number	Serial Number (TechOps)	Added to Assetforce	Not updated. Used as a key to identify an existing Tech Asset
Salesforce SKU ID	Asset Type	Salesforce SKU ID correlates to an appropriate Tech Asset Type	Not updated
Purchase Order	PO Number	Added to Assetforce	Not updated
MAC Address	MAC Address	Must be in valid ISO format	Updated if blank
DRAC MAC Address	DRAC MAC Address	Added to Assetforce	Updated if blank
Rack U Position	Rack U Position (Number)	Added to Assetforce	Updated

Parent Asset Number	Parent Tech Asset	Parent Asset Number is matched with an existing Tech Asset with the same Asset Number	Updated
Ship to Facility Code	In Transit To Facility	The facility code the asset was shipped to	Updated
Sync Status	<none>	Reserved Status indicator	Reserved Status indicator

Rack Parenting

If the Tech Asset has a Parent Tech Asset then the following fields will change based on the value on the Parent Tech Asset

Assetforce Fields
SVC State
Asset Location

Disable a Vendor Feed

It is sometimes necessary to disable a vendor feed. For example, if a vendor loses the bid on a particular proposal, that vendor would then stop payment on their org. This action would cause subsequent errors every time Assetforce pulls data from the vendor. To eliminate the noise generated by these errors, you can disable their vendor feed.

To disable a vendor feed, follow these steps.

1. Open the App Launcher.
2. From the App Launcher, in the search box, enter `vendors`, then select **Vendors Information**.
3. Click the entry for the vendor that you need to disable.
4. In the upper right, click **Edit**.
5. Check the Disable Import box.
6. Click **Save**.

Edit Vendor_A_Org

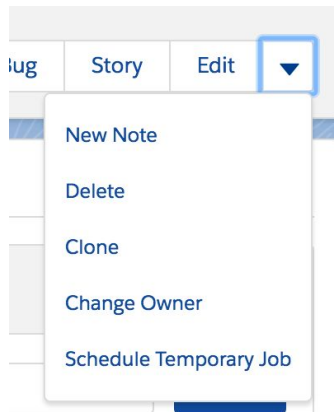
* Callout Name	Owner
Vendor_A_Org	
Default Location	Currency
Import - HP - <blank> - <blank> - <BLANK>	USD - U.S. Dollar
Notify on Error ⓘ	
 	
Email Address to send to on Import ⓘ	
Vendor Managed Package Version	
1.11.0	
Ogranization Id	
Last Sync Date Time	
Date	Time
10/24/2018 ⓘ	3:03 PM ⓘ
Last SKU Sync Date Time ⓘ	
Date	Time
10/24/2018 ⓘ	3:03 PM ⓘ
Disable Import ⓘ	
☒	
Created By	Last Modified By
 , 10/19/2018 10:37 AM	 , 10/24/2018 3:03 PM

Manually Start Vendor Sync

If you need to sync vendor data and cannot wait for the next scheduled job, you can start a manual sync. Manual sync will execute for all vendors. You cannot specify manual synchronization for a specific vendor.

Manual Sync requires TechOps Assetforce Administrator permissions.

1. Open the App Launcher.
2. From the App Launcher, in the search box, enter `vendors`, then select **Vendors Information**.
3. Click on any vendor information entry in the list.
4. In the upper right, click the down arrow and select **Schedule Temporary Job** from the picklist.



A new page will open allowing you to specify when the temporary job should run.

5. In the edit box labeled “Create temporary job to run __ minutes from now”, enter a value between 5 and 600.

 **Assetforce** Home Reports Dashboard Data Dictionary Cases ▾ Tech Assets ▾

Create a temporary synchronization job. This scheduled job will run the vendor synchronization for all vendors configured. This job will run only once.

Current temporary job status: No jobs are scheduled
Temporary job next run (GMT):

Create temporary job to run minutes from now. Value range from 5 to 600 minutes.

6. Click **Create Temporary Vendor Sync Job**.

Only one job is allowed at a time. The button will be disabled if a job is already scheduled or running. The button will also be disabled for 15 minutes after any job, to avoid data collision.

Force SKU and Facility Synchronization

The Vendor EDI org contains a list of Salesforce facilities, SKU Ids and rack architectures, which are used for validation when the vendor enters data. See the [Vendor EDI Org: User's Guide](#) for more information about vendor data entry.

Salesforce automatically updates these values in the vendor's org every five days. Sometimes, you may need to update these values in the vendor's org before the next scheduled update.

You can force the SKU Ids and Facilities to update on the next sync.

1. Open the App Launcher.
2. From the App Launcher, in the search box, enter `vendors`, then click **Vendor Information**.
3. Click the entry for the vendor you need to update.
4. In the upper right, click **Edit**.
5. In Last SKU Sync Date Time, delete the values for Date and Time.
6. Click **Save**.
7. Wait for the next scheduled sync job to run, or [manually start a vendor sync](#).

Facility Information

Facility information is stored in Facility records in GUS. Facility information is sent to the Vendor EDI org when the following conditions are true:

1. The checkbox Vendor EDI Enabled is checked in the Facility record.
2. The Facility Type value is one of: Lab, Warehouse, or Data Center.

If these conditions are true, then the value in the External_Id field will be sent to the Vendor EDI org.

SKU Id

Salesforce SKU Ids are a property of Tech Asset Type records, with the field name Salesforce SKU Id.

SKU Ids are sent to the Vendor EDI org with every update.

Rack Architectures

Rack Architecture is stored in the Rack Architecture object. The values sent to the vendor is the Unique Id field in the Rack Architecture. Not all Rack Architectures are sent to all Vendors. Each Vendor is sent a subset of data. The subset of data is based on a filter of the Vendor field in Rack Architecture matching the vendor field in the Vendor Information object.

Rack Architectures are sent to the Vendor EDI org with every update.

This feature was introduced in managed package 1.14, Dec 2019.