

IBM Tivoli Asset Management for IT 7.2

Asset initialization part 1: Overview



Objectives

- Define asset initialization
- Explain the asset initialization data flow
- List the components of asset initialization
- Identify the asset initialization tasks

In part 1 of this 5-part series, you will learn about the overview of asset initialization. At the completion of this module, you should be able to:

- Define asset initialization
- Explain the asset initialization data flow
- List the components of asset initialization
- Identify the asset initialization tasks

Asset initialization

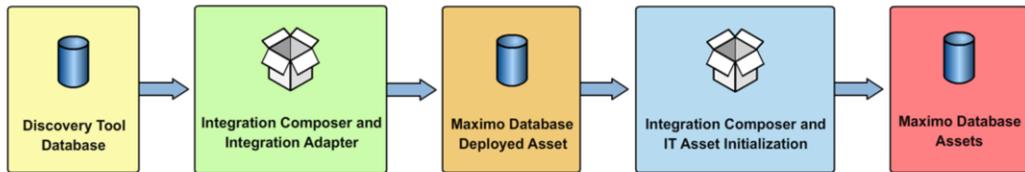
- Establishes a baseline of authorized IT assets in Tivoli® Asset Management for IT
- Uses data that is collected from discovery tools. This data has been imported to deployed assets in the Maximo® database
- Uses these deployed assets to create new IT assets
- Requires user configuration

Asset initialization establishes a baseline of authorized IT assets in Tivoli Asset Management for IT. When you first implement the system, you can either create your existing assets manually in the Tivoli Asset Management for IT system or use the asset initialization process to create an initial set of assets.

Asset initialization uses data collected from discovery tools that has been imported to deployed assets in the Maximo database. The process uses these deployed assets to create new IT assets in the system. To perform asset initialization, configuration is required.

It is important to understand that the asset initialization process can only create new IT assets. Assets that are already entered into the system cannot be updated using the asset initialization process.

Process overview



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This graphic provides an overview of the asset initialization process. A Discovery tool collects the discovered hardware and software data found on your network. The Tivoli Integration Composer engine and adapter that you configure imports and transforms this discovered data to deployed assets in the Maximo Database. Tivoli Integration Composer and an asset initialization adapter then transform this deployed asset data from the Maximo database to new IT assets in the database.

Components and products

- Tivoli Asset Management for IT 7.2
- IBM Tivoli Integration Composer 7.2
- A discovery tool and database repository
- Tivoli Integration Composer adapter for discovered assets to deployed assets transformation and mapping
- Tivoli Integration Composer asset initialization adapter for deployed assets to Maximo assets transformation and mapping

The following components and products are required for asset initialization in Tivoli Asset Management for IT 7.2:

- .Tivoli Asset Management for IT 7.2
- .IBM Tivoli Integration Composer 7.2
- .A discovery tool, such as Tivoli Asset Discovery for Distributed 7.2
- .A Tivoli Integration Composer adapter for the discovery tool. This adapter transforms the discovered data to deployed assets.
- .A Tivoli Integration Composer asset initialization adapter that transforms the deployed assets to new IT assets.

Prerequisite tasks

- Ensure Tivoli Asset Management for IT 7.2 and IBM Tivoli Integration Composer 7.2 are installed
- Decide what deployed assets you want to use to create new IT assets
- Create an IT asset classification hierarchy
- Define item records in the Item Master for the assets and spare parts you plan to create
- Scan for hardware and software on the network using a selected discovery tool
- Configure Tivoli Integration Composer adapter for the discovery tool to deployed assets import
- Import the deployed asset data that is collected by the discovery tool

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You must complete the following prerequisite tasks before asset initialization can take place:

Install Tivoli Asset Management for IT 7.2 and IBM Tivoli Integration Composer 7.2.

Decide what deployed assets you want to use to create new IT assets.

Create an IT asset classification hierarchy in Tivoli Asset Management for IT.

Define item records in the Item Master for the assets and spare parts that you plan to create. Classify these items using the IT classification hierarchy that you define.

Scan for hardware and software on the network using a selected discovery tool.

Configure a Tivoli Integration Composer adapter for the discovery tool to deployed assets import.

Import the deployed asset data that is collected by the discovery tool into the Maximo database.

After you complete these tasks, you can use the asset initialization adapter to create new IT assets.

Asset initialization adapter

- Provided with Tivoli Integration Composer
- Uses the Source - Deployed Assets 7.2 and target Maximo Assets 7.2 schema
- Includes the mapping file, AssetInitDPA72toAssets72.fsn
 - The mapping file provides transformation for computers as assets and software as spare parts. You can update this file as required
 - Configure the mapping file and properties files to reflect your environment

The asset initialization adapter is provided with Tivoli Integration Composer. The adapter uses the Source - Deployed Assets 7.2 and target Maximo Assets 7.2 schema and includes a mapping file named AssetInitDPA72toAssets72.fsn. The mapping file provides transformation for computers as assets and software as spare parts. You can update this mapping file as needed. In addition, you must configure the mapping file and properties files to reflect your environment.

Asset initialization tasks

- Identify the system roles for the deployed assets you plan to transform*
- Configure the provider properties file (maximoasset.properties)*
- Configure the assetinit.properties file*
- Set up data source connections for the Source-Deployed Assets 7.2 and target Maximo Assets 7.2
- Define a new mapping for the deployed assets to IT assets using the two data sources
- Import the mapping file AssetInitDPA72toAssets72.fsn into the new mapping
- Modify mapping expressions for the transformation*
- Set up and run the deployed assets to IT assets mapping shell or bat file
- Review results and resolve any errors.

*Tasks demonstrated in this five-part IBM Education Assistant module

You must complete the following tasks for the asset initialization process:

Identify the system roles for the deployed assets you plan to transform.*

Configure the provider properties file (maximoasset.properties). *

Configure the assetinit.properties file. *

Set up data source connections for the Source-Deployed Assets 7.2 and target Maximo Assets 7.2 schema.

Define a new mapping for the deployed assets to IT assets using the two data sources.

Import the mapping file AssetInitDPA72toAssets72.fsn into the new mapping.

Modify mapping expressions for the transformation. *

Set up and execute the deployed assets to IT assets mapping shell or bat file.

Review results and resolve any errors.

* Note: The tasks to identify system roles, configure the properties files, and modify the mapping expressions are detailed in the next several slides. Additional demonstration modules for these topics are available as part of this five-part IBM Education Assistant module.

Identify deployed asset system roles

- The system role is populated in the Deployed Assets when you import the discovery data
- The system role identifies whether the asset is a server, laptop, desktop, or other item
- The mapping expressions provided in the asset initialization mapping file use these system roles to assign an item number to the target asset or spare part
- The item number is then used to assign a class structure ID to the target asset
- The item number must be assigned by system role in the assetinit.properties file
- These item numbers must already be created in Tivoli Asset Management for IT before you run the asset initialization mapping

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The system role is populated in the Deployed Assets when you import the discovery data. The system role identifies whether it is a server, laptop, desktop, or other item. Each discovery tool can have a set of unique system roles. Therefore, you must identify all the system roles that you need to map. The mapping expressions that are provided in the asset initialization mapping file use these system roles to assign an item number to the target asset or spare part. The item number is then used to assign a class structure ID to the target asset, which gives the asset its classification and asset specifications.

The item number must be assigned by system role in the assetinit.properties file. These item numbers must already be created in Tivoli Asset Management for IT before you run the asset initialization mapping. Item numbers are created in the Item Master application within Tivoli Asset Management for IT. These item numbers must also be classified within the Item Master application using an IT classification hierarchy that you define.

In part 2 of this 5-part series, you can view a demonstration about identifying system roles.

Configure the provider properties file

- The maximoassets.properties file is located in <installdir>\data\properties\provider folder
- Integration composer uses this file to dynamically define the Maximo Assets 7.2 data schema that is used to create new IT assets
- The file uses class structure IDs for each class in the schema, based on the demonstration data. You must update these IDs to reflect your installation's IDs for the assets you want to create
- The class structure IDs are in the Tivoli Asset Management for IT database
- You can expose the class structure ID using Application Designer in the Classifications application or you can run a query against the database to find the class structure IDs

The maximoassets.properties file is located in the <installdir>\data\properties\provider folder. Tivoli Integration Composer uses this file to dynamically define the Maximo Assets 7.2 data schema that is used to create new IT assets. The file uses class structure IDs for each class in the schema, based on the demonstration data. You need to update these IDs to reflect your installation's class structure IDs for the assets you want to create. The class structure IDs are found in the Tivoli Asset Management for IT database. They are generated when you create an IT asset classification hierarchy. When you create items in the item master, you classify them, which assigns a class structure ID to the item number.

You can expose the class structure ID using the Application Designer in the Classifications application, or you can run a query against the database to find the class structure IDs.

In part 3 of this 5-part series, you can view a demonstration about configuring the provider properties file.

Configure the Assetinit.properties file

- The assetinit.properties file is located in the <installdir>\data\properties folder
- Integration composer uses this file to define values for properties used in the asset initialization mapping file
- The file uses properties values based on the demonstration data. You need to update these values to reflect your installation
- Orgid, siteid, langcode, itemset and changeby need to be set
- For each deployed asset system role that you create an asset or spare part from, you create key value pairs that include the system role and the corresponding item number
- The item number must already be defined in the Tivoli Asset Management for IT Item Master

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The assetinit.properties file is located in the <installdir>\data\properties folder. Tivoli Integration composer uses this file to define values for properties that are used in the asset initialization mapping file, or .fsn file.

This file uses properties values that are based on the demonstration data. You need to update these values to reflect your installation. You need to set orgid, siteid, langcode, itemset, and changeby. The organization ID, site ID, and item set are created in Tivoli Asset Management for IT. You need to identify the organization and site in which assets will be created.

For each deployed asset system role that you create an asset or spare part from, you create key value pairs that include the system role and the corresponding item number. The item number must be part of the item set that you identify in the properties file. The item number must already be defined in the Tivoli Asset Management for IT's Item Master.

In part 4 of this 5-part series, you can view a demonstration about configuring the assetinit.properties file.

Modify mapping expressions

- After you import the AssetInitDPA72toAssets72.fsn file into the mapping that you created, you modify the expressions for the following properties:
 - Itemnum
 - Classtructureid
 - Status
 - Asset specification properties
 - Software items (spare parts)
- To create spare parts, you modify the itemnum and quantity
- You can modify additional properties in the mapping

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After you import the AssetInitDPA72toAssets72.fsn file into the mapping you have created, you modify the expressions for the following properties:

- Itemnum
- Classtructureid
- Status
- Asset specification properties
- Software items (spare parts)

You can modify additional properties in the mapping, based on your data requirements. If you create spare parts, you must update the item num and quantity properties expressions.

You must update the itemnum expression to reflect the system roles that you identified. The item num is assigned to the values in the assetinit.properties, based on the system roles.

You must also update the class structure ID expression to use the item num for the appropriate system role to look up the class structure ID from the item table.

Asset Specification properties are assigned to the schema, based on the class structure ID that you identify in the provider properties file. Specifications, such as processor speed, disk size, and ram size are examples of these specifications. You can modify the mapping expression to assign values from the deployed asset to the target asset record for these specifications.

In part 5 of this 5-part series, you can view a demonstration about modifying the mapping expressions for asset initialization.

Additional information

- The IBM Tivoli Integration Composer 7.2 Administration Guide has detailed information about the prerequisite and asset initialization tasks that are identified in this overview
- This module is part one of a five-part series. The other four modules in the series address the following topics:
 - Identifying system roles (part 2)
 - Configuring provider properties (part 3)
 - Configuring assetinit.properties (part 4)
 - Modifying mapping expressions (part 5)

This concludes part 1 of this 5-part series. For additional information, see the IBM Tivoli Integration Composer 7.2 Administration Guide.

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