



# **SACM 9.41**

# **What's New**

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# SACM 9.41 – Improve CI data quality across integrations

Consists of SM 9.41, UCMDB 10.21, and AM 9.50

## Logical name solution

- Keep CI data integrity in reference modules (e.g., incident, problem, change, etc.)
- Allow duplicate CI names in SM Configuration Module

## Global ID

- Global ID is the single-trusted reconcile key
- Simplify CI reconciliation for the SM-UCMDB and AM-UCMDB integrations

## Support ASM

- Synchronize service trees discovered by ASM into SM
- Expedite service modeling in SM



# Logical name solution



# Logical name solution – keep CI data integrity


Allow to rename CIs

## Scenarios of changing CI names

- Re-organization/Acquisition
- Hardware lifecycle changes
- CI movements from site to site
- Audit

**By implementing this solution, CI data integrity is not lost but well maintained across SM modules when CI name is changed.**

Configuration Item CI12345	
ID:	CI12345
Display Name:	Sql_Server
Location:	Shanghai
Status:	Active

Incident IM10005	
ID:	IM10005
Description:	Server down
Affected CI:	Sql_Server 

# Logical name solution – allow identical CI names

Allow to duplicate CI names

## Scenarios of identical CI names

- CIs in different geographies have an identical name
- CIs with different owners have an identical name
- Both a new CI and a retired CI share an identical name

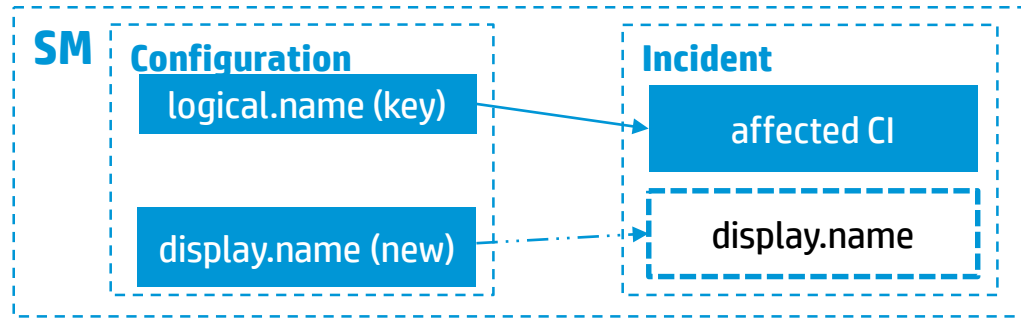
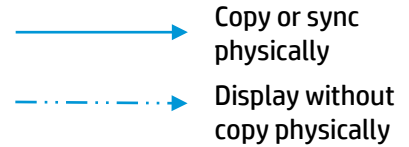
**By implementing this solution, CI names can be duplicate in SM Configuration Module.**

Configuration Item CI12345	
ID:	CI12345
Display Name:	Sql_Server
Location:	Shanghai
Status:	Active

Configuration Item CI67890	
ID:	CI67890
Display Name:	Sql_Server
Location:	San Francisco
Status:	Active

# The “logical.name” solution overview - 1

For SM configuration module and reference modules



## Design

1. Set **logical.name** as a unique key with a sequential number (e.g., CI0001) created in the CI table.
2. Add **a new field of display.name** in the CI table.
3. In the reference modules, take the incident module as an example, use logical.name as a reference to the configuration module, and **display.name is not copied to the reference modules**.
4. On the form of the reference modules, **CI name is shown with display.name** that is looked up from the CI table by SM Client/Server.

## Benefits

- **Less upgrade overhead compared to the previous workaround**
- Easy to extend this solution to other tables of master data, e.g., contacts, assignment, etc., to solve the loss of data integrity issue
- **Move towards a relational DB structure**

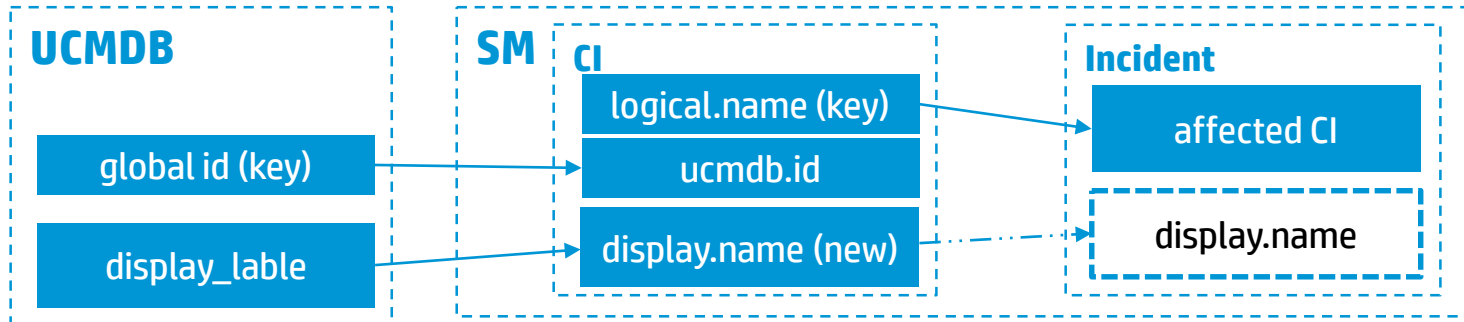
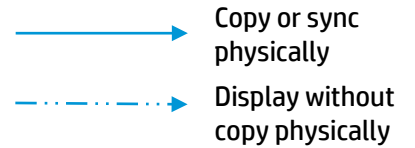
## Implications

- Existing customers need to upgrade to the next SM release
- New customers use the next SM release directly



# The “logical.name” solution overview - 2

For the SM-UCMDB integration



## Design

1. Map UCMDB `display_label` as the CI name to SM `display.name` instead of `logical.name`
2. Map UCMDB `global id` to SM `ucmdb.id`

## Benefits

- Allow duplicate CI names in both SM and UCMDB
- Simplified the OOB CI reconciliation rule for the SM-UCMDB integration

## Implications

- Existing customers need to upgrade to the SM 9.41 release, plus UCMDB10.x releases, and adopt the updated adapter
- New customers apply the latest product versions



# Demo - How to enable CI display name

Show CI display name in the reference modules

*Set display.name field in CI table, then establish reference relationships in reference tables*

The screenshot displays the 'Data Policy' configuration interface. The left pane shows the configuration for a table named 'device', with the 'Display Field' set to 'display.name'. The right pane shows the configuration for a table named 'probsummary', with the 'Display Field' set to 'probsummary'. The 'Field Settings' table at the bottom shows the relationship between the 'affected' table and the 'device' table.

Field Name	Caption	Field Type	Usage Ty...	Reference Object	Available	Invisible	Read Only	Encrypted	Sy...
affected	Affected		System		false				
affected.item	Affected ...		Application	device	true				
affected.services	Affected ...		Application	device	true				





# Examples in the database

## CI (device):

### Unique Key & Display Field

logical.name  
display.name

## Incident (probsummary):

### Reference Field: Refer to logical.name of device

logical.name (Affected CI)



LOGICAL_NAME	DISPLAY_NAME	LOCATION	VERSION	...
<u>C102930</u>	email-server	California	2013	...
C103000	email-server	Shanghai	2013	...
...	...	...	...	...



NUMBER	DESCRIPTION	AFFECTED CI	ASSIGNMENT	...
IM10025	Cannot connect to mail service	<u>C102930</u>	Falcon, Jennifer	...
...	...	...	...	...

# Demo Solution: Rename CI

**Demo User:** Configuration Admin

## Demo scenario

**Configuration Admin** is going to change a CI name, search by the new CI name in the Incident module, and check the data integrity in incidents.



### Data integrity assurance

Change in one place and get the right name in reference modules



### Extendable

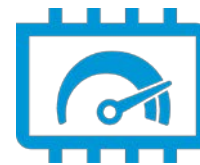
Plan to work on other tables:

- Assignment
- Operator
- Contact
- Department
- Company
- Location



### Seamless UCMDB Support

Can rename the CI from the UCMDB side.



### Reduces system TCO

Reduce manual effort to maintain data integrity

# Demo Solution: Sync CI with duplicate names

**Demo User:** Configuration Admin

## Demo scenario

**Configuration Admin** is going to sync two CIs with the same CI name "Apache Tomcat" from UCMDB to HPSM



### Consistent CI names

Exact the same name without adding suffix between HPSM & UCMDB;  
Reduces the learning curve and operation cost for Configuration Management.



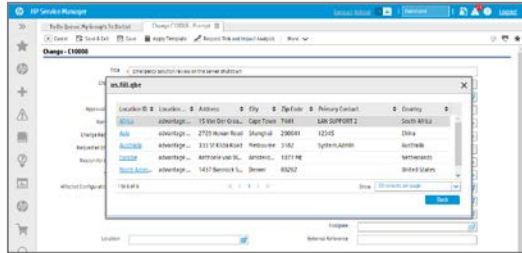
### Robust

More robust than before by leveraging aligned data structure

# User Experience Improvements for CI selection

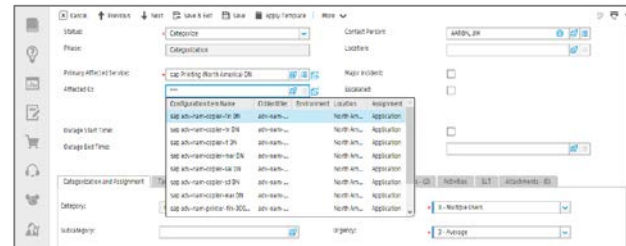
## 1. Eliminating the refresh

Smooth and speed up daily operations

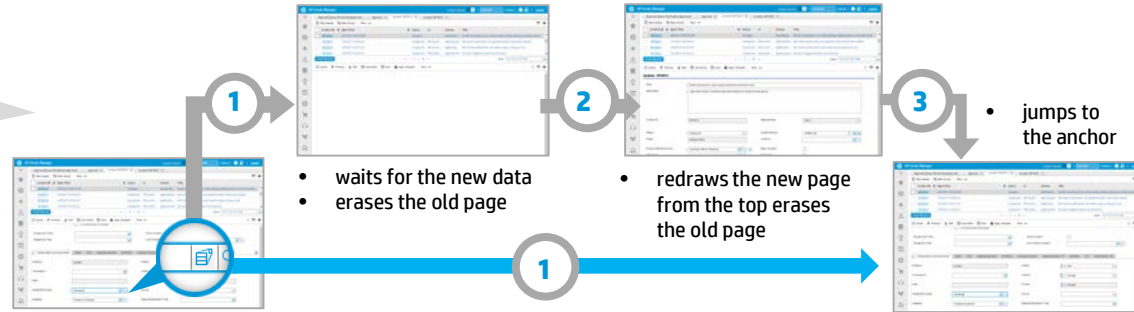


## 3. Column Configurable Autocomplete

More columns in drop-down list to facilitate device selection



Before



After

## 2. Pop up Dialog

Less pages jump back and forth to decrease attention shifting



# Global ID solution



# Simplified CI reconciliation with Global ID

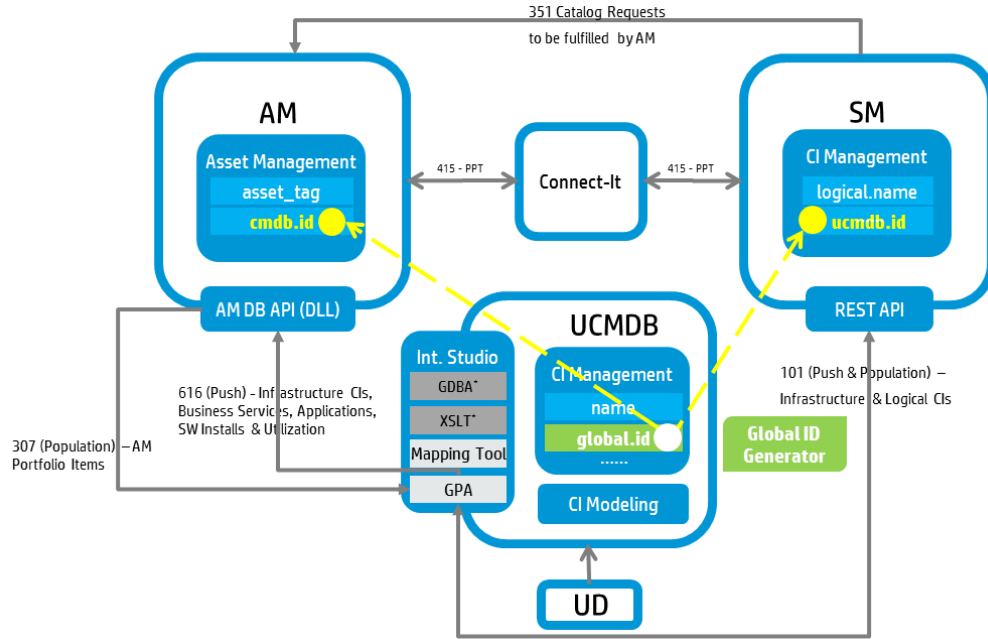
A great enhancement in HP SACM 9.41

## CI reconciliation cannot be complex any more

- Provide a unique key as the Global ID for CI in the context of HP SACM solution
- Sync up the unique key across HP UCMDB integrations to reconcile CIs effectively
- Dramatically simplify CI reconciliation rules for HP SACM solution

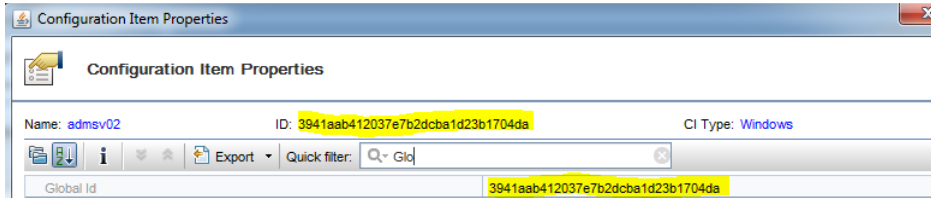
## Two typical scenarios

- If the authorized source is UCMDB, then UCMDB generates a unique Global ID, and then pushes it into SM/AM as the single reconciliation key
- If the authorized source is not UCMDB, **as an alternative flow**, CIs (without Global ID) are populated from SM/AM to UCMDB so that UCMDB can generate and then push a unique Global ID back to SM/AM

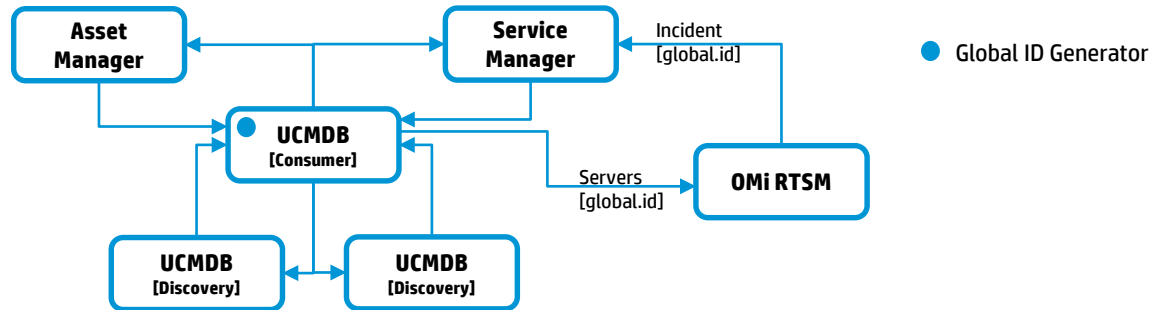


# Global ID & UCMDB ID

Every CI in UCMDB has a UCMDB ID by Design. This ID can also be viewed as the discovery ID. If your environment has only one UCMDB, by design, it will also act as the Global ID generator. In this case, UCMDB ID and Global ID share the same value.



Global ID is extremely helpful in a multitier CMS (Configuration Management System), where the CI data moves around from discovery tier to consumer tier UCMDB. Then the same CI will be consumed in other systems like Service Manager, Asset Manager, OMi, and so on.



# Global ID... Things to remember

- Marking HP UCMDB is the single source of truth of CI for SACM and CLIP solutions.
- For any discoverable data, UD/UCMDB is the authorized source, for non-discoverable data, the authorized source is probably SM, or AM, or other MDR.
- Setting up Reconciliation Priority in UCMDB setup is a critical step to avoid duplicates.
  - Select **Data Flow Management > Reconciliation Priority**.
  - Select **Data Flow Management > Integration Studio**, right-click an Integration point and select **Reconciliation Priority Manager**.
- To avoid bi-directional CI sync, the recommended CI sync flow is:
  - o Authorized data population to UCMDB
  - o UCMDB CI push to consumer product
- Use of Global ID option in SM Integration adaptor setting is enabled out of box.

```
Resource discovery\ConfigFiles\ServiceManagerAdapter9-x\sm.properties
5 #the min amount of SM objects needed to use concurrent send instead of single thread send.
6 min.objects.for.concurrent.sending=50
7 #number of chunks per thread. (Total of number of chunks = number.of.chunks.per.thread
8 number.of.chunks.per.thread=3
9 max.running.hours.for.multi.threaded=20
10
11 #number of CIs per request, in case the request has 64K limitation.
12 number.of.cis.per.request=1000
13
14 #if true, will use globalId instead of ucldbId in the SM integration.
15 use.global.id=true
```





# Global ID setup

## How to Configure Global ID Generation

1. Launch the Web browser and enter the following address:  
**http://<CMS server>:8080/jmx-console.**
2. Click **UCMDB:service=Multiple CMDB Instances Services** to open the JMX MBEAN View page.
3. Click one of the following methods and enter values as required:

<b>setAsGlobalIdGenerator</b>	Specifies that the CMDB will act as the global ID generator for all locally existing scopes
<b>setAsGlobalIdGeneratorForScopes</b>	Specifies the scopes for which global IDs will be generated
<b>setAsNonGlobalIdGenerator</b>	Stops the CMDB from acting as the global ID generator for all scopes

4. Click **Invoke**.

### setAsGlobalIdGenerator

*Sets as global id generator*

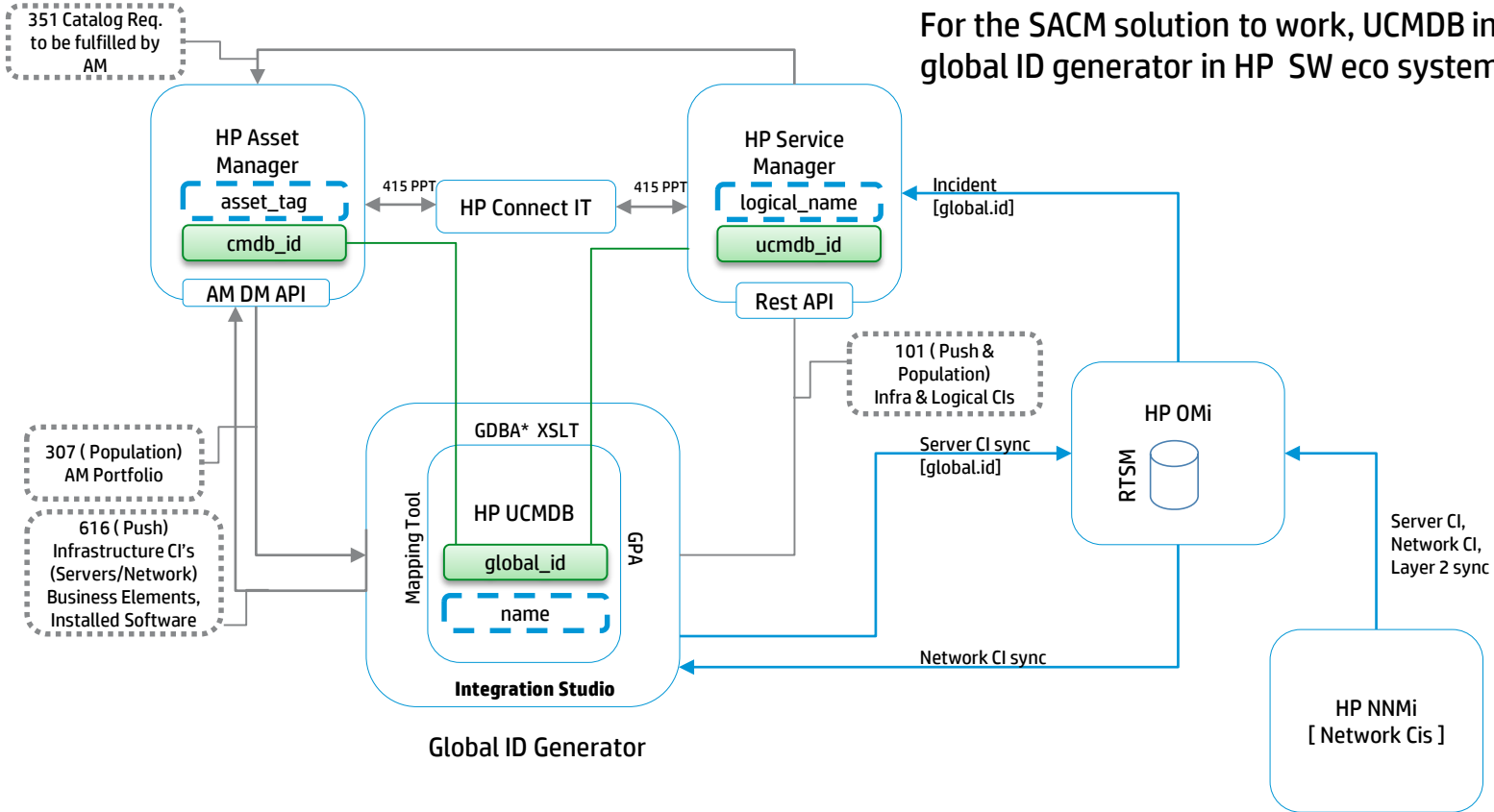
Name	Type	Value	Description
customerID	java.lang.Integer	<input type="text" value="1"/>	Customer ID
dbTimeout	java.lang.Integer	<input type="text"/>	DB timeout in minutes. Leave empty or put -1 for default

Invoke

**Note :** In case of single instance of UCMDB, this setting is not needed as the instance will act as the Global ID generator by default.



# Global ID in SACM & CLIP

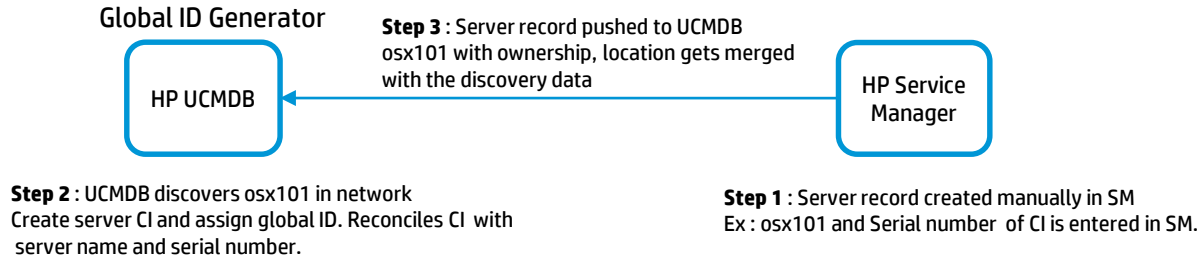


For the SACM solution to work, UCMDB instance will be the global ID generator in HP SW eco system.



# Global ID in UCMDB & SM environment

Global ID – Internal Setting is available from 10.11 CUP 5 and 10.21, for use cases with SM being the CI creator and UCMDB being the global ID generator



## How to enable this setting in UCMDB ?

Go to JMX Console > UCMDB:service=Settings Services > setSettingValue

In the **name** field, enter **reconciliation.match.attributes**

In the **value** field, enter global\_id

The screenshot shows the JMX Console interface. The 'name' field contains the text 'reconciliation.match.attributes' and the 'value' field contains 'global\_id'. There is a 'Set' button next to the value field.

## Validation

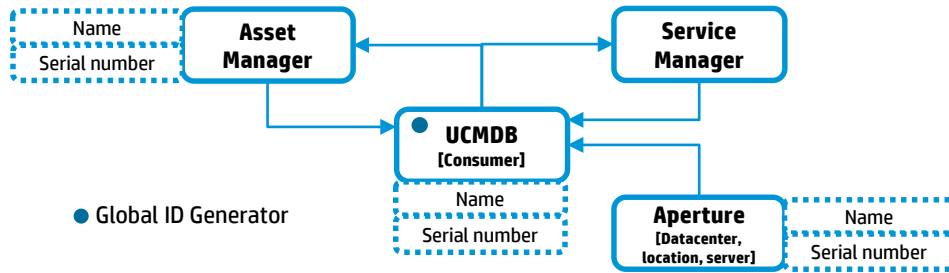
Go to JMX Console > UCMDB:service=Settings Services > getInternalSettings



# Global ID with Datacenter management tools

## Importance of Global ID & Serial Number

SACM solution design works with customer environment which has datacenter management tools like Aperture or HP Oneview. Serial number and display label/name of a server record is critical in reconciliation process.



## Global ID Pushback

If the target UCMDB is configured as a Global Id generator, it is possible to configure the population job to pushback Global IDs, for each synchronized CI, from the target to the source. In this way, it is possible to synchronize Global IDs from a Global ID generator to other UCMDBs like RTSM instances, HP Service manager.

# ASM integration



# Automatic service modeling (UCMDB - ASM) integration

## A quicker way to build up service maps in SM

- SM consumes accurate service trees discovered by ASM
- Dependencies of service trees are also synchronized
- Expedite service modeling in SM

