

OIE Scenario 11 – Publish Asset Removal/Installation events from MMS to O&M

In order to notify other O&M systems that a serialized asset has been installed or removed, the Work Management System (WMS) publishes an asset install or removal event to all relevant O&M systems.

Actors

Work Management System	Send notifications of changes in asset configuration
O&M Systems	Receive notifications of changes in asset configuration

Data Content

The data sent from the Work Management System to O&M Systems is, at a minimum, composed of:

- The functional location
- The serialized asset
- The timestamp of when the installation or removal occurred

In addition, the following data can be sent for context:

- The agent who performed the installation or removal
- The calendared maintenance work order associated with the installation or removal

MIMOSA CCOM Reference Types

For the purposes of reference data management, the following MIMOSA CCOM types may be referenced:

- EventType
 - Asset installs are represented by the 'Installation of Asset on Segment' EventType
UUID: ecc99353-412b-4995-bd71-1cbc6fc16c7c
 - Asset removals are represented by the 'Removal of Asset on Segment' EventType
UUID: 3a45e126-b234-42a0-b3b1-07c29522d02d

Data Formats

The data published by the Work Management System and received by O&M Systems must conform to MIMOSA CCOM BODs.

System Interoperability Events

This Scenario requires the sending/receipt of the following Events:

- [Publish Asset Configuration Change](#)

Infrastructural Components

ISBM

The communication between all systems occurs via the ISBM using publish-subscribe services.

Implementation Requirements

The Work Management System must implement a client for the ISBM Provider Publication and Channel Management (only the GetChannel operation) Services.

O&M Systems must implement a client for the ISBM Consumer Publication and Channel Management (only the GetChannel operation) Services. O&M Systems may implement the ISBM Notify Listener Service for message notification.

Suggested Channel/Topic Configuration

A channel should be created for removal/installation events and should conform to the following format:

```
/Enterprise/Enterprise Subdivision/.../ISO18435:D1.3/Publication
```

For example:

```
/Enterprise/Refinery A/Area A/Light Ends Area/ISO18435:D1.3/Publication
```

As outlined in the document [ISBM Guidelines](#), topics should match the message content. Correspondingly, the following topic format should be used:

```
OIIE:S11:V1.1/StandardSchemaName{:Version}
```

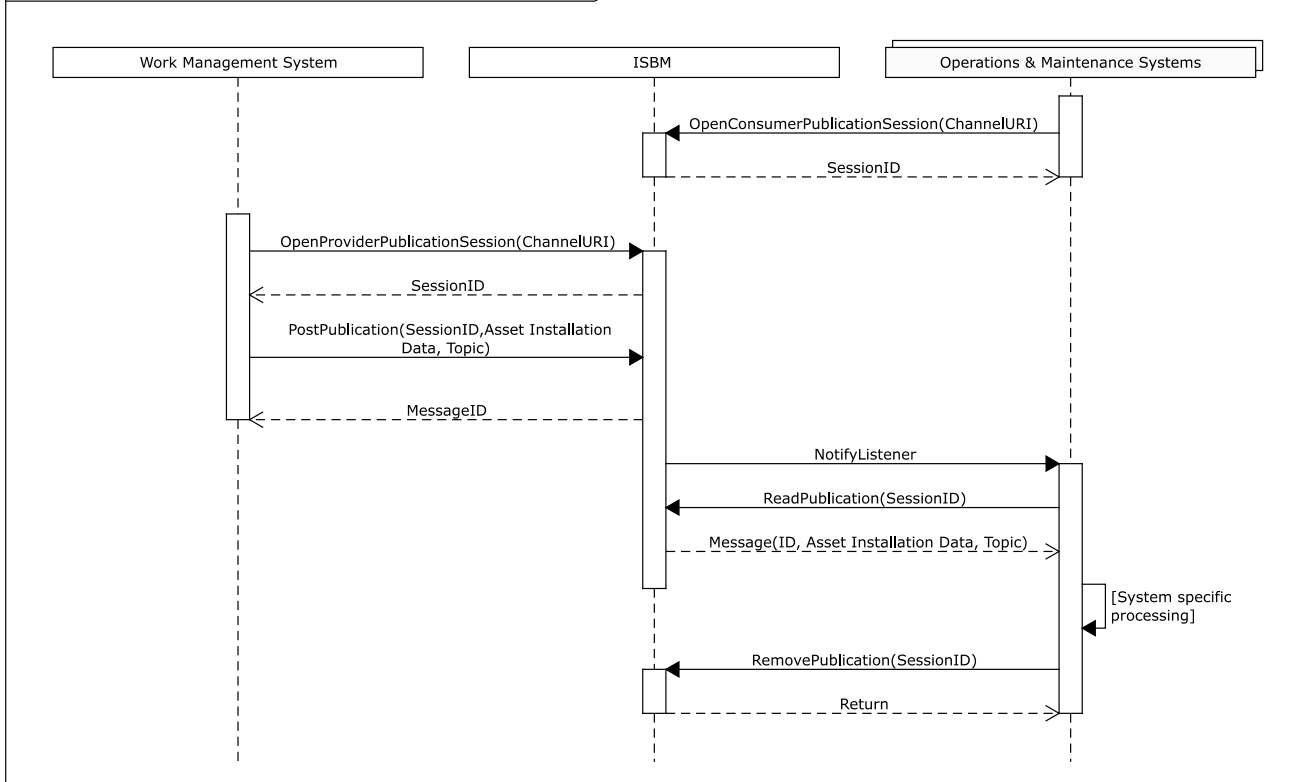
For example:

```
OIIE:S11:V1.1/CCOM-XML:SyncAssetSegmentEvents:V1.0
```

Event Sequence

The following diagram represents a simplified set of exemplar interactions between the systems required to achieve this Scenario. The system actors are assumed to have OIIE/ISBM adaptors implemented as required, with services according to the ISBM Implementation Requirements described above. For simplicity, it is assumed that each system/adaptor implements the optional Notify Listener service.

OIIE Scenario 11: Publish Asset Removal/Installation events from MMS to O&M



Version Applicability/Alignment

Scenarios describe general data requirements and, hence, they are aligned to specific versions of CCOM and/or other MIMOSA standards. For example, older versions of CCOM may not include the data elements required by newer Scenarios, while older Scenarios may become obsolete or have their data requirements change over time.

This Scenario is applicable to the following versions of CCOM:

- CCOM 3.x (part of OSA-EAI 3.x)
- CCOM 4.x

NOTE Use of 'x' in the version number indicates a variable version. For example, "4.x" indicates applicability to all versions of CCOM with the MAJOR version '4', regardless of MINOR and PATCH versions.

Document Versioning

Version	Date	Major Changes
1.1	2020-06-29	Updated to new Use Case Architecture and OpenO&M template.
1.0	2018-02-07	Imported from website-based documentation.