

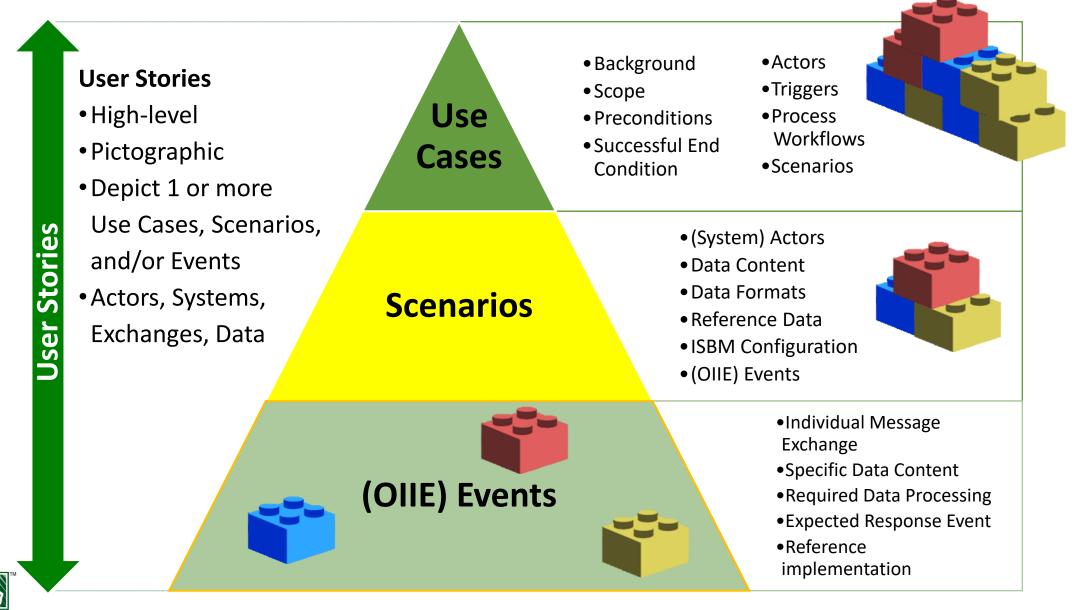
Open Standards for Physical Asset Management

OIIE Scenarios Specification

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OIIE Standardized Use Case Architecture

Standardized Methodology to Define and Re-use OIIE Components



OIIE Scenario Specification

(System) Actors

Data Content

Data Formats

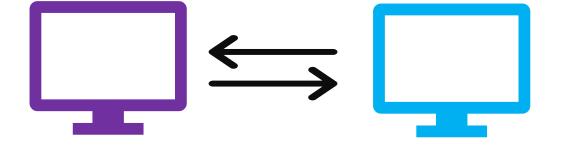
Reference Data

ISBM Configuration

(OIIE) Events







Overview

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

[system actors only in Scenarios]

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 WMS to other O&M Systems is at least:

- Functional location; serialized asset; timestamp when install/remove occurred Additional contextual data may be sent:
- Agent performing the work; calendared maintenance work order

[lists general types and relevant specific reference data that is to be used] MIMOSA CCOM Reference Types

- 'Installation of Asset on Segment' Event Type, UUID: ecc99353-412b-4995-bd71-1cbc6fc16c7c
- 'Removal of Asset on Segment' Event Type, UUID: 3a45e126-b234-42a0-b3b1-07c29522d02d



Data Formats

[Indicates any constraints on specific data formats]

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

[Note: Does not specify which BODs; the Events determine that.]

System Interoperability Events

- Publish Asset Configuration Change
 - This maps to a publish-subscribe BOD: SyncAssetSegmentEvents

[there may be several events, but only 1 in this Scenario]



Infrastructural Components

[includes requirements based around the use of specific OIIE components such as the ISBM, SDAIR, *Transform Engine*, *CIR*, etc.]

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 Provider Publication and Channel Management (only the GetChannel operation) Services.
- O&M Systems must implement a client for the 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

Channels and topics should be declared following the ISBM Guidelines.

Example channel path:

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

[/Enterprise/<Enterprise
Subdidvision>/<...>/ISO18435:<domain>/<'Publication'|'Request'>]

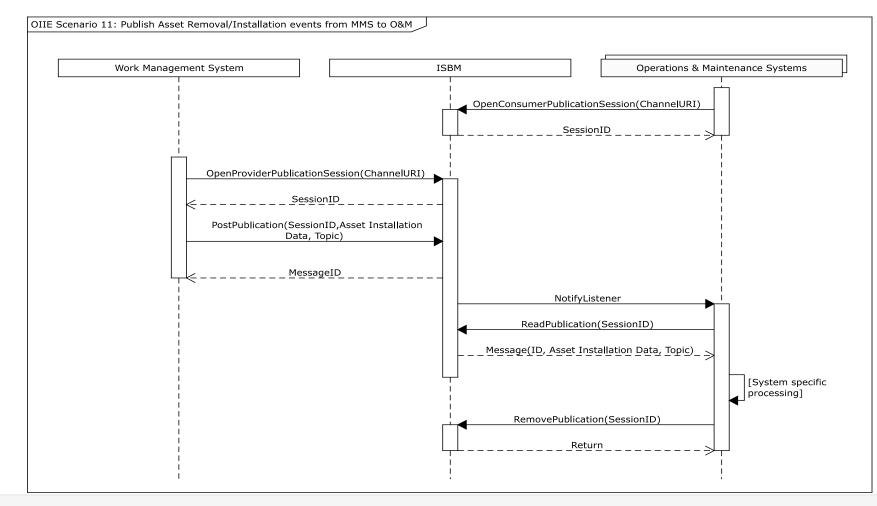
Example Topic Name:
OIIE:S11:V1.1/CCOM-XML:SyncAssetSegmentEvents:V1.0
[OIIE:<ScenarioAbbreviation>:<Version>/<StandardSchemaName>{:<Version>}]

Event Sequence

(see next slide)



SC-11: Publish Asset Removal/Installation events from MMS to O&M Event Sequence





Resources

- OIIE Use Case Architecture Description <u>https://openoandm.org/files/standards/01-</u> <u>Use%20Case%20Architecture%20Description.pdf</u>
- OIIE Scenario Specification Example <u>https://openoandm.org/files/standards/scenarios/OIIE%20Scenario</u> <u>%2011.pdf</u>

