

Change Log for OSS Inventory API version 1.1

OSS through Java™ Initiative

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INV-API-SPEC_change_log.1.1.5.doc

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Executive Summary

This document summarizes the changes to the Inventory API (JSR 142) specification Version 1.1. The main purpose of this version is

- To use the Core Business Entities (CBE) interfaces from the OSS Common API (JSR 144)
- Follow the new Draft of the OSS/J Design Guideline v1.2
- Add the Web Service Specifications
- **Align with Common JSR Version 1.4**
- Fix Bugs

However, since maintenance release to the specification was taking place, additional modifications to the previously existing Java Value Type interface were also incorporated. All these modifications are coming from the Web Bug tracking system at:

<http://bugs.sun.com/bugdatabase/index.jsp>

The detailed description of changes in this document is principally of interest to people implementing the Inventory API specification.

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1 Preface

1.1 Objectives

This document lists all the changes that have been requested for the maintenance release v1.2 version of the OSS Inventory API, JSR 142.

The changes have been collected through:

- Bug parade: Bug and Request For Evolution (RFE) submitted by Java developers
- OSS/J specification leaders: evolution necessary to incorporate new common objects and to improve the common interfaces and Reference Implementation that will be “inherited” by all maintenance releases of the existing OSS APIs
- OSS/J Architectural Board: The common API needs to reflect the necessary new architectural recommendation (new CBE, etc)

1.2 Audience

This document is used to start a Maintenance Release of the OSS Inventory API, JSR 142.

According to the JCPSM:

1.3 Approval and Distribution

The ML may choose to modify one or more of the proposed changes based on comments received during review.

1.4 Related Information

Change Log for OSS Common API version 1.4

http://jcp.org/aboutJava/communityprocess/maintenance/jsr144/COM-API-SPEC_change_log.1.4.4.pdf

1.5 Revision History

| Date | Version | Author | State | Comments |
|---------------|---------|--------------------------------------|-------|--|
| December 2006 | 1.1.5 | Pierre Gauthier MetaSolv Software | Final | <ul style="list-style-type: none">• Using CBE from Common JSR 1.4• Modification to JVT Session Bean based on DG 1.2• Addition of Web Service Profile |
| | | | | |
| | | | | |
| | | | | |

2 Summary of changes

- Bug ID: 6322461 Inventory TCK can't create random arrays
- Bug ID: 6322464 QueryResource javadoc refers to ResourceAggregatesResource
- Bug ID: 6322462 TCK does not allow arrays for attribute type
- Bug ID: 6322463 QueryResource.setReturnedTypes javadoc refers to classes that don't exist
- Bug ID: 6322460 testGetEntitySpecificationType expects describedEntityType to be populated
- Bug ID: 6313950 Inventory TCK requires all Inventories to be implemented
- Bug ID: 6313952 testQueryInventory inappropriately fails if certain queries are implemented
- Bug ID: 6313951 Inventory documents specify association management methods as mandatory
- Bug ID: 6313953 Inventory TCK uses null to indicate "all attributes" in some get methods
- Bug ID: 6313954 Inventory TCK's random string length isn't configurable
- Bug ID: 6313949 Inventory TCK does not allow attribute types without default constructors
- Bug ID: 6309690 compliance issue with common spec, breaking AttributeManager in common API
- Bug ID: 6309691 Inconsistencies of JVTInventorySession method optionality
- Bug ID: 6308783 Invalid test report format, unreadable
- Bug ID: 6281603 Inventory API shall use ReportFormat definition from common CBE definition
- Bug ID: 6281598 How to implement QueryResponse and QueryValue
- Bug ID: 559097 Apply OSS/J Design Guidelines v1.2 and Common JSR 1.2 to the OSS Inventory API

3 proposed changes

3.1 Bug ID: 6322464 QueryResource javadoc refers to ResourceAggregatesResource

In the javadoc for javax.oss.inventory.resource.QueryResource near the top of the file it refers to "ResourceAggregatesResource" instead of ""ResourceAggregatesResourceAssocValue".

The javax.oss.inventory.resource package will be deprecated.

3.2 Bug ID: 6322463 QueryResource.setReturnedTypes javadoc refers to classes that don't exist

In the file javax/oss/inventory/resource/QueryResource.htm in the javadoc, for javax.oss.inventory.resource.QueryResource the doc for the method setReturnedTypes refers to "javax.oss.inventory.resource.OwnerOwnsResourceAssocValue" which doesn't exist.

The javax.oss.inventory.resource package will be deprecated.

3.3 Bug ID: 6313950 Inventory TCK requires all Inventories to be implemented

The Inventory API will be modified in such a way that only the Entity Entity Specification management functions will be mandatory. No assumptions will be made regarding the nature of the data model implemented by a vendor (i.e. the TCK will not test if there is a Service, Product, Resource or Cross data model).

The TCK will also test Association management if present. That is if String[] getAssociationTypes() return a non empty array.

The different types of associations defined by the Inventory package will be moved under the info model RI package. (I.e. in the example information model) .

and moved into the RI contrib. data model.

3.4 Bug ID: 6313951 Inventory documents specify association management methods as mandatory

Implementation of AssociationValue methods is defined as mandatory in User's Guide and in the actual interfaces. However, if implementation of only one of the several Inventories is allowed, there are no meaningful associations in such implementation.

Association management will not be mandatory in 1.1 Only the Entity and Entity Specification management methods will be mandatory.

3.5 Bug ID: 6309691 Inconsistencies of JVInventorySession method optionality

TCK, User's Guide and the method signatures disagree about the mandatoriness of several methods. The following table summarizes the differences (m for mandatory and o for optional) :

User's Guide TCK signature Method name

| | |
|-------------------------|--|
|m.....m.....o..... | createAssociationsByValues |
|m.....m.....o..... | createEntitiesByValues |
|m.....m.....o..... | createEntitySpecificationsByValues |
|o.....o.....m..... | getAllAssociationsRelatedToInventoryEntity |
|o.....m.....m..... | getAssociationRule |
|o.....o.....m..... | getSpecificationDefinedEntityTypes |
|m.....m.....o..... | importInventoryData |
|m.....m.....o..... | removeAssociationsByKeys |
|m.....m.....o..... | removeAssociationsByTemplate |
|m.....m.....o..... | removeEntitiesByKeys |
|m.....m.....o..... | removeEntitiesByTemplate |
|m.....m.....o..... | removeEntitySpecificationsByKeys |
|m.....m.....o..... | removeEntitySpecificationsByTemplate |

Furthermore, there's

- validateEntityValuesByTemplates: optional by signature and TCK but isn't mentioned by User's Guide at all
- getEntitySpecificationType: optional by signature, mandatory by TCK and not mentioned by User's Guide at all
- makeEntityValueFromSpecification: optional by signature and TCK, User's Guide says both optional (in chapter 2.6.26) and mandatory (in chapter 2.6.22, where it is listed twice)
- validateValuesByTypes: optional in User's Guide, but doesn't exist in interfaces nor TCK at all

The Spec and User Guide will be modified.

3.6 Bug ID: 6281603 Inventory API shall use ReportFormat definition from common CBE definition

The JSR 142 will use the OSS Common API , javax.oss.cbe package instead of defining its own set of CBE's.

3.7 Bug ID: 6281598 How to implement QueryResponse and QueryValue

The QueryResponse and QueryValue types seem to be core types for interoperability of the query operations, but there don't seem to be any example implementations, or any guidance, to help an implementor.

Inventory API will extend the query components and usage as specified in the JSR 144 spec v 1.2

3.8 Bug ID: 559097 Apply OSS/J Design Guidelines v1.2 and Common JSR v1.4 to the OSS Inventory API

3.8.1 Use Common CBE definitions for CBE implementation

The JSR 142 will use the OSS Common API , javax.oss.cbe package instead of defining its own set of CBE's.

The following packages are thus removed from the specification:

javax.oss.inventory.cross

javax.oss.inventory.product

javax.oss.inventory.resource

javax.oss.inventory.service

3.8.2 Replace all javax.oss exceptions

JSR 142 replace all the javax.oss exception by the new name from JSR 144

The following exception definitions in the javax.oss domain have been deprecated and replaced by prefixing their name with the string "Oss".

- javax.oss.IllegalArgumentException replaced by javax.oss.OssIllegalArgumentException
- javax.oss.IllegalAttributeValueException replaced by javax.oss.OssIllegalAttributeValueException
- javax.oss.IllegalStateException replaced by javax.oss.OssIllegalStateException
- javax.oss.ResyncRequiredException replaced by javax.oss.OssResyncRequiredException
- javax.oss.SetException replaced by javax.oss.OssSetException
- javax.oss.UnsupportedAttributeException replaced by javax.oss.OssUnsupportedAttributeException
- javax.oss.UnsupportedOperationException replaced by javax.oss.OssUnsupportedOperationException

and consequently all the methods of the Inventory JVT Session will be fixed to reflect the new javax.oss Exceptions.

3.8.3 Change Query Values Definitions

JSR 142 change the queryValues definition to inherit from the new named query pattern as defined in JSR 144.

3.8.4 Add Update Values Definitions

JSR 142 define update procedure value related to inventory by extending the base UpdateProcedureValue and UpdateProcedureResponse from JSR 144 1.2

