

# GI-cat against IGN CIM ETS Report

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Version: 1.0.0

Date: 21 December 2009

Document type: Technical Note

Identifier: HMAT-TN-0002-CNR

## *Test Environment*

### **IUT endpoint**

<http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim>

### **TEAMEngine server**

<http://montgomery.esrin.esa.int/>

### **CTL scripts version**

IGN 07-038 version 0.1.10 at 10:28AM of Dec 21, 2009

### **Parameters file extracted from first run logs**

```
<parameters>
  <ebrim.cl>level1</ebrim.cl>
  <sampling>first</sampling>
  <debug>true</debug>
  <binding name="KVP">
    <endpoint operation="GetCapabilities"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim"/>
    <endpoint operation="GetRepositoryItem"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim"/>
  </binding>
  <binding name="SOAP12">
    <endpoint operation="GetCapabilities"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim_soap_1_1"/>
    <endpoint operation="GetRecordById"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim_soap_1_1"/>
    <endpoint operation="GetRecords"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim_soap_1_1"/>
  </binding>
  <binding name="XML">
    <endpoint operation="GetCapabilities"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim"/>
    <endpoint operation="GetRecordById"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim"/>
    <endpoint operation="GetRecords"
      url="http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim"/>
  </binding>
</parameters>
```





# ***Analysis of results***

## **General overview**

Please note that HTTP binding is referred as XML binding in the parameters file.

The conformance test is performed in two main executions, one for HTTP binding and one for SOAP 1.2, both executions return the same results except for test of A.1.1 (testing SOAP 1.2) that is skipped in case of HTTP binding. We note that the parameters file from first execution contains wrong endpoints of SOAP 1.2 address. This invalidates our tests of SOAP 1.2.

## **cim:conformance-test**

It executes tests for XML and SOAP 1.2 binding using these parameters:

- ebrim.cl: level1
- sampling: first
- debug: true
- KVP Binding:
  - GetCapabilities endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim
  - GetRepositoryItem endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim
- SOAP12 Binding:
  - GetCapabilities endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim\_soap\_1\_1
  - GetRecordById endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim\_soap\_1\_1
  - GetRecords endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim\_soap\_1\_1
- XML Binding:
  - GetCapabilities endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim
  - GetRecordById endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim
  - GetRecords endpoint: http://ade.pin.unifi.it:8080/gi-cat/services/cswebrimcim

## **cim:binding-test**

It executes all the tests for a given binding. It gives two times the following warning message: "WARNING(EP#W002): is not a known sampling method.". It seems to exist an error with respect to the sampling, apparently because of uncorrect parameters passing from the caller test.

## **cim:a1-conformance-tests**

It invokes execution of A.1.1, A.1.2, A.1.3, A.1.4, A.1.5, A.1.6, A.1.7, A.1.8 and A.1.9 tests.

## ***HTTP binding***

### **cim:execute-A.1.1**

This test is skipped for HTTP binding.

### **cim:execute-A.1.3**

The test executes GetRepositoryItem with an arbitrary hardcoded ID. The "dummyId" is always used instead of provided ID or others obtained from sampling. This seems an error. The server reply to the request with a 404 HTTP status code (not found) and the test fails.

## **cim:execute-A.1.5**

Tests if associations are correctly implemented, invoking "wrs:test-association" for:

1. ResourceConstraints
2. MetadataPointOfContact
3. ResourceReferenceSystem
4. Authority
5. ResourceMetadataInformation
6. ParentMetadataInformation
7. OperatesOn
8. ContainsOperation
9. CodeSpace
10. CitedResponsibleParty

Some warning issues has been fixed, details for the remaining ones follow.

### **wrs:test-association**

During the execution of test cim:execute-A.1.5 there are multiple invocations of this test, one to check each of these:

- urn:ogc:def:ebRIM-AssociationType:OGC:ResourceConstraints
- urn:ogc:def:ebRIM-AssociationType:OGC:MetadataPointOfContact
- urn:ogc:def:ebRIM-AssociationType:OGC:ResourceReferenceSystem
- urn:ogc:def:ebRIM-AssociationType:OGC:Authority
- urn:ogc:def:ebRIM-AssociationType:OGC:ResourceMetadataInformation
- urn:ogc:def:ebRIM-AssociationType:OGC:ParentMetadataInformation
- urn:ogc:def:ebRIM-AssociationType:OGC:OperatesOn
- urn:ogc:def:ebRIM-AssociationType:OGC:ContainsOperation
- urn:ogc:def:ebRIM-AssociationType:OGC:CodeSpace
- urn:ogc:def:ebRIM-AssociationType:OGC:CitedResponsibleParty

Responses to GetRecordById with "brief" option had a bug, that is now fixed.

#### A.1.5/Test wrs:test-association[7]

The test prints:

WARNING: No instance of "urn:ogc:def:ebRIM-AssociationType:OGC:OperatesOn" association type.

The cause is that operatesOn element is missing from reference data.

#### A.1.5/Test wrs:test-association[10]

The test prints:

WARNING: No instance of "urn:ogc:def:ebRIM-AssociationType:OGC:CitedResponsibleParty" association type.

This seems to be caused by a mapping problem, it will be investigated.

## **cim:execute-A.1.6**

Tests if the mandatory attributes, slots and classifications are implemented, invoking "wrs:test-object" for:

1. CitedItem
2. ResourceMetadata
3. MetadataInformation
4. IdentifiedItem
5. DataMetadata
6. ServiceMetadata
7. ServiceOperation
8. LegalConstraints
9. SecurityConstraints

## **wrs:test-object**

During the execution of test cim:execute-A.1.6 there are multiple invocations of this test, one to check each of these:

- urn:ogc:def:ebRIM-ObjectType:OGC:CitedItem
- urn:ogc:def:ebRIM-ObjectType:OGC:ResourceMetadata
- urn:ogc:def:ebRIM-ObjectType:OGC:MetadataInformation
- urn:ogc:def:ebRIM-ObjectType:OGC:IdentifiedItem
- urn:ogc:def:ebRIM-ObjectType:OGC:DataMetadata
- urn:ogc:def:ebRIM-ObjectType:OGC:ServiceMetadata
- urn:ogc:def:ebRIM-ObjectType:OGC:ServiceOperation
- urn:ogc:def:ebRIM-ObjectType:OGC:LegalConstraints
- urn:ogc:def:ebRIM-ObjectType:OGC:SecurityConstraints

### A.1.6/Test wrs:test-object[3]/Test wrs:test-object-slot[1]

The test prints:

FAILED: "d1e54:resourceMetadataInformation" has 0 instances of "date" slot while 1 are required.

Test of "MetadataInformation" fails due to some uncorrect built-in test parameters, the test look for:

1. Slot name: date
2. Slot type: DateTime

According to specification (section C.2.1) it should change to:

1. Slot name: http://purl.org/dc/elements/1.1/date
2. Slot type: urn:oasis:names:tc:ebxml-regrep:DataType:Date

However, section C.2.1 is also ambiguous. A comment specifies to use "Date slot from Basic Package", whereas in the table attribute "Data type/Target object" the value "DateTime" instead of "Date" is specified. Also figure 9 is misleading: there it appears a "date" attribute of type "DateTime". With regard to this point specification should be clarified.

### A.1.6/Test wrs:test-object[3]/Test wrs:test-object-slot[6]

The test printed:

FAILED: "d1e54:resourceMetadataInformation" has 0 "urn:ogc:def:ebRIM-AssociationType:OGC:MetadataPointOfContact" associations while 1 are required.

The MetadataPointOfContact association is not mandatory, as from figure 9 and section C.2.1. This should be changed to a warning.

Anyway this issue has been fixed.

#### A.1.6/Test wrs:test-object[6]/Test wrs:test-object-classification[1]

The test printed:

```
FAILED: "ENVISAT_SCI_C_SERVICE" has 0 instances of "urn:ogc:def:ebRIM-
ClassificationScheme:Services" classification while 1 are required.
```

The Services classification was not implemented, as it is not clearly defined in the specification. According to figure 11 «Services classification» is «to be extended to handle the service versions», but we were not able to find more information about this.

#### A.1.6/Test wrs:test-object[9]/Test wrs:test-object-classification[1]

The test printed:

```
FAILED: "d22e281" has 0 instances of "urn:ogc:def:ebRIM-
ClassificationScheme:ClassificationCode" classification while 1 are required.
```

This issue has to be investigated as d22e281 actually has the following classification:

```
<rim:Classification classificationNode="urn:ogc:def:ebRIM-
ClassificationNode:ClassificationCode:restricted" classifiedObject="d22e281"
classificationScheme="urn:ogc:def:ebRIM-ClassificationScheme:ClassificationCode"
objectType="urn:oasis:names:tc:ebxml-
regrep:ObjectType:RegistryObject:Classification" id="d22e281:Classification"/>
```

#### A.1.6/Test wrs:test-object[1]

The test prints:

```
WARNING: No instance of "urn:ogc:def:ebRIM-ObjectType:OGC:CitedItem" object type.
```

This issue has to be further investigated, as the subclass ResourceMetadata of CitedItem is actually present in the catalog.

### **cim:execute-A.1.7**

Tests if the CIM Products package is available as a supported extension package and is complete, the test fails.

The check is performed against CIM 0.1.10 spec. and the server implements the CIM 0.1.9 spec.

### **cim:execute-A.1.8**

The test checks the content of sampled items, it returns warning because there aren't any items sampled.

The log says:

```
Input parameters:
- Sample (number of item,number of repository item): 0, 0
- Test configuration parameters (number of modules): 3
```

Probably the sampling operation is never executed, then there is no content in sample. The test do not invoke any operation and exit with warning.

## **cim:execute-A.1.9**

Because of missing sample items the test does not invoke any operation and exit with success.

## ***SOAP 1.2 binding***

## **cim:execute-A.1.1**

Verify SOAP 1.2 correctness. The test fails because a wrong endpoint is used (not a SOAP 1.2 endpoint).