



intecs *informatica e tecnologia del software*
Brainware Company

Document Id: ERG-EBRR-ATP-4100-INT

Issue: 1-30/04/2009

Revision: 0-30/04/2009

EbRim implementation with GeoNetwork and Omar

EBRR SOFTWARE Acceptance Test Plan

Authors:

M. Barone

30/04/09

Reviewed by:

P. Nencioni

30/04/09

Approved by:

S. Gianfranceschi

30/04/09



Document change record

Issue	Issue date	Pages/section effected	Reason for change
1.0	30/04/2009	All	First version

Distribution List

<i>Company</i>	<i>Name</i>	<i>Function</i>	<i>N° of copies</i>
ESA	P.G. Marchetti	ESA Technical Officer	1
Intecs	S. Gianfranceschi	ERGO Project Manager	1
4CT	J. Vanbockryck	4CT Project Manager	1
GeoCat B.V.	J .Ticheler	GeoCat B.V. Project Manager	1

Table of Content

1. INTRODUCTION	6
1.1. PURPOSE	6
1.2. GLOSSARY	6
1.2.1. ABBREVIATIONS	6
1.2.2. DEFINITION OF TERMS	8
1.3. REFERENCES	8
1.3.1. NORMATIVE REFERENCES	8
1.3.2. INFORMATIVE REFERENCES	9
2. ORGANISATION OF TEST ACTIVITIES	10
2.1. FACTORY ACCEPTANCE ACTIVITIES	10
2.1.1. ACTIVITY DEFINITION	10
2.1.2. DESCRIPTION OF A FACTORY ACCEPTANCE SESSION	10
2.1.3. VERIFICATION METHOD	10
2.1.4. ACTIVITY RESULTS	11
3. TEST ENVIRONMENT	12
3.1. HARDWARE & SOFTWARE CONFIGURATION	12
3.2. TEST TOOLS	13
3.2.1. STEPS TO EXECUTE A CTL TEST SUITE	13
3.2.2. GENERAL STRUCTURE OF A CTL TEST SUITE	14
3.3. TEST DATA	14
4. TEST SPECIFICATION	16
4.1. TEST DESIGN	16
4.2. TEST SCENARIO TS_01 : SUBMISSION OF REGISTRY OBJECTS	16
4.2.1. TEST CASE TS_01_01: SUBMITOBJECTREQUEST	16
4.3. TEST SCENARIO TS_02: PERFORMANCE	17

This document is a property of "Intecs SPAHewlett-Packard" and cannot be distributed or duplicated without written authorization.

4.3.1.	TEST CASE TS_02_01: INGESTION OF 20.000 RECORDS IN DB	17
4.3.2.	TEST CASE TS_02_02: TIME-OUT RESPONSE	17
4.3.3.	TEST CASE TS_02_03: NUMBER OF RECORDS RETURNED BY GETRECORDS	18
4.3.4.	TEST CASE TS_02_04: MAXIMUM RESPONSE TIME FOR GETRECORDBYID	19
4.3.5.	TEST CASE TS_02_05 MAXIMUM RESPONSE TIME FOR GETRECORDS	20
4.4.	TEST SCENARIO TS_03	20
4.4.1.	TEST CASE TS_03_01 ACCESSING THE REGISTRY API	21
4.5.	TEST SCENARIO TS_04	21
4.5.1.	TEST CASE TS_04_01: AUTHORIZED ACCESS	21
5.	TRACEABILITY MATRICES	23

1. INTRODUCTION

1.1. Purpose

This document is the Acceptance Test Plan (ATP) for the ERGO ebRR Catalogue Service and represents a formal deliverable of work package 4100.

The objectives of this plan are to:

- Define the validation approach;
- Describe the activities needed for the preparation and execution of testing;
- Define the testing environment;
- Define the sequence of the validation/acceptance tests;
- Serve as a guide in the definition of the test procedures.

1.2. Glossary

1.2.1. Abbreviations

<i>Acronym</i>	<i>Extended Form</i>
ATC	Abstract Test Case
ATP	Acceptance Test Plan
ATS	Abstract Test Suite
ATR	Acceptance Test Report
EO	Earth Observation
FAT	Factory Acceptance Test
GMES	Global Monitoring for Environment and Security
HMA	Heterogeneous Mission Accessibility
HTTP	Hypertext Transfer Protocol
HW	Hardware
I/F	Interface

This document is a property of "Intecs SPAHewlett-Packard" and cannot be distributed or duplicated without written authorization.

Acronym	Extended Form
ICD	Interface Control Document
NA	Not Applicable
OGC	Open Geospatial Consortium
SOAP	Simple Object Access Protocol
SR	Software Requirements
SRD	Software Requirements Document
SSD	Software Specification Document
SSE	Service Support Environment
SSL	Secure Sockets Layer
SUM	Software User Manual
SW	Software
TBC	To Be Confirmed
TBD	To Be Defined
TBW	To Be Written
TN	Technical Note
UML	Unified Modeling Language
URD	User Requirements Document
URL	Universal Resource Locator
WSDL	Web Services Description/Definition Language
XML	Extensible Mark-up Language
XSD	XML Schema Definition

Acronym	Extended Form
XSLT	Extensible Style Language Transformation

1.2.2. Definition of Terms

1.3. References

1.3.1. Normative References

In case of conflict between two or more applicable documents, the higher document will prevail.

- [NR1] ERGO-TEC-PROP-354-07-SP-PI, issue 1.0, 05/02/2008.
- [NR2] ebRR Software Requirement Document, Id: ERG-SRD-2100-4CT, issue 1, Revision 1, 06/06/2008.
- [NR3] ERGO Project Management Plan, Id: ERG-PMP-1000-INT, Issue 1, Revision 1, date 30/04/2009
- [NR4] ERGO Project Assurance Plan, Id: ERGO-PAP-1000-INT, Issue 1, Revision 1, date 30/04/2009
- [NR5] OGC compliance Test Language (CTL), Id: OGC 06-126r2, version 0.6, 31/03/2009
- [NR6] CSW-ebRIM Registry Service - Part 3: Abstract Test Suite, doc. Identifier OGC 08-103r2, issue 1.0.1, 07/11/2008.
- [NR7] OGC CSW-ebRIM Extension Package for EO Products - Abstract Test Suite, Id: HMA-T-CSW-ebRIM-EO-AP-ATS-IMAA, issue 1.0.1, 09/02/2009, http://wiki.services.eoportal.org/tiki-download_wiki_attachment.php?attId=218&page=HMA-T%20Deliverables&download=y
- [NR8] OGC™ GML 3.1.1 Application Schema for Earth Observation Products, Id: OGC 06-080r4, version 0.9.3, 21/07/2008
- [NR9] OGC™ Catalogue Services Specification 2.0 Extension Package for ebRIM Application Profile: Earth Observation Products, Id: OGC 06-131r6, version: 0.2.3, 09/03/2009.
- [NR10] ebXML Registry Information Model, version 3.0, Id: regrep-rim-3.0-os, 02/05/2005.
- [NR11] ebXML Registry Services and Protocols, version 3.0, Id: regrep-rs-3.0-os, 02/05/2005.

1.3.2. Informative references

The following documents, although not a part of this test procedure, amplify or clarify its contents.

- [IR1] SOAP Simple Object Access Protocol 1.1, W3C Note 08 May 2000, <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>
- [IR2] SOAP Simple Object Access Protocol 1.2, Part 1 (Messaging Framework) <http://www.w3.org/TR/soap12-part1/>
- [IR3] SOAP Simple Object Access Protocol 1.2, Part 2 (Adjuncts) <http://www.w3.org/TR/soap12-part2/>
- [IR4] Hypertext Transfer Protocol -- HTTP/1.1, RFC 2616, U.C. Irvine, DEC W3C/MIT, DEC, W3C/MIT, W3C/MIT, January 1997, <http://www.normos.org/ietf/rfc/rfc2616.txt>
- [IR5] Web Services Description Language (WSDL) 1.1, W3C Note 15 March 2001, <http://www.w3.org/TR/wsdl>
- [IR6] XML Schema, <http://www.w3.org/TR/xmlschema-0/>, W3C Recommendation, 2 May 2001.
- [IR7] Extensible Mark-up Language (XML) 1.0, W3C Recommendation 10 February 1998, <http://www.w3.org/TR/REC-xml>.
- [IR8] XSL Transformations (XSLT) Version 1.0, W3C Recommendation 16 November 1999, <http://www.w3.org/TR/xslt>.
- [IR9] XSL Transformations (XSLT) Version 2.0, W3C Recommendation 23 January 2007, <http://www.w3.org/TR/xslt20/>



2. ORGANISATION OF TEST ACTIVITIES

This document defines the acceptance test plan for ERGO ebRR Catalogue Service software. The validation consists of Factory Acceptance (i.e. verification against software requirements) activities, as described in the following section.

2.1. Factory Acceptance Activities

2.1.1. Activity Definition

The objective of the Factory Acceptance Test is to check that ERGO ebRR software satisfies all the requirements listed in the ebRR Software Requirement Document [NR2].

The FAT tests are run at INTECS premises. The following tasks are part of the factory acceptance:

- Installation of ERGO ebRR software
- Execution of the formal acceptance tests
- Writing of the test execution report

2.1.2. Description of a Factory Acceptance Session

The Factory Acceptance Test session starts with the verification of the testing environment and the presence of all required people. During this "Test Readiness Review", it will be checked whether the software is ready to be submitted to the factory acceptance tests (e.g. open actions, open change requests, and state of documentation).

The next activity is the execution of the formal factory acceptance. If a difference is detected between the observed behavior of the software and the expected behavior described in the Test Procedures, then the test engineer raises a problem report. In case a blocking problem is encountered, the test case is skipped and testing continues with the next test case.

Finally at the end of the session, a Factory Acceptance Test Report is written. Depending on the number of major problems that are detected, a retest of some test cases may be appended to the testing activities, if a new release with a number of corrections is available.

2.1.3. Verification Method

The following verification methods are envisaged for test execution:

- **Analysis [A]** This verification method implies use of analytical techniques (such as system engineering analysis, statistics, mathematical modeling, simulations) and shall be used to verify such requirements.



- **Review of Design [D]** This verification method may be used when approved Design reports, technical descriptions, engineering drawings unambiguously show that the requirement is met.
- **Inspection [I]** Verification by inspection is only done when testing is insufficient or inappropriate. This method of verification is for those requirements that are normally performed by some form of visual inspection. This would include workmanship, labeling, envelope requirements etc.
- **Demonstration [M]** This verification method may be used when actual conduct can verify achievement of requirements such as service and access, transportability, human engineering features and processes hardware. A requirement which is of an operational or functional nature and is not quantified by a specific measurable parameter may be verified by demonstration.
- **Similarity [S]** This verification method may be used when there is proof that the item is similar or identical in design and manufacturing processes to another previously qualified to equivalent or more stringent criterion.
- **Test [T]** A requirement may be verified by test alone if the form of the specification is such that the requirement can be directly measured.

2.1.4. Activity Results

The outputs of the Acceptance Test phase is a signed Acceptance Test Report (ATR) which lists for each test scenario/test case whether it failed or was successful, and a general acceptance statement.

Three cases are possible:

- **Rejection:** the reasons are written in the report; the software is corrected according to the normal change control and configuration management procedures; a new factory acceptance test session is scheduled;
- **Conditional acceptance:** some problems have been found, but the factory acceptance is signed providing that they will be corrected.
- **Full acceptance:** the factory acceptance is signed.

3. Test Environment

In this chapter the software and hardware resources required to perform the Factory Acceptance Test sessions are listed.

3.1. Hardware & Software Configuration

The test environment is made up of the HW/SW configurations for the ERGO ebRR and TeamEngine systems.

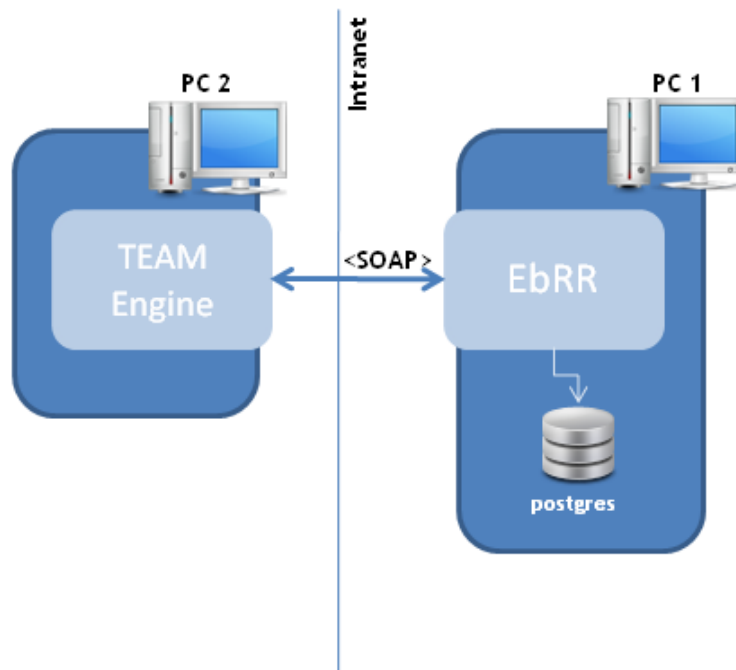
The HW/SW configuration for ERGO ebRR is the following:

Host	Hardware	Software
PC1	Dual CPU AMD Opteron 246 (detected 1992.536 MHz processor), 4 GB of RAM	Linux (Fedora Core 9) or Windows XP Apache Tomcat (version 5.5 or greater) Java Runtime Environment (version 1.5 or greater) Postgres (version 8.3 or greater) with PostGIS extension ERGO ebRR software

The HW/SW configuration for the TeamEngine is as follows:

Host	Hardware	Software
PC2	I586 Intel processor + 2GB RAM	Windows XP Apache Tomcat (version 5.5 or greater) Java Runtime Environment (version 1.6.x) Firefox 3.0.x TeamEngine tool software

A network connection is required between the 2 PCs, as shown in the following figure:



3-1 HW and SW configuration for ERGO ebRR Test Environment

3.2. Test tools

The Test tool used for the tests described in this document is the TeamEngine, able to execute tests written in the CTL language [NR3]. The TeamEngine is a WEB application running as a Tomcat service, able to load, execute and log CTL test suites. Each test suite is made up an arbitrary number of tests.

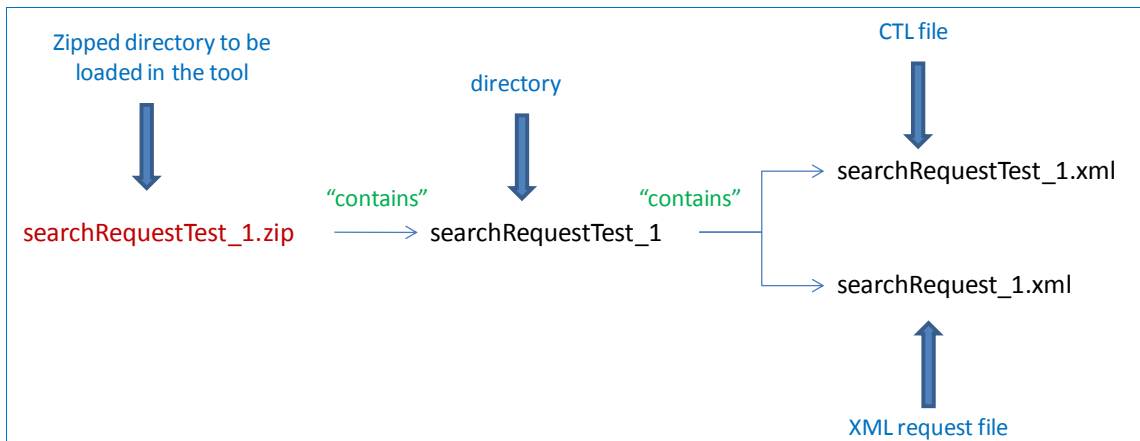
The TeamEngine is distributed as a “war” file to be deployed under Tomcat and it is accessible as http://tomcat_host:8080/TeamEngine.

3.2.1. Steps to execute a CTL test suite

The user shall execute a test suite using the capabilities provided by the TeamEngine GUI to carry out the following steps:

- 1) Load the CTL test suite, which shall be provided as a zipped directory file, as in the example described in the following figure. Notice that the name of the directory and that of the CTL file [without suffix] shall be the same; the directory shall contain all of the resources needed to execute the tests:

- a. The CTL file is the main and mandatory file, which lists the steps to be executed to carry out the test suite; the tests are described using the CTL language.
- b. Other files are optional, but usually provided, such as files containing the actual XML requests to be sent to the ERGO ebRR server.



- 2) Execute the CTL test suite, by selecting the test suite just loaded in the “CTL Stored File List” tab of the GUI;
- 3) Inspect the response displayed in the output windows of the GUI, which will show the pass/fail result.

Given that these steps are the same for all the tests, they will not be repeated in the description of the test cases: they will be simply referred to, whereas details will be given about the specific request to be sent to the ERGO ebRR Catalogue Service.

3.2.2. General structure of a CTL Test Suite

A CTL test suite is made up of one or several tests to be executed by the Team Engine tool. A CTL test has the main following instructions:

1. Definition of the type (XML or SOAP) of the request;
2. Definition of the mandatory (URL of the ERGO ebRR Catalogue Service) and optional parameters of the request;
3. Inclusion of either directly the request or the link to the request, if this is provided in a separate file, as usually happens;
4. Check that a response is returned by the ERGO ebRR Catalogue Service;
5. Check that the response is compliant with what expected.



3.3. Test data

The ERGO ebRR database shall be populated by ingesting:

- EO GML Metadata, compliant with [NR8] in order to test the support of the CSW-ebRIM profile for EO products [NR9];

The EO GML Metadata belongs to the following collections:

- ASAR Global Monitoring (as SAR collection); the data cover the 2007 January and 2007 February periods;
- SPOT Multi (as OPT collection); the data cover the 1999 and 2000 years periods

4. Test Specification

4.1. Test Design

The testing is divided into **Test Scenarios** and **Test Cases**.

Test Scenarios are group of tests, which have a common theme or objective (e.g. Installation, communication mechanism used etc). Each Test Scenario is divided into a number of sub-cases. Each sub-case is a **Test Case**.

Notice that the compliance tests to the applicable profiles to the OGC CSW-ebRIM specifications are provided in a separate document [NR7]. Consequently, the current document does not include testing of requirements already covered by the ATS.

4.2. Test Scenario TS_01 : Submission of Registry Objects

This scenario addresses the submission of registry objects through the OASIS ebXML RegRep Submit Objects Protocol. Notice that the ATS of the OGC documents [CSW-ebRIM, CIM profile, EO profile] do not cover the testing of the native OASIS RegRep interface.

4.2.1. Test Case TS_01_01: SubmitObjectRequest

This test case checks that a list of RegistryObjects are correctly submitted to the ERGO ebRR Catalogue Service through the “SubmitObjectsRequest” operation

Prerequisites	The ERGO ebRR Catalogue Service is installed and is working
Input	A CTL test handling an ebXML “SubmitObjectRequest”; the request contains: <ul style="list-style-type: none">• a set of RegistryObjects to be submitted to the ERGO ebRR Catalogue Service.
Steps	The steps are those described in §3.2.1, where: <ul style="list-style-type: none">• the CTL test suite contains the test described in the “Input” section
Results	The test result displayed in the TeamEngine GUI
Test pass/failure criteria	The test is passed if the server response to the request is successful, failed otherwise.

References | ERG-SR-EBR-FUN-030

4.3. Test Scenario TS_02: Performance

This test scenario addresses performance issues of the ERGO ebRR Catalogue Service implementation.

4.3.1. Test Case TS_02_01: Ingestion of 20.000 records in DB

This test case checks that the ERGO ebRR Catalogue Service is able to store at least 20.000 records.

Prerequisites	The ERGO ebRR Catalogue Service is installed and is working.
Input	The URLs of at least 20.000 records to be harvested.
Steps	Due to the large number of records to be harvested, the ingestion will be carried out using a procedure implemented ad hoc; this test foresees a unique step consisting in: <ol style="list-style-type: none">1) Launch the shell script which will be provided for ingesting the records
Results	The output of the shell script
Test pass/failure criteria	The test is passed if at least 20.000 records are successfully harvested; the test is failed otherwise.
References	ERG-SR-EBR-PER-060

4.3.2. Test Case TS_02_02: Time-out response

This test case checks that the ERGO ebRR Catalogue Service returns a time-out response maximum 5 minutes after an unresolved request.

Prerequisites	<ul style="list-style-type: none">• The ERGO ebRR Catalogue Service is installed, has been
----------------------	--

	<p>correctly populated and is working.</p> <ul style="list-style-type: none"> The registry configurable specific limit for the processing time has been set
Input	<p>A CTL test handling a generic [no filtering criteria] CSW-ebRIM “GetRecords” request having:</p> <ul style="list-style-type: none"> the attribute parameter “resultType” set to “results” the “ElementSetName” element value set to “full”
Steps	<p>The steps are those described in §3.2.1, where:</p> <ul style="list-style-type: none"> the CTL test suite contains the test described in the “Input” section
Results	<p>The test result displayed in the TeamEngine GUI</p>
Test pass/failure criteria	<p>The test is passed if the response contains a “TimeoutException” and is returned no later than 5 minutes after sending the request; the test is failed otherwise</p>
References	<p>ERG-SR-EBR-PER-061</p>

4.3.3. Test Case TS_02_03: Number of records returned by GetRecords

This test case checks that the ERGO ebRR Catalogue Service is able to return at least 20 records to a search request

Prerequisites	<ul style="list-style-type: none"> The ERGO ebRR Catalogue Service is installed, has been correctly populated and is working; At least 20 EO GML Metadata belonging to the same <i>collection</i> has been successfully harvested in the registry.
Input	<p>A CTL test handling a CSW-ebRIM “GetRecords” request with the following parameters:</p> <ul style="list-style-type: none"> the GetRecords attribute “resultType” is set to “results”; the GetRecords attribute “maxRecords” is set to 20; the “ElementSetName” element value is set to any of the “brief”, “summary” or “full” value

	<ul style="list-style-type: none"> the only filter criterion is about the property “parentIdentifier” set to <i>collection</i> whose metadata files have been harvested in the registry.
Steps	<p>The steps are those described in §3.2.1, where:</p> <ul style="list-style-type: none"> the CTL suite contains the test described in the “Input” section
Results	The test result displayed in the TeamEngine GUI
Test pass/failure criteria	The test is passed if the response contains at least 20 records; the test is failed otherwise
References	ERG-SR-EBR-PER-062

4.3.4. Test Case TS_02_04: Maximum response time for GetRecordById

This test case checks that the ERGO ebRR Catalogue Service is able to return a GetRecordByIdResponse in less than 2 seconds

Prerequisites	The ERGO ebRR Catalogue Service is installed, has been correctly populated and is working;
Input	<p>A CTL test handling a CSW-ebRIM “GetRecordById” request with the following parameters:</p> <ul style="list-style-type: none"> the “ElementSetName” element value is set to the “full” value the identifier is a RegistryPackage identifier returned in a previous, successful GetRecordsResponse
Steps	<p>The steps are those described in §3.2.1, where:</p> <ul style="list-style-type: none"> the CTL test contains the test described in the “Input” section
Results	The test result displayed in the TeamEngine GUI
Test pass/failure	The test is executed at least 20 times; it is passed if the response is returned (on average) in less than 2 seconds; the test is failed

criteria	otherwise
References	ERG-SR-EBR-PER-063

4.3.5. Test Case TS_02_05 Maximum response time for GetRecords

This test case checks that the ERGO ebRR Catalogue Service is able to return a GetRecordsResponse containing a collection of 20 records in less than 10 seconds.

Prerequisites	<ul style="list-style-type: none"> The ERGO ebRR Catalogue Service is installed, has been correctly populated and is working; At least 20 EO GML Metadata belonging to the same <i>collection</i> has been successfully harvested in the registry.
Input	<p>A CTL test handling a CSW-ebRIM “GetRecords” request with the following parameters:</p> <ul style="list-style-type: none"> the GetRecords attribute “resultType” is set to “results”; the GetRecords attribute “maxRecords” is set to 20; the “ElementSetName” element value is set to the “full” value; a filter criterion about the “parentIdentifier” property set to <i>collection</i> is specified.
Steps	<p>The steps are those described in §3.2.1, where:</p> <ul style="list-style-type: none"> the CTL test suite contains the test described in the “Input” section
Results	The test result displayed in the TeamEngine GUI
Test pass/failure criteria	The test is executed at least 20 times; it is passed if the response is returned (on average) in less than 10 seconds; the test is failed otherwise
References	ERG-SR-EBR-PER-064

4.4. Test Scenario TS_03

This test scenario addresses the functionalities of the ERGO ebRR Registry API.

4.4.1. Test Case TS_03_01 Accessing the Registry API

The test is performed through a set of JUnit Test; specification, execution, and reporting of unit tests are carried out using Apache Maven.

Prerequisites	The ERGO ebRR Catalogue Service is installed, has been correctly populated and is working
Input	JUnit Tests for the ERGO ebRR Registry API.
Steps	The Junit Tests are executed using Apache Maven
Results	JUnit Test Reports generated by Apache Maven
Test pass/failure criteria	The tests are considered passed if the Registry API operations comply with their [reference] specification; the tests are failed otherwise
References	ERG-SR-EBR-OPE-120 ERG-SR-EBR-OPE-130 ERG-SR-EBR-OPE-140

4.5. Test Scenario TS_04

This test scenario addresses the security features of the ERGO ebRR through RBAC. This test scenario refers to user authorization; it is assumed that ERGO ebRR supports the SAML Profile and thus relies on the authentication services of an external Identity Provider (according to [NR11], §10.2). The following scenario (compliant with the “Authenticated SOAP Requestor” scenario described in [NR11], §11.6.5) is envisaged:

- The Identity Provider (IdP) gives the user a SAML authentication token to be used for accessing the ERGO ebRR services;
- The SAML authentication token contains the user profile information needed to ERGO ebRR to check whether the user is authorized to access the service;
- The SAML authentication token is inserted in the SOAP header of the user request message, embedded in WS-Security tags.

4.5.1. Test Case TS_04_01: Unauthorized access

This test case checks that an unauthorized user cannot perform the required operation

Prerequisites	<p>The ERGO ebRR Catalogue Service is installed, has been correctly populated and is working</p> <p>The user is not authorized to perform the requested operation, as described by the authorization rules.</p>
Input	<p>A CTL test handling a SOAP request, which contains:</p> <ul style="list-style-type: none"> • the SAML token released by the external IdP, in the SOAP header • a “GetRecords” request, in the SOAP Body
Steps	<p>The steps are those described in §3.2.1, where:</p> <ul style="list-style-type: none"> • the CTL test contains the test described in the “Input” section
Results	<p>The test result displayed in the TeamEngine GUI</p>
Test pass/failure criteria	<p>The test is considered passed if the response contains an Authorization failure response, the test is failed otherwise.</p>
References	<p>ERG-SR-EBR-OPE-240</p> <p>ERG-SR-EBR-SEC-270</p>

5. Traceability matrices

For the sake of brevity, in the following table the following notations are used:

- **ATS of CSW-ebRIM** stands for the Abstract Test Suite of the CSW-ebRIM Registry Service [NR3]
- **ATS-EO** stands for the Abstract Test Suite for the CSW-ebRIM Extension Package for EO Products [NR7]

In future versions of this document, when ATS-EO will be released in a stable version, the references to the specific ATC(s) covering the ERGO ebRR requirement will be specified.

Requirement	Test case
ERG-SR-EBR-FUN-010	Demonstration
ERG-SR-EBR-FUN-020	<ol style="list-style-type: none"> 1. Covered by ATS-EO 2. Covered by ATS of CSW-ebRIM [ATC 16]
ERG-SR-EBR-FUN-030	<ol style="list-style-type: none"> 1. Test scenario [TS_01_01] 2. Covered by ATS-EO 3. Covered by ATS-EO
ERG-SR-EBR-FUN-040	Covered by ATS-EO
ERG-SR-EBR-FUN-050	Covered by ATS-EO
ERG-SR-EBR-FUN-060	Test scenario [TS_02_01]
ERG-SR-EBR-FUN-061	Test scenario [TS_02_02]
ERG-SR-EBR-FUN-062	Test scenario [TS_02_03]
ERG-SR-EBR-FUN-063	Test scenario [TS_02_04]
ERG-SR-EBR-FUN-064	Test scenario [TS_02_05]
ERG-SR-EBR-FUN-070	<ol style="list-style-type: none"> 1. Covered by ATS of CSW-ebRIM [ATC 16] 2. Covered by ATS-EO 3. Covered by ERGO GeoNetwork

ERG-SR-EBR-INT-080	Covered by ATS-EO
ERG-SR-EBR-INT-090	N/A
ERG-SR-EBR-INT-100	Covered by ATS-EO
ERG-SR-EBR-INT-110	Covered by ATS-EO
ERG-SR-EBR-OPE-120	Test scenario [TS_03_01]
ERG-SR-EBR-OPE-130	Test scenario [TS_03_01]
ERG-SR-EBR-OPE-140	Test scenario [TS_03_01]
ERG-SR-EBR-OPE-150	Covered by ATS-EO
ERG-SR-EBR-OPE-160	Covered by ATS-EO
ERG-SR-EBR-OPE-170	Covered by ATS-EO
ERG-SR-EBR-OPE-180	Covered by ATS-EO
ERG-SR-EBR-OPE-190	Covered by ATS-EO
ERG-RB-EBR-OPE-200	Covered by ATS-EO
ERG-SR-EBR-OPE-210	Covered by ATS-EO
ERG-SR-EBR-OPE-220	Covered by ATS-EO
ERG-SR-EBR-OPE-230	Covered by ATS-EO
ERG-SR-EBR-OPE-240	Test scenario [TS_04_01]
ERG-SR-EBR-DES-250	Inspection
ERG-SR-EBR-DES-260	Inspection
ERG-SR-EBR-SEC-270	Test scenario [TS_04_01]
ERG-SR-EBR-SCD-280	Inspection
ERG-SR-EBR-SCD-290	Inspection
ERG-SR-EBR-SCD-300	Inspection
ERG-SR-EBR-SCD-310	Inspection
ERG-SR-EBR-ADP-320	Demonstration

This document is a property of "Intecs SPAHewlett-Packard" and cannot be distributed or duplicated without written authorization.

ERG-SR-EBR-ADP-330	Inspection
ERG-SR-EBR-OTH-340	Inspection
ERG-SR-EBR-VAL-350	Demonstration [through ETS]