The Infinity Project
Infrastructures for the Future Internet Community
FI-PPP

Contract Number 285192

# D4.2 - REPOSITORY 1ST RELEASE

## Document Reference

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## Table of Contents

## Management Summary

This deliverable accompany the release of the XiPi repository. In particular it provide a factsheet of the released software (related to T4.2) and provide an initial plan for testing and maintenance activities (related to T4.3). It is out of the scope of this deliverable to provide fine-grained details on the design of XiPi. The interested reader should refer to D4.1 - Repository Design 1st release.

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# 1. Introduction

XiPi is the Repository for eXperimental Infrastructures for Public private partnership Innovation. This deliverable document the first release of the repository occurred on 10th April and documents the planned testing and maintenance procedures.

XiPi is a web-based application that, through innovative community-driven Web tools, describes available infrastructures as a 'living organism', and brings together the two key aspects of FI-PPP projects: the infrastructures and the applications.

In this first release we mostly focused on infrastructure description, upcoming updates will enable also to describe the dual aspect of applicative use cases.

The final objective of XiPi is to enable, through a collaborative Web-based approach, the creation of a sustainable 'market' where infrastructure owners and operators can market and advertise capability and capacity that meet user's demand. Dually, XiPi will enable users to publicise their application scenario including the requirements for infrastructure capacity and capability that can be supplied by infrastructure providers.

The specification of XiPi is contained in D4.1. In this deliverable we shortly present the status of implementation and document the work performed on the graphical layout that was not defined in D4.1.

## 1.1. Scope of the Deliverable

This deliverable accompany the release of the XiPi repository. In particular it provide a factsheet of the released software (related to T4.2) and provide an initial plan for testing and maintenance activities (related to T4.3). It is out of the scope of this deliverable to provide fine grained details on the design of XiPi. The interested reader should refer to D4.1 - Repository Design 1st release.

## 1.2. Document Conventions

The formatting of the document is compliant with the deliverable template provided for the INFINITY project template. Information regarding the content organization of the rest of the document can be found in Section 1.3.

## 1.3. Intended Audience and Reading Suggestions

This document is mainly intended for four categories of users:

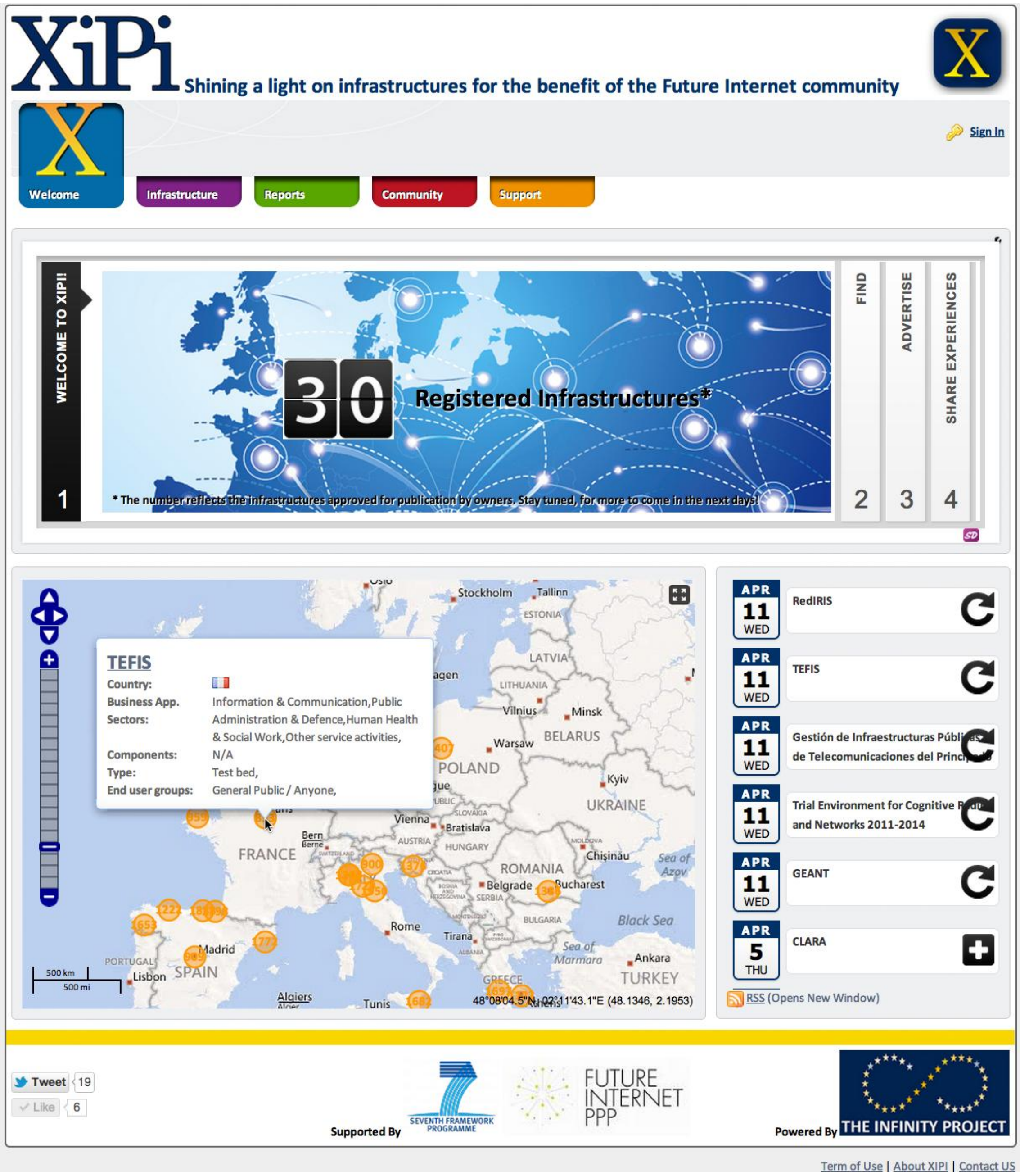
- **Developers**, who are in charge of testing XiPi and providing maintenance support. Most relevant sections for them are: Section 3 and Section 4.
- **Project partners,** who should find general information about XiPi release and availability. Most relevant sections for them are: Section 2.
- **FI-PPP projects, infrastructure owners and other end users,** that may want to have an overview of current version of XiPi and the planned support and maintenance activities. Most relevant sections for them are Section 2 and Section 4.

- **EU commissioners and project reviewers,** that will evaluate the progresses of the Work Package 4 within respect the Description of Work. Most relevant sections for them are Section 2.

## 2. Repository 1st Release

In this section we shortly document the release of XiPi, which as it was explained in the first section is the INFINITY Future Internet infrastructures repository. This section provides a factsheet, the description of the implemented functionalities and some considerations on the look & feel.

The following figure shows the XiPi home page.



XiPi Shining a light on infrastructures for the benefit of the Future Internet community

30 Registered Infrastructures*

* The number reflects the infrastructures approved for publication by owners. Stay tuned, for more to come in the next days!

TEFIS
Country:
Business App. Sectors: Information & Communication,Public Administration & Defence,Human Health & Social Work,Other service activities,
Components: N/A
Type: Test bed,
End user groups: General Public / Anyone,

APR 11 WED RedIRIS

APR 11 WED TEFIS

APR 11 WED Gestión de Infraestructuras Públicas de Telecomunicaciones del Princ

APR 11 WED Trial Environment for Cognitive Radio and Networks 2011-2014

APR 11 WED GEANT

APR 5 THU CLARA

RSS (Opens New Window)

Figure 1. XiPi Home Page

## 2.1. Repository Factsheet

| General Information | |
|---|---|
| Product Name | XiPi |
| Version | 1.0 |
| Date of public release | 10th April 2012 |
| Date of internal release | 28th March 2012 |
| Source control | http://gforge.create-net.org/svn/infinity |
| Publication URL | http://xipi.eu |
| User Documentation | http://xipi.eu/support<br>This link provide a slide set with tutorial for XiPi interface and video demonstrating it |
| Design Document | D4.1 - Repository Design 1st release. Available at: http://www.fi-infinity.eu/portal/resources/deliverable/d41 |
| Contact Person | Federico M. Facca – federico.facca@create-net.org |

| Technical Information | |
|---|---|
| Nature | Web Application |
| Interfaces | Java APIs, RESTful Services, Portlets |
| Platform | J2EE 1.6 and Liferay Portlet container running on top of Apache Tomcat |
| Data storage | PostgreSQL 8.4 |
| Supported Standards | JSR 53[1], JSR 127[2], JSR 168[3], JSR 170[4] and JSR 286[5] |
| Required Libraries | J2EE, Apache Struts, Hibernate, GoogleSON, Google Geocoder<br>JQuery, OpenLayer, Google JSAPI |
| License | Apache License 2.0 To be confirmed. Decision will be detailed in D4.3. |

## 2.2. Implemented Functionalities

The first release of XiPi covers the following functionalities:

- Data Model API: This API supports the description of Infrastructures based on the Common Description Framework. It also supports the management of the Common Description Framework through meta-modelling and dynamic instantiation of tables corresponding to the meta-model (cfr. D4.1 for clarifications).
- Infrastructure Editing: this functionality is covered by the *Infrastructure Portlet* (it is one of the portlets developed in XiPi). It allows infrastructure owners to modify the description of their infrastructure based on the CDF.

[1] JSR 53: JavaTM Servlet 2.3 and JavaServer PagesTM 1.2 Specifications – http://www.jcp.org/en/jsr/detail?id=53

[2] JSR 127: JavaServer Faces - http://www.jcp.org/en/jsr/detail?id=127

[3] JSR 168: Portlet Specification - http://www.jcp.org/en/jsr/detail?id=168

[4] JSR 170: Content Repository for JavaTM technology API - http://jcp.org/en/jsr/detail?id=170

[5] JSR 286: Portlet Specification 2.0 - http://www.jcp.org/en/jsr/detail?id=286

- Infrastructure Navigation: this functionality is covered by the *Infrastructure Portlet* and supports the navigation of infrastructure data based on the Common Description Framework model.
- Infrastructure Search: this functionality is covered by the *Infrastructure Portlet* and supports the search and filtering of infrastructures based on the Common Description Framework model.
- Infrastructure Social Networking: this functionality support social network interaction on infrastructures and it is included in the *Infrastructure Portlet.*
- Infrastructure Profiling: this functionality supports the registration of a new infrastructure to XiPi. The *Infrastructure Portlet* provides this functionality.
- Infrastructure Reports: the *Static Chart Portlet* provides a number of basic statistics about registered infrastructures.
- Infrastructure Browsing: the *Catalogue Portlet* provides a browsing view of registered infrastructures.
- Infrastructure Management: the *Ownership Portlet* supports infrastructure management by both owners of infrastructures and administrators of XiPi.
- Infrastructure Updates: the *Latest Update Portlet* provides feeds and notification about registrations and updates of infrastructures.
- Infrastructure Map Navigation: the *Map View Portlet* provides an interactive map to navigate infrastructures by geographical location of their head offices.

## 2.3. Look & Feel Guidelines

The logo of the application is the following one:

In order to suit to the Logo's style, we suggest the following font for: logo subtitle, headings, and body text:

Century School

### 2.3.1. Colours

The following colours used for this layout are web compatible.

- The Background is in white:

**#ffffff**

- The blue of The Infinity Project is our starting point. According to this colour, we suggest that the Xipi logo, the tab of Xipi Homepage, the headings, and the login buttons have the same colour:

**#003366**

- Regular black for the Body text :

**#000000**

- Grey for the header and content boxes:

**#cccccc**

### 2.3.2. Template

The template is based on a .psd file pre-sets for the web, on Photoshop:

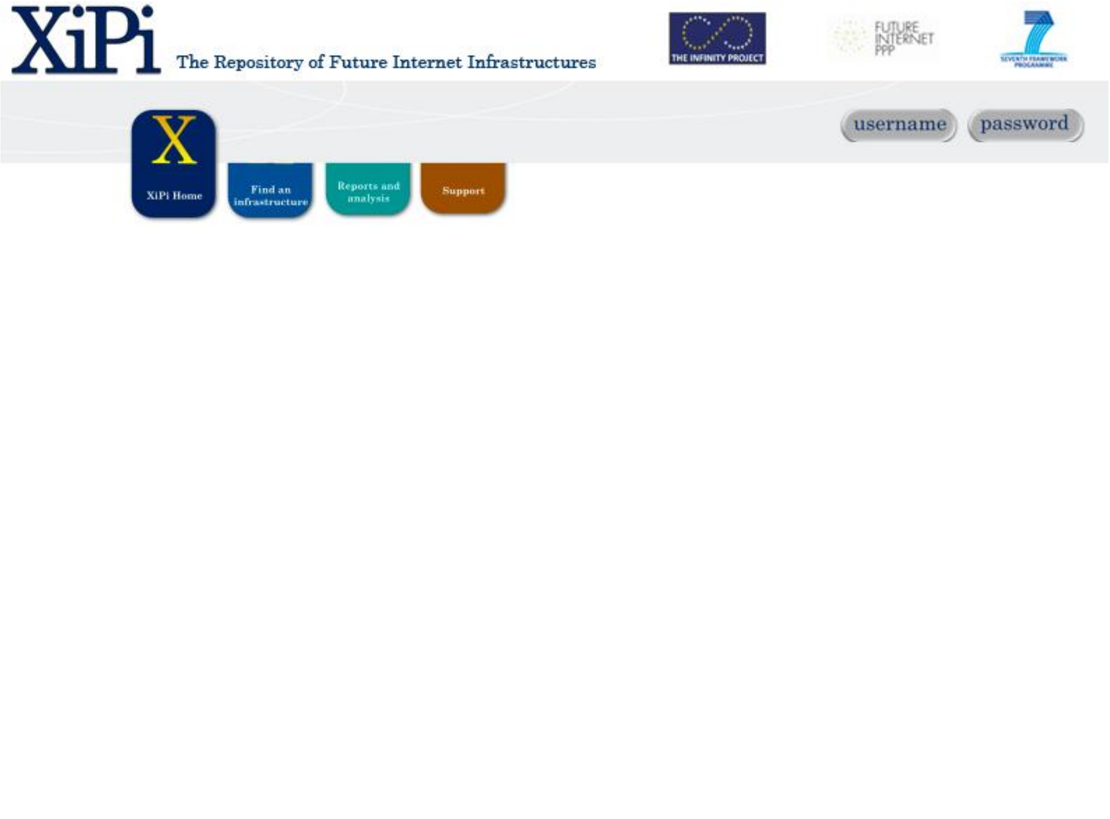
**Size** : 800x600px

**Background**: white

**Mode**: RVB color – 8 bits

**Resolution**: 72 px /inch

Below, an overview of the template without any content inside:



**The XiPi template**

### 2.3.3. The header

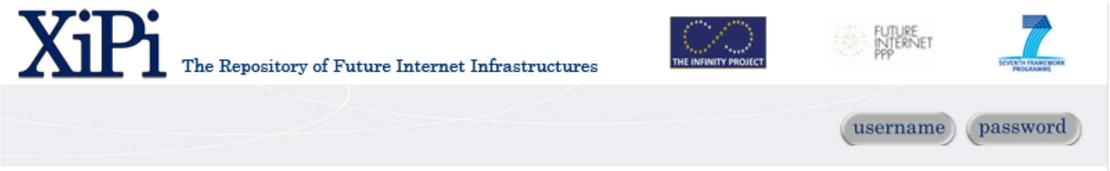
The header consists of two parts:

1) On the top, a white band including the following elements:

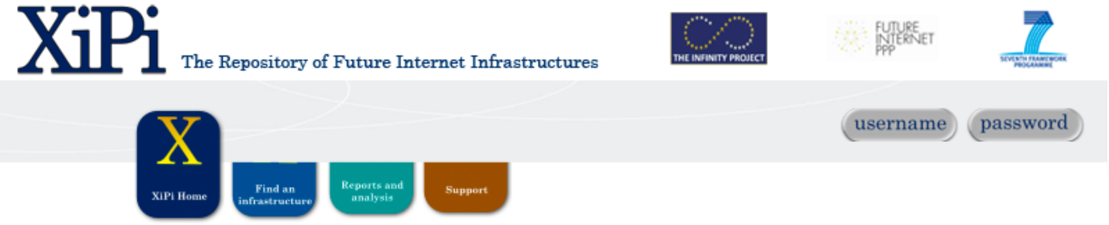
- Xipi Logo + subtitle
- The Infinity Project
- The FI-PPP Logo
- The FP7 Logo

2) On the bottom a grey banner with white curves, including:

- Username button
- Password button

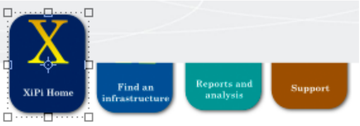

XiPi
The Repository of Future Internet Infrastructures
THE INFINITY PROJECT
FUTURE INTERNET PPP
SEVENTH FRAMEWORK PROGRAMME
username
password

### 2.3.4. The navigation bar (tabs)

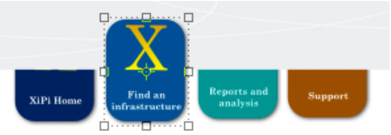


The idea here is, when the user click on a tab, it pop it out .

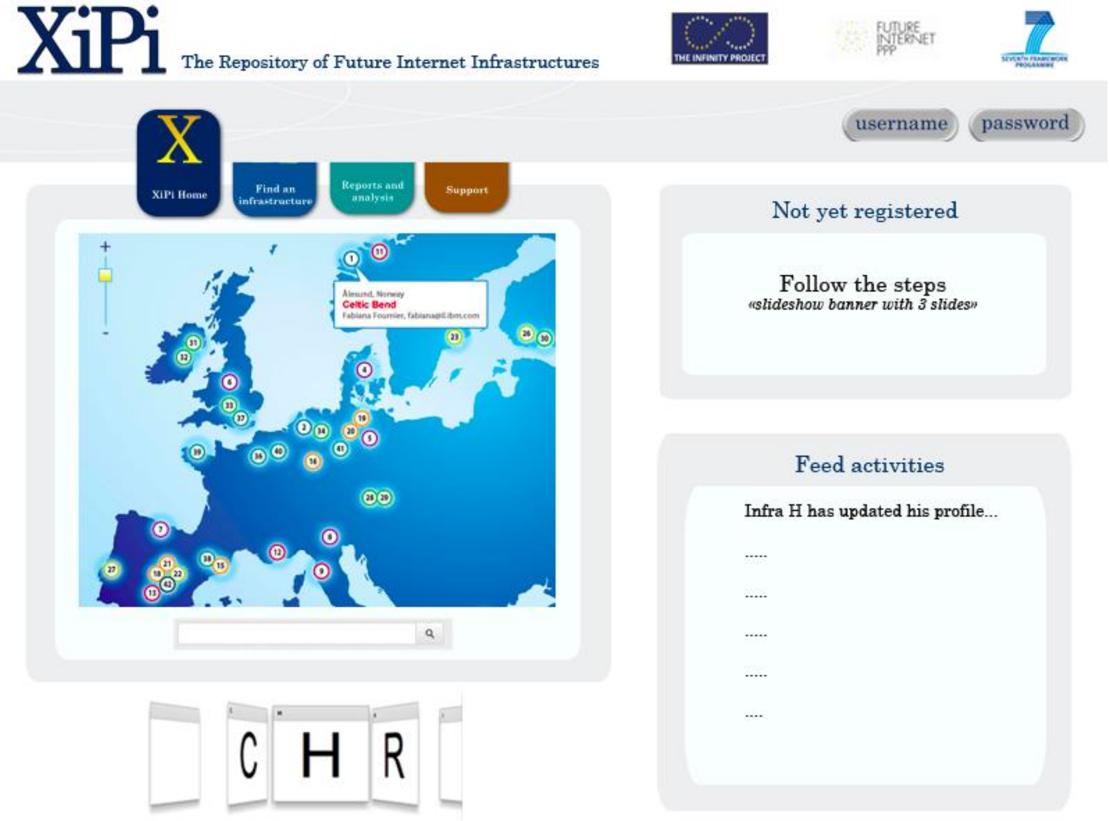
Example:
Below, the user arrives on the homepage…



Then, he decides to move to the “Find an infrastructure” section.



### 2.3.5. Example of Home Page Layout


XiPi
The Repository of Future Internet Infrastructures

Not yet registered

Follow the steps
*«slideshow banner with 3 slides»*

Feed activities

Infra H has updated his profile...
.....
.....
.....
.....
....

Ålesund, Norway
Celtic Bend
Fabiana Fournier, fabiana@il.ibm.com

**The XiPi home page**

- **The map** with its navigation functionalities + a search bar
- The **"Not yet registered" box** aims to explain how to be a user of Xipi
- The **"Feed activities" box** aims to show the last updated profiles and infrastructures activities on Xipi
- The **cover flow** on the left bottom, is a showcase to promote the infrastructures (their logos) who are already registered

# 3. Testing Methodology and Plan

This section defines the test plan strategy, the techniques and tools that will be used to perform this plan on INFINITY Web Repository's prototypes. It is out of the scope of this document the analysis of the completeness or the validation of the requirements.

## 3.1. Objectives of the testing

We are going to test the correct functioning of INFINITY Web Repository, called XIPI. Located on http://xipi.eu

Unlike software, web based applications need intensive testing, as the applications will always function as a multi-user system with bandwidth limitations. Some of the testing which should be done are: Unit testing, Integration testing, Stress testing and usability end user testing. Both automated testing and manual testing should be done without fail.

The main objective of this testing is to have well tested each version of the prototype, that have been developed during the previous phase, in order to identify all bugs, misunderstood functionalities and other issues. These last two types of outputs will be redirected to next system requirements analysis phase as inputs.

Another main objective is to test end user acceptance and usability of the INFINITY Web Repository. In order to improve consistency of the information displayed on the portal and user satisfaction.

In this deliverable the testing strategy is described, together with the approach to Quality Assurance that will be used to validate the quality of INFINITY Web Repository on each iteration of the prototyping and prior to the final release.

## 3.2. Analysis of testing dimensions

This document describes the testing strategy for a web portal and this specific kind of software has its own characteristics. Apart from classic software testing it is needed a specific approach to the testing phase. For the unit testing and integration testing we are going to use classic methods:

- **White box testing.** Test the internal structures and working of a piece of software, this kind of technique test the paths that the data follows within a unit during unit testing and through units during integration testing.

- **Black box testing.** Test the functionality of a piece of software, without knowing anything about the code itself nor the internal structure. The test cases are built around specifications and requirements. It is needed to define a set of valid and invalid inputs to test, and compare with expected output.

Web software need specific testing according to various parameters such as:

- Functionality:
    - Check all the links, all the outgoing links should be tested.
    - Test all the forms, the forms are crucial part of a web site, first of all the validation of the fields should be tested, also the default values.
    - Validate HTML and CSS using the different tools provided by W3C.
- Usability:
    - Navigation check for the correct navigation and the correctness of the help. The site should be easy to use. This must be tested by a group of users.
- Compatibility: the experience through the site must be similar using any browser mainly the more popular ones (Internet Explorer, Opera, Firefox, Chrome and Safari).
- Performance: for a web site load time is a very important parameter and the code should be fitted to the minimum time to load.

## 3.3. Test methodology

In this section, based on the discussion presented in the previous paragraph, we propose the actual testing methods that we intend to apply to XiPi.

### 3.3.1. Testing activities

#### *3.3.1.1. Unit and integration testing*

The INFINITY Web Repository is a portal based on Liferay that is a portal framework based on Java. While Liferay is a well tested software is not needed to test it. The approach described in this document is based in unit testing. We are going to test each portlet separately using known tools, such as jUnit, that perform automatic tests. As portlets cannot stand alone and need a portlet container is necessary to do a work around to make a real unit test that is described in this blog.

This test should be performed by developers during the coding phase to ensure that proper functionality has been achieved. This test will be done using white box approach.

Once the portlet has been separately tested the integration tests must be performed according with the functionality of each portlet. Finally a manual validation test should be done over the INFINITY Web Repository with all the portlets integrated. A report must be done with all the data collected during the test process and addressed to next phase of the prototype lifecycle in order to guide new version. This report should be done using form you can find on appendix A.

Once performed this test, integration testing should be performed while adding each portlet to INFINITY Web Repository. This test will be done using black box approach.

For the first version of INFINITY WEB Repository have been developed several portlets. These portlets must pass the following test to be validated:

- **CatalogView, MapView and LatestUpdate.** To test this portlet we need some sets of data. These sets of data are infrastructures' lists. We will perform these tests with the following lists, an empty list, a list of infrastructures with empty data on them, a proper list of infrastructures and a list with wrong data. We check that the correct data is displayed.
  For integration testing, we should check if the data is well displayed and all the links are working properly. We should check this with all user roles.
- **Import.** To test this portlet we need some sets of data. These sets of data are files. We will perform these tests with the following files: an empty file, a well formed file, a file with wrong data.
  For integration testing, we should check if the data is well displayed and all the links are working properly. We should check this with all user roles.
- **InfinityServices.** To test this portlet we need to make calls to all the functionalities that it provides, and check with the data base that the answer to the queries is correct.
- **Infrastructure Ownership.** To test this portlet we need some sets of data. These sets of data are infrastructures' lists. We will perform these tests with the following lists: an empty list, a list of infrastructures with empty data on them, a proper list of infrastructures, a list with wrong data. We check that the correct data is displayed. With the proper list of infrastructures we also check to accept, publish and unpublish functionalities from this portlet.
  For integration testing, we should check if the data is well displayed and all the links are working properly. We should check this with all user roles.
- **StaticCharts.** For each of the charts displayed by this portlet, perform the test with the following sets of data: empty data set, Wrong data set and proper data set. For integration testing, we should check if the data is well displayed and all the links are working properly. We should check this with all user roles.

#### *3.3.1.2. Usability testing*

The approach INFINITY Web Portal developers' take is a non classical one, because of the geographical dispersion of the team, because of this is difficult to have an observatory during all the testing. The test users will have the description of each task to do and after performing it will fulfil a questionnaire about the task and their impressions of the difficulty, clearness and the satisfaction with INFINITY Web Portal. After performing the tasks given each test user should fill a questionnaire about general impressions on the INFINITY Web Portal. This test should be performed in session of 1 hour at maximum, to avoid user apathy. The schedule of this test is linked to the development schedule. This test should be performed by at least 1 non-developer of each partner.

The testing is divided in the use cases described on D4.1 Repository Design 1st Release:

### Manage Infrastructures (UC 1)

The user can perform different management actions on the infrastructures, such as: register a new one, edit it, unpublish it or delete it.

- Register infrastructure test:
  - As a guest user try to register an infrastructure, a login prompt should be shown.
  - Login as a register user. A form to insert data will appear.
  - Fulfill form.
  - Select profiling information.
  - Save infrastructure. Select privacy politic on the infrastructure.
  - Review summary.
- Edit infrastructure:
  - As a suitable user select the option to edit infrastructure.
  - Edit generic information.
  - Edit profiling information.
  - Review summary.
- Unpublish / delete infrastructure:
  - As a suitable user select the option to unpublish / delete infrastructure.
  - Confirm action.

### Browse Infrastructures (UC 2)

The user can browse through existing infrastructure using predefined queries or through search functionality.

- Browse infrastructure:
  - Add an infrastructure as described in 4.2.1
  - Find it using each predefined query (geographically, by scenario, by category, by organization, alphabetically, by ranking).
  - Apply any filter to delimit the results.
  - Select infrastructure.
- Search infrastructure:
  - Fill the text box for basic search.
  - Review results.
  - Change sorting criteria.
  - Select advanced search and perform an accurate search.
  - Review results.

### Social Networking Interaction on Infrastructure (UC 3)

When a user is visualizing an infrastructure, he can add his comments and rate the infrastructure.

- Comment infrastructure:
  - As a guest is only allowed to read comments, check this.
  - Login and see that a new option has appear, a box to comment infrastructure.
  - Write down a comment.
- Rate infrastructure:
  - As a guest is only allowed to see rating, check this.

  - Login and see that a new option has appear, a selector to rate infrastructure.
  - Rate infrastructure.
- Share infrastructure:
  - Select "social network" to share infrastructure.
  - Share infrastructure in different "social networks".
- Add to a collection:
  - Choose a collection to add the infrastructure.
  - Create a collection
  - Add infrastructure to the new created collection.

### Updates Subscription Management (UC 4)

The user can register for updates on a specific infrastructure or a category of infrastructures. The user can remove their subscriptions. The functionalities are available only to registered users.

- Subscribe to an infrastructure.
- Subscribe to a category.
- Manage subscriptions:
  - Select manage subscription in profile page.
  - Review summary of subscriptions.
  - Disable subscription.
  - Enable subscription.
  - Delete subscription.

### Infrastructure Ownership Management (UC 5)

The user can apply for ownership of infrastructures that do not have an owner. The survey manager has to approve the request.

  - Apply for infrastructure ownership:
  - Search an infrastructure without owner.
  - As guest user can't apply for ownership.
  - As registered user a link to ownership appliance is shown.
  - Apply for ownership.
  - Approve ownership request:
  - As survey manager access to "Manage ownership request" in management panel.
  - Review list of ownership request.
  - Select one ownership request and deny it.
  - Select one ownership request and approve it.

### Infrastructure Privacy Management (UC 6)

Infrastructure owners can manage what data is public or not of their infrastructure (except basic information). Users can request to the infrastructure owner to access such data.

  - Manage infrastructure privacy:
  - Check that only the owners of the infrastructure can access to this functionality in infrastructure summary page.
  - Select functionality.
  - Change infrastructure privacy on at least one profiling category.
  - Save infrastructure privacy.
  - Request access to private data:
  - Search for an infrastructure containing private data.

- Review list of private data.
- Request access to at least one profiling category.
- Manage access to private data:
- Access to own profile.
- Select "Manage request of access to infrastructure private data".
- Review summary of pending requests.
- Deny request.
- Approve request.

### Infrastructure Model Management (UC 7)

The administrator can update the profiling model adding or removing components. Infrastructure owners can ask for updates to the model and administrators can analyse the list of request.

- Update profiling model:
- As administrator access to "Manage Profiling Model" in administrator panel.
- Review model.
- Edit an existing item.
- Remove an existing item.
- Add a new item
- Save.
- Access update request list:
- Review update request list in administrator panel.
- Access to a request.
- Approve request.
- Deny request.
- Request a profiling model update:
- Access in support area to "request a profiling model update".
- Review and fulfill form.
- Save request.

### Authentication Key Management (UC 8)

The user can apply for an authentication key to access the Web APIs. Administrators can revoke authentication keys.

- Apply for authentication key:
- Select "Apply for authentication key" on support page.
- Fulfil form.
- Manage authentication keys:
- Select "Manage authentication keys" on management panel.
- Review list of existing authentication keys.
- Select an authentication key and revoke it.

### Infrastructure Survey Management (UC 9)

The user can suggest surveying an infrastructure; Survey Manager can manage surveying requests.

- Suggest infrastructure to survey:
- On the main page of INFINITY Web Repository there is a link to suggest new infrastructures to survey.
- As a registered user access to the functionality.
- Review form to suggest new infrastructure to survey.
- Fulfill at least mandatory information.

- Manage list of suggested infrastructures to survey:
- As administrator select “browse suggestions” where it appears.
- Review list of suggestions.
- Change sorting option of the list of suggestions.
- Perform a search on the list of suggestions.
- Select a suggestion.
- Review the data of the suggestion.
- Accept suggestion.
- Cancel suggestion.

### Report Management (UC 10)

The user can create an analysis report on infrastructures; search for existing reports; edit an existing report and publish or unpublish a report.

- Create report:
- Where on an infrastructure page a register user have the functionality to create a report.
- Review form displayed.
- Select at least one attribute to create the report.
- Review schema of the report and example.
- Validate report.
- Search report:
- On report page select search report.
- Perform a basic search by keyword.
- Apply filters on advanced search.
- Review results.
- Change sorting style.
- Edit report:
- Select edit a report in an infrastructure page where we have a report.
- Review the selected attributes for the report
- Edit attributes of the report.
- Validate report.
- Publish / unpublish report:
- Search for own reports.
- Review result list.
- Check publish box on an unpublished report.
- Uncheck publish box on a published report.

### Manage infrastructure owners (UC11)

An infrastructure owner can add or remove owners to the infrastructure.

- Add owner:
- In configuration page of the infrastructure check list of owners.
- Select link to add a new owner.
- Search from list of users displayed the user to add.
- Add new owner.
- Remove owner:
- In configuration page of the infrastructure check list of owners.
- Click on red cross near owner’s name you want to remove.

### Manage application scenario (UC12)

FI-PPP project users can create, delete and edit application scenarios. Application scenarios are the way to define the “generic enablers” that will support the implementation of the scenario through existing infrastructures. In the following, "generic enablers" are called requirements, in the sense that they are required components that infrastructures should offer in support of the scenario.

- Create application scenario:
- In user profile page select "describe application scenario".
- Write down description. Validate
- Review form displayed, fulfill form.
- Select infrastructures from list.
- Review diagram of application scenario.
- Validate application scenario.
- Edit application scenario:
- In user profile page select "edit application scenario".
- Review list of all application scenarios he owns.
- Select one application scenario.
- Review form displayed.
- Change some data
- Validate.
- Delete application scenario:
- In user profile page select "delete application scenario".
- Review list of all application scenarios he owns.
- Select application scenario to delete.

### 3.3.2. Bug reporting and tracking

During coding phase all developers should run their own unit test, and once the piece of software is ready to be included into INFINITY Web Portal, integrations test should be run by another developer. These developers have access to https://redmine.fi-infinity.eu/ and when they found a bug or any issue should use the tools provided by this track system.

The usability test form filled from the users during their test phase should be sent by email to support@fi-infinity.eu, these mails should be given to a person designed by the developer team, this person should be involved into the requirements acquisition phase. And have to compile all the forms.

### 3.3.3. Test environment

To have this test plan done is necessary to describe two different environments one for the server side to perform the unit and integration testing and another on the client side to perform the usability test.

Software requirements:

**Server**

- Liferay 6.0.6
- Eclipse Indigo
- Postegresql 8.4.10
- Liferay plugings sdk 6.0.6

**Client**

- Web Browser (Safari, Internet Explorer, Firefox or Chrome) last version.
- Internet connectivity.

Hardware requirements:

No special requirements because we are not going to test mobile web browsing. The only need is that server and client should be different machines.

### 3.3.4. Test Plan

As has been described in this document, first test should be performed by developers during last states of coding phase. These tests are the unit test and integration test, which must be done on every portlet to the INFINITY Web Repository at that release. For the first release of the prototype the portlets to be tested and the test that have to be passed are described on 3.3.1.1.

Once all tests have been passed, a new prototype will be released to the user testing phase where the usability test will be performed. These tests should be run in one week. And all the forms filled sent to the developer team in order to analyze the results as inputs to the new acquisition of requirements phase.

For the first version of INFINITY Web Repository, it is important to focus mainly in the look & fell of the web site, the use cases 1 and 2 and the search infrastructure functions.

To test these capabilities of INFINITY Web Portal, we must select 20 users, divided in the following groups:

- 2 Administrators.
- 8 Infrastructure Owners.
- 10 regular users.

For the first iteration of the test plan, these users should be chosen randomly between the members of the consortium, and from infrastructures already in INFINITY Web portal. Taking in account that this is a European project the users chosen must be a representative set of countries from EC.

On next iteration of the development life cycle, the amount and groups of the users will be chosen according to the development status.

Look & feel of INFINITY Web Portal, should be tested by all users. All users have to navigate through the portal and take notes about their experience using Xipi. These notes with form from appendix 2 will be sent to support-request@fi-infinity.eu. This test will take 1 hour, and should be perform in 2 web browsers designed for each user, by the test team.

Use case 1 will be only tested by administrators and infrastructure owners groups:

- Infrastructure owners must register an infrastructure.
- Once registered they can look for the status of the infrastructure under MiXipi>MyInfrastrucutres menu.

- They have to wait until the infrastructure is approved by an administrator.
- After the infrastructure is approved the infrastructure owner can publish it to make it visible on main page of Xipi.
- Next step is to update infrastructure data and make sure that is updated into the portal.
- Unpublish the infrastructure and look it up in the portal, the infrastructure must not be accessible via find functions.

Use case 2 will be tested by all users:
According to description of the use case on 3.3.1.2, each user must find a given infrastructure using:

- Basic search.
- Advanced search, using checkboxes designed for this purpose.
- The map.
- The RSS ticker of new & updated infrastructures.

## 4. Maintenance and Support overview

During the normal life cycle of INFINITY Web Portal, users may find some issues or difficulties navigating through XIPI. To help users and fix the bugs it could appear it has been designated a Maintenance and Support team. This team will have the following tools to perform their duty.

Users can address their questions or suggestions via email to support@fi-infinity.eu. All emails will be classified:

- if possible will be solved by Maintenance and Support team,
- if the problem is a bug, an email will be sent to the user explaining that his problem is being studied and will be solved as soon as possible, a new high priority ticket will be open in the *redmine* server and assigned to one of the developers. Once the problem has been solved a new email will be sent to the user who asks for this problem to be solved.

If they don't have access to their mail, there is a form on the site (http://www.xipi.eu/contact-us). This form has some fields for contact information, in order to answer the question, and a text field to explain the issue or suggestion.

There is also a support forum (http://www.xipi.eu/forum) where all kinds of users will have their subforum, and the posts should be answered within the first 24 hours when they are posted. To handle these questions it will be one Forum Administrator and one Moderator for each subforum. The procedure will be the same as the emails. If possible the answer will be given by the Administrator or the Moderators, if it is not possible a new ticket will be open in the *redmine* and assigned to the person who is most suitable to solve it.

Finally there is a wiki (http://www.xipi.eu/support/) where all the documentation will be available for everyone to check it out. This wiki page should be up to date, with the latest documents available, and also will contain a faq section.

# 5. Conclusions

In this deliverable we documented the release of XiPi repository and provided an initial plan for testing and maintenance activities.

# 6. References

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# Appendix 1 Test Template

## A1.1 Unit, Integration test Template

| | | |
|---|---|---|
| Number # | Name | |
| Begin Date | End Date | Result |
| mm/dd/yyyy | mm/dd/yyyy | **Ok // Failed** |
| Pre-requisites | 1. Xxxx<br>2. xxxx | |
| Description | • | |
| Comments | • | |

## A1.2 Usability Test Template

| | | | |
|---|---|---|---|
| UC X | Task name | | |
| Test User | | Date | MM/DD/YYYY |
| Time spent | | Completed | Yes/no |
| Difficulty in completing the task (1-5 max) | | | |
| Comments | Please add your impressions about the appeal of the menus, the position of the links, and overall thoughts about the pages viewed during the performance of the task. | | |

# Appendix 2 Questionnaire

1. Name:

2. Consortium partner:

3. Position:

4. Do you have experience with any of the follow? Please select with an x.
__ HTML
__ Java
__ Web Design
__ CSS
__ Software Development

5. Describe INFINITY Web Portal in few words:

6. Where menus clear to perform your tasks? 1-10 (10 max)

Comments:

7. How intuitive and helpful is the navigation system? Please select with an x.
__ Very good
__ Good
__ Average
__ Bad
__ Very Bad

8. Task given could be performed in fewer than 5 clicks?

9. I have problems performing the tasks. Please select with an x.
__ Strongly agree.
__ Agree .
__ Indifferent.
__Disagree.
__ Strongly disagree.

Comments:

10. Name your three favourite things about the site, and your three least favourite

| Favourite | Less Favourite |
|---|---|
| | |
| | |
| | |

11. Will you change anything of the look & feel of INFINITY Web Portal?
If yes, explain yourself:

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