Trailer e-portfolio

Citation for published version (APA):

Janssen, J. (Author), Finders, A. (Author), Vogten, H. (Author), & Brouns, F. (Author). (2013). Trailer e-portfolio. Software

Document status and date:

Published: 28/10/2013

Document Version:

Peer reviewed version

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

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TRAILER e-portfolio installation

Workpackage 4 Definition of a Portfolio Component

Deliverable 11 Personal Portfolio Component

Deliverable 12 Peer finder to support user competence development

Contributors: José Janssen, Hubert Vogten, Anton Finders, Francis Brouns, Matija Obreza, Leon Schaeps, Harrie Martens

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Table of contents

ΓRAILER e-portfolio	3
TRAILER server installation	
TRAILER e-portfolio configuration in Liferay	
Preconditions	
Remark	
Configure administration environment	
Configure user environment	
Configure user pages	
Post installation configuration	24
Authorise OAuth clients	
Configure the TRAILER institutional client access	25
TRAILER database changes	





TRAILER e-portfolio

The TRAILER e-portfolio is implemented in the Liferay Portal environment and consists of a combination of standard Liferay portlets and custom build portlets. Liferay Portal is a java-based web platform. It requires a servlet container or application server. It can be downloaded as bundle, packaging Liferay, java and application server. The required version for the TRAILER e-portfolio is Liferay Portal 6.0 EE, bundled with Tomcat 6.0.23. Check the documentation at http://www.liferay.com/documentation/liferay-portal/6.0/getting-started for further details on how to get started. The downloadable bundled Liferay Portal uses an embedded HSQL as database, but for production systems this needs to be changed easily to a DBMS of choice. Follow the Liferay installation documentation for this. The TRAILER e-portfolio has been tested with MySQL 5.

TRAILER server installation

First this...

During some steps the portal-ext.properties (PEP) will have to be modified. After doing so, the server should be restarted to effectuate these changes.

Setup Liferay

- download and unzip LR 6.0.12 EE, the version bundled with Tomcat
- create database in MySQL (UTF8!!)
- (when needed) install MySQL JDBC driver
- in tomcat-6.0.32/conf/server.xml add attribute deployXML="false" to the <Host>
- additions to PEP (below)
- drop the developer key into the deploy directory
- deploy trailer WAR files
- start Liferay

Additions to PEP

Conform default Liferay installation, at least the Mysql specific properties need to be added to portalext.properties. Check the Liferay installation manual for all required changes, in addition to the ones mentioned below.

jdbc.default.driverClassName=com.mysql.jdbc.Driver jdbc.default.url=jdbc:mysql://localhost/\$DATABASENAME?useUnicode=true&characterEncoding=U TF-8&useFastDateParsing=false jdbc.default.username=liferay jdbc.default.password=liferay

TRAILER specific additions

permissions.user.check.algorithm=6

layout.user.private.layouts.enabled=false layout.user.private.layouts.modifiable=false layout.user.private.layouts.auto.create=false

layout.user.public.layouts.enabled=true layout.user.public.layouts.modifiable=false layout.user.public.layouts.auto.create=false





Install TRAILER custom projects

Deploy both TRAILER WARs on Tomcat, either through the Liferay Control panel, or by placing the WAR files in the deploy directory.

- $\hbox{``nl-openu-trailer-theme.WAR''}$
- "nl-openu-trailer-portfolio-portlet.WAR"
- This is the main TRAILER theme.
- This file contains a set of TRAILER custom build e-portfolio portlets.





TRAILER e-portfolio configuration in Liferay

Preconditions

- 1. Liferay is already installed and configured.
- 2. MySQL is already installed and configured.
- 3. TRAILER-portlets has been deployed on the Liferay server.
- 4. TRAILER-theme has been deployed on the Liferay server.

Remark

By deploying the TRAILER WAR, several TRAILER portlets become available for use. Some of these portlets are TRAILER e-portfolio administration portlets, while the others are end-user portlets. The TRAILER e-portfolio consists of a combination of these end-user TRAILER portlets with some of the default Liferay portlets. Because the portlets need to deal with personalised information, the portlets cannot be placed on regular Liferay community pages, but the e-portfolio end-user portlets have to be placed on the public pages of a user group. In addition, a standard Liferay community is required to provide some guidelines to the end-users and to administer and configure the TRAILER e-portfolio component.

Refer to the Liferay manual for creating communities, pages, placing portlets, users, roles, etc.

Use the following guideline to configure Liferay for the TRAILER e-portfolio.

- 1. Configure Administration Environment
- 2. Configure User Environment

Configure administration environment

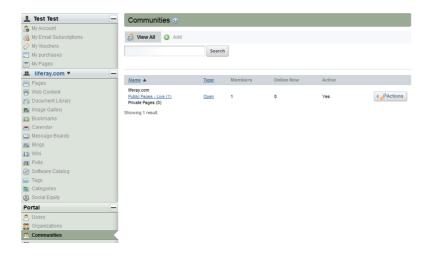
To configure a separate environment for installing the TRAILER administration tools we have to update the Liferay home community. In this community we will create a couple of pages where we will install the TRAILER administration portlets. This community will have a double function. Some pages are available to end-users, while others are specifically intended for the TRAILER administrator and never should be made available to end-users. Alternatively you can use to create a separate community specifically dedicated to the TRAILER administrator. This manual follows the easy route of a combined community, in which Home and OAuth confirmation should be accessible for end-users, and TrailerAdmin purely for the TRAILER administrator. The end-user pages do not contain any of the e-portfolio portlets, although the OAuth confirmation page is required to authorise the ILC to post into the e-portfolio.

TRAILER e-portfolio community

- Select Manage/Control Panel/Communities
- Select the default liferay.com community. This is the default Liferay homepage (see following screenshot).
- The name liferay.com can be changed via Control panel settings. Refer to the Liferay installation manual for this.







TRAILER e-portfolio community pages

Now we will add a couple of pages to this community.

- Select Manage/Control Panel/Communities
- Select at the action-menu of the "liferay.com" community the option "Manage pages"

Before we add new pages to the community we have to define the look and feel for the pages.

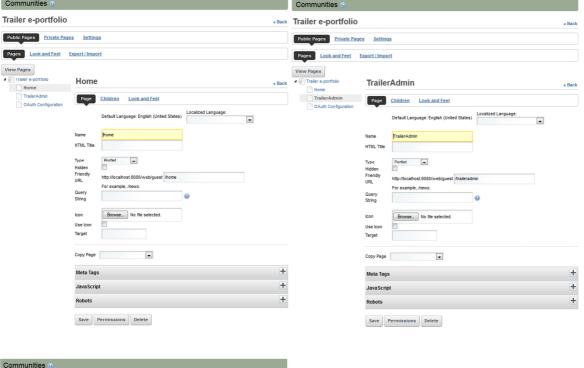
- Click on the link "Look and Feel"
- Select the TRAILER theme
- Select the Color Scheme "My Place". A message "Your request processed successfully" will be shown on top of the screen.
- Click on the link Pages to navigate back to the page editor.

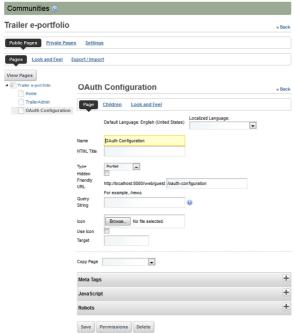
Add pages.

- You can either reuse the existing page Welcome, but then have to remove the example portlets
 from that page, or you create a new page Home (or Welcome) and remove the existing page. The
 Home page can be used to provide general information or instructions on how to use the eportfolio.
- Add 2 new pages "TrailerAdmin" and "OAuth Confirmation". Look for further details at the
 following screenshots. The TrailerAdmin page will contain portlets that are only intended for an
 administrator to configure authorisation to APIs. The OAuth Confirmation page should be
 accessible to end-users to authorise the ILC to post into the e-portfolio.









Within the next step we have to configure the access permissions for those pages.

• Select the "Home" page and click on the Permissions button. Ensure that all permissions are checked for the Owner, and that Community Member has the view permissions. By default permissions are set like this.



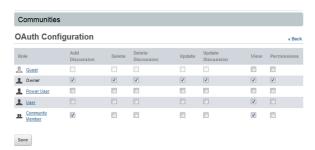




• Select the "TrailerAdmin" page and click on the Permissions button. Ensure that no role except Owner has permissions on this page. Ensure that Guest, User, Community member never have access to this page.



• Select the "OAuth Confirmation" page and click on the Permissions button. Ensure that Owner has all permissions and that Community Member and User have View permissions. This page is used by the OAuth authorisation from the ILC.



TRAILER administration portlets

Now that we have created the pages for the TRAILER e-portfolio community, we can install the trailer admin portlets on them.

- Select Manage/Control Panel/Communities
- Select in action menu of the "TRAILER e-portfolio" community the option "Manage pages"
- Click on the "View Pages" button. After that a new page will be opened on your browser.
- Remove the Sign on and Hello world portlet from the Home page.

[Optional] On the Home page you add a "Web content display" portlet. This is a Liferay out of the box portlet. This portlet can be used to give the visitors of this community an introduction about the TRAILER project and/or instructions on how to use the e-portfolio portlets.

Check if the "Home" page is selected

Step 1 Select page layout type by





- Select Manage/Page layout
- Select option "2 Columns (50/50)" and save.

Step 2 Install portlets

- Select Add (menu bar)
- Select "Web Content Display"
- Use the available controls to enter some explanation about the TRAILER project and use of the eportfolio, which will be visible for every visitor of this page.

Portlet installation for "TrailerAdmin" page.

• Check if the "TrailerAdmin" page is selected

Step 1 Select page layout type by

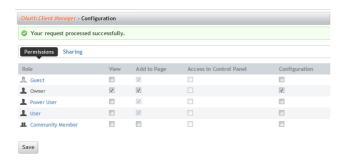
- Select Manage/Page layout
- Select option "2 Columns (50/50)" and save.

Step 2 Install portlets

- Select Add (menu bar)/ More....
- Search for "OAuth Client Manager" and add to the page.

Step 3 Configure permissions

• Select the "Configuration" option in the portlet menu bar. Confirm that the permissions are set in accordance to the next screenshot. In particular Guest should not have View permissions.



Portlet installation for "OAuth confirmation" page.

Check if the "OAuth Confirmation" is selected.

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlets

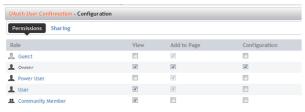
- Select Add (menu bar)/ More....
- Search for "OAuth user confirmation" and add to the page.

Step 3 Configure permissions

• Select the "Configuration" option in the portlet menu bar. Confirm that the permissions are set in accordance to the next screenshot.













Configure user environment.

The TRAILER e-portfolio consists of a number of portlets. Each portlet is responsible for a different part of the e-portfolio functionality. In Liferay there is a concept which gives you the ability to create web pages on which you can install and configure portlets. However, as the e-portfolio portlets need to deal with personalised data, the portlets need to be placed on a personal user environment. So let us start creating the user pages.

User group

Before we can start creating the pages we have to define a user group. This user group will contain all the user pages including the required portlets. By assigning a new user to this user group he/she will get all preconfigured pages at the moment he/she logs in for the first time. It is important that this user group and its user pages are created before any users are created, because the pages will not become available for existing users.

First we create a user group.

- Select Manage/Control Panel/User Groups/Add
- Enter a name for example "MP_Trailer".
- Enter a short description like "Trailer public user pages"
- Select "None" for Public Pages
- Select "None" for Private Pages
- Save the content.

Define default user pages

Next step is to define the public user pages for this User Group.

- Select Manage/Control Panel/User Groups
- Select user group "MP_Trailer"
- Select Actions/Manage Pages

Before we add new pages to the user group we have to define the look and feel for pages.

- Click on the link "Look and Feel"
- Select the TRAILER theme
- Select the Color Scheme "My Place". A message "Your request processed successfully" will be shown on top of the screen.
- Click on the link Pages to navigate back to the page editor.

Add the following new pages to MP_Trailer:

- "Overview"
- Add a child page with the name "OAuth Manager" to the page "Overview".
- "Competences"
- "Activities"
- "Showcase manager"
- "Showcases"
- "Peer recommender"

The additional fields of each of those pages have to be set to the following values:

Template: None
Type: Portlet
Hidden: <unchecked>





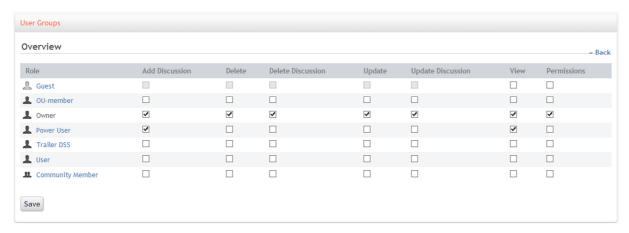
After we have created the public user pages we have to configure each page.

Overview page

Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Overview" and switch from children to Page. Change Friendly URL to "/Home".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular remove the View permissions from Guest and save.

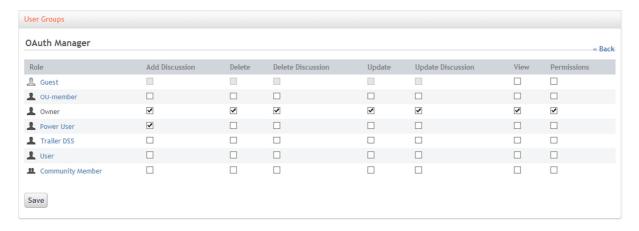


OAuth Manager page

Select Manage/Control Panel/User Groups/Manage Pages

Click on the "OAuth Manager" and switch from children to Page. Change Friendly URL to "/oauth-manager".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular remove the View permissions from Guest and save.



Competences page

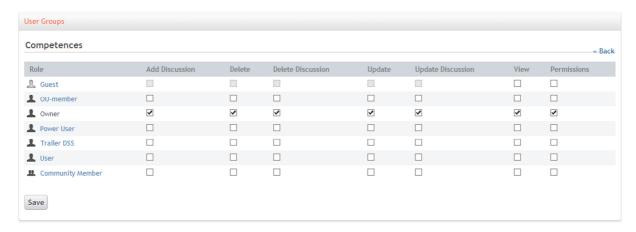
Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Competences" and switch from children to Page. Change Friendly URL to "/competences".





Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular remove the View permissions from Guest and save.

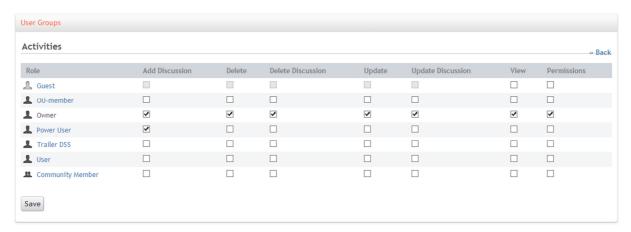


Activities page

Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Activities" and switch from children to Page. Change Friendly URL to "/activities".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular remove the View permissions from Guest and save.



Showcase manager page

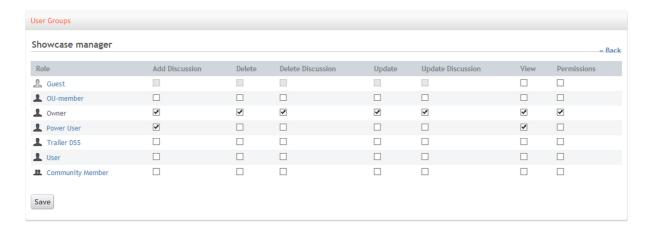
Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Showcase manager" and switch from children to Page. Change Friendly URL to "/showcase-manager".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular remove the View permissions from Guest and save.





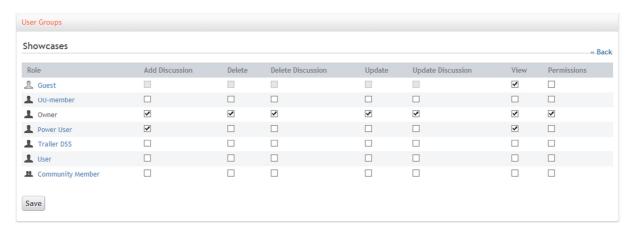


Showcases page

Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Showcases" and switch from children to Page. Change Friendly URL to "/showcases".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular ensure that the View permissions for Guest are set and save.



Peer recommender page

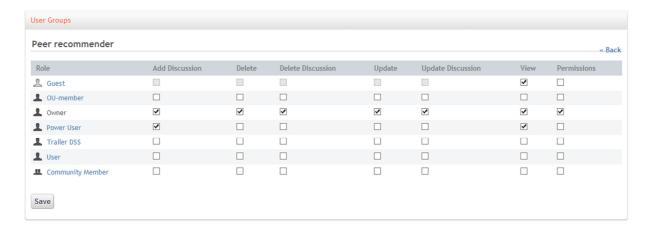
Select Manage/Control Panel/User Groups/Manage Pages

Click on the "Peer recommender" and switch from children to Page. Change Friendly URL to "/peer-recommender".

Next click the Permissions button at the bottom of the screen. Set all permissions as shown in the image below. In particular check that the View permissions for Guest are set and save.







Add portlets to the user group pages

Now we get to the point where we can add standard Liferay and TRAILER e-portfolio portlets to the individual pages.

Overview page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Overview page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "2 Columns (30/70)" and save.

Step 2 Install portlets

- Select Add (menu bar)/More...
- Search for "Tag Cloud" and click on Add
- Search for "Asset Publisher" and click on Add

After this, the page should look like this screenshot. You can drag and drop the portlets if they are positioned on a different location. You also can change the title via the portlet configuration menu.



OAuth Manager page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the OAuth Manager page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlet





- Select Add (menu bar)/More...
- Search for "OAuth Tokens" and click on Add

After this the page should look like this screenshot. You can drag and drop the portlet if its position is on a different location. You also can change the title via the portlet configuration menu, option Look and Feel.



Competences page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Competences page

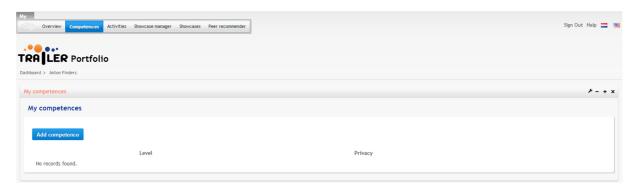
Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlet

- Select Add (menu bar)/More...
- Search for "Competence editor" and click on Add

After this the page should look like this screenshot. Refresh the page when you see a message about the portlet being temporarily unavailable. This is a one-off action. You can change the title via the portlet configuration menu, option Look and Feel.



Activities page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Activities page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlet





- Select Add (menu bar)/More...
- · Search for "Informal Learning Activity Editor" and click on Add

After this the page should look like this screenshot. Refresh the page when you see a message about the portlet being temporarily unavailable. You can change the title via the portlet configuration menu, Look and Feel option.



Showcase manager page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Showcase manager page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlet

- Select Add (menu bar)/More...
- Search for "Portfolio Showcase Editor" and click on Add

After this the page should look like this screenshot. Refresh the page when you see a message about the portlet being temporarily unavailable. You can change the title via the portlet configuration menu, Look and Feel option.



Showcases page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Showcases page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.



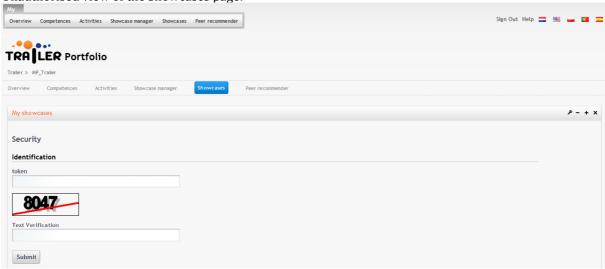


Step 2 Install portlet

- Select Add (menu bar)/More...
- Search for "Portfolio Showcase Viewer" (category trailer) and click on Add

After this the page should look like this screenshot. Refresh the page when you see a message about the portlet being temporarily unavailable. You can change the title via the portlet configuration menu, Look and Feel option. The administrator sees this page as unauthorised user and sees the identification page; the end-user sees a list of personal showcases.

Unauthorised view of the Showcases page:



End-user view of Showcases page:



Peer recommender page

- Select Manage/Control Panel/User Groups/Manage Pages
- Select the Peer recommender page

Step 1 Select page layout type by

- Select Manage/Page layout
- Select option "1 Column" and save.

Step 2 Install portlet

- Select Add (menu bar)/More...
- Search for "ILA Recommender" and click on Add

After this the page should look like this screenshot. Refresh the page when you see a message about the portlet being temporarily unavailable. You can change the title via the portlet configuration menu, Look and Feel option.



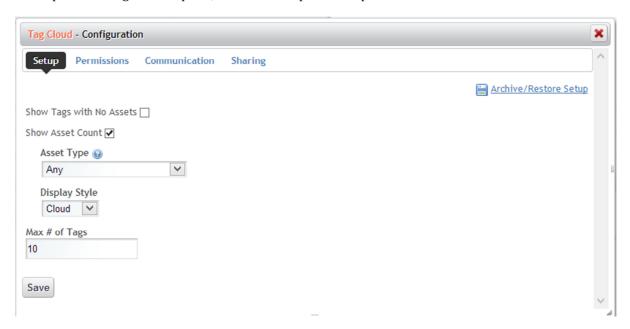




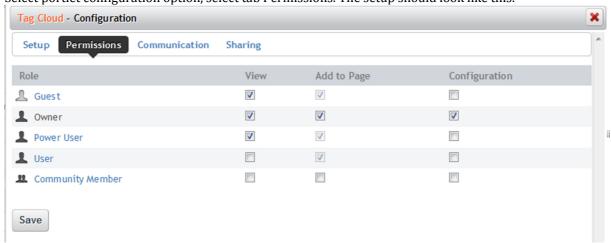
Portlet configuration

Tag Cloud Portlet (Overview page)

Select portlet configuration option, select tab Setup. The setup should look like this.



Select portlet configuration option, select tab Permissions. The setup should look like this.

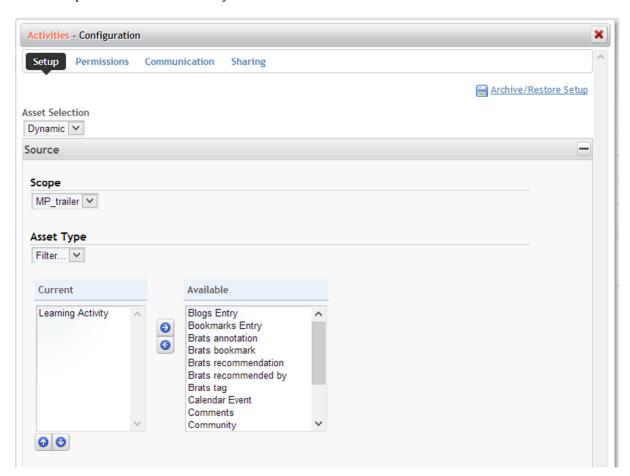




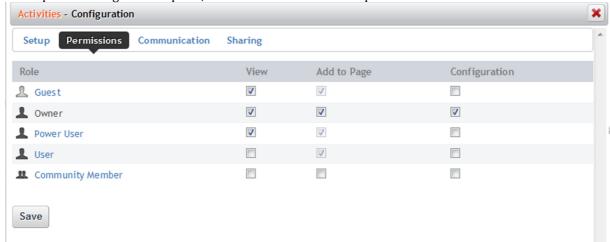


Activities (Overview page)

Select portlet configuration option, select tab Setup. Set Asset type to Filter and filter on Learning activity. All other options can remain as set by default.



Select portlet configuration option, select tab Permissions. The permissions should be set as shown below.

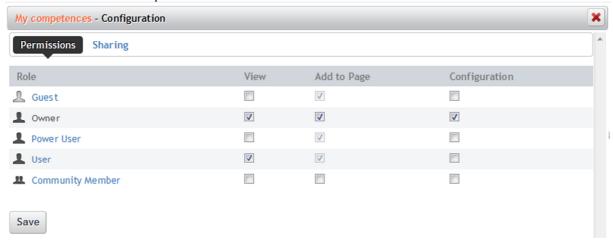






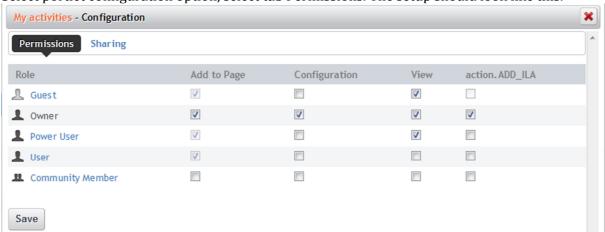
My Competences (Competences page)

Select portlet configuration option, select tab Permissions. The setup should look like this. Ensure that Guest does not have View permissions.



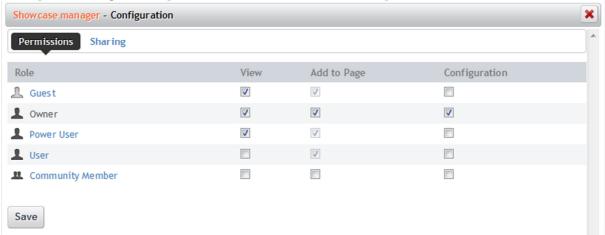
My Activities (Activities page)

Select portlet configuration option, select tab Permissions. The setup should look like this.



Showcase manager (Showcase manager page)

Select portlet configuration option, select tab Permissions. The setup should look like this.

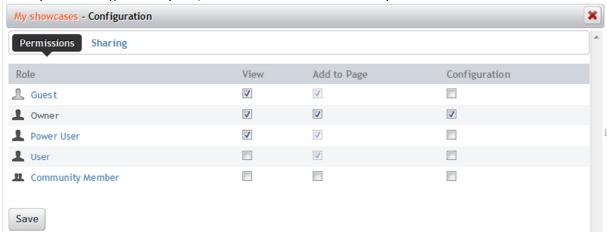






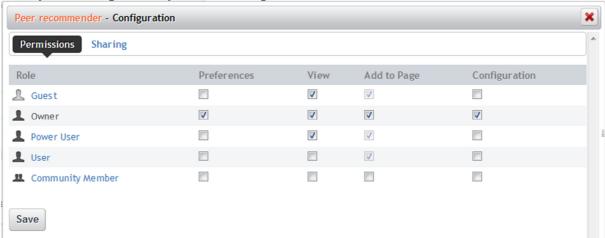
Showcases (Showcases page)

Select portlet configuration option, select tab Permissions. The setup should look like this.

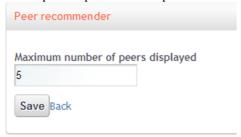


Peer recommender (Peer recommender page)

Select portlet configuration option. The settings should look like this.



Select portlet preferences option. The settings should look like this.





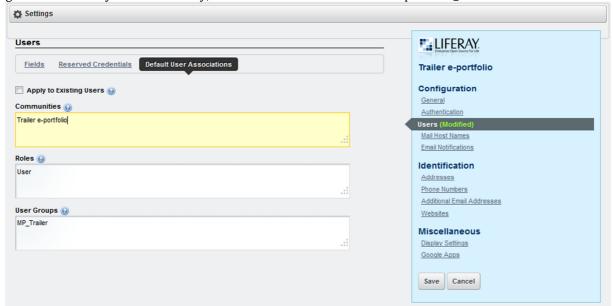


Configure user pages

Now we have to configure the server that when a user logs in the first time his personal environment with pages and portlets will be created for him or here. To configure that follow the next instructions.

- Select Manage/Control Panel/Settings
- Select User on the (blue) right panel
- Select the tab Default User Associations

The screen should be similar to this. In particular ensure that Communities shows the name you have given to the liferay.com community, Roles is set to User and User Groups to MP_Trailer.



Save your changes.





Post installation configuration

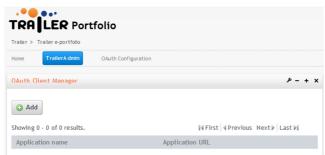
After installing the e-portfolio components, you need to set various tokens for the APIs, authorise clients to connect to the e-portfolio and associate users with an institution. Some of these actions require manual updates of the database.

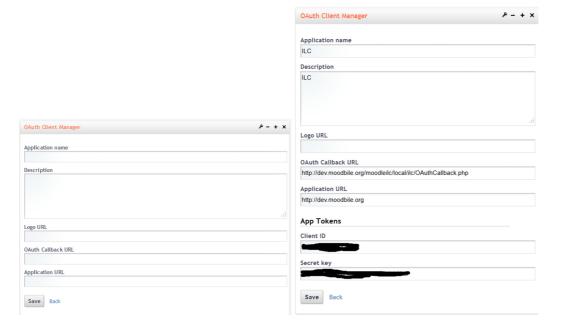
Authorise OAuth clients

Currently there is one OAuth consumer, i.e., the ILC that needs to be authorised to put data into the e-portfolio.

- Go to the community you have created.
- Access the page TrailerAdmin.
- Click on Add (see screenshot)
- Fill in the required fields
 - Application name: give the name of the application that is allowed to connect, e.g. ILC
 - Description: give a short description
 - Logo URL: a logo can be shown, but needs to be uploaded first
 - OAuth Callback URL: obtain this URL from the administrator of the client that needs to be authorised, e.g. from the ILC administrator.
 - Application URL: obtain this URL from the administrator of the client that needs to be authorised, e.g. from the ILC administrator.
 - Save

The system now generates a Client ID and secret key. The Client ID and the secret key are needed by the ILC application to communicate with the portfolio via OAuth.









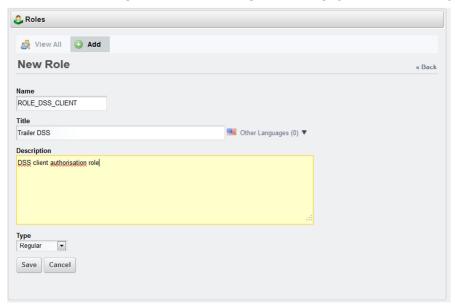
Configure the TRAILER institutional client access

To allow the TRAILER institutional client (DSS) to obtain data from the e-portfolio, a dedicated Liferay role needs to be defined. At least one dedicated user needs to be allocated to this role, but other users can be allocated for other clients. The API call verifies on email address.

Create the ROLE_DSS_CLIENT role

- Select Manage/Control Panel/Roles
- Click on Add (top of screen)
- Fill in the fields
 - New Name: Enter the name of the role exactly as: ROLE_DSS_CLIENT
 - Title: give a title, e.g. Trailer DSS
 - Description: give a description
- Save

This role will show up as Trailer DSS in all permissions pages, but should not get any permissions at all.

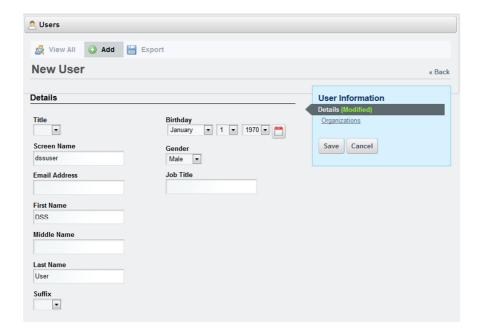


Create the DSS User useraccount

- Select Manage/Control Panel/Users
- Click on Add (top of screen)
- Fill in the fields
 - Screen Name: as this is a required field by Liferay a screenname needs to be provided.
 - Email Address: provide an email address for this user. The email address is used in the API
 call to verify the user.
 - First Name: enter the first name as DSS.
 - Last Name: enter the last name as User.
- Save
- Provide a password
- Save



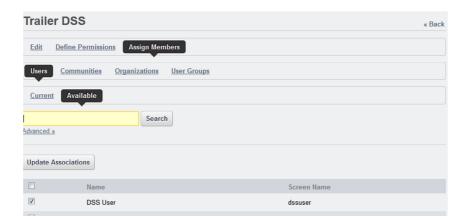




Allocate DSS User to role

The DSS user needs to be allocated to the ROLE_DSS_CLIENT role.

- Select Manage/Control Panel/Roles
- At the Actions button of the role Trailer DSS, select Assign Members
- Click on Available
- Find the DSS User and tick the selection box.
- Click on Update Associations



TRAILER database changes

The database tables need to be updated to enter the adminToken and userToken for the Competence Catalog API and to associate the user with an institution.

Competence Catalog API

Precondition

Obtain the adminToken and the userToken for the institution you want to add from the administrator of the Competence Catalog component. These tokens are used for encrypting or decrypting the data traffic in





a per institution unique way between the TRAILER e-portfolio component and the central Competence Catalog component.

Add institution

Within MySQL you must add an entry within entity "trailer_institution".

institutionId this is an unique entity entry id. You can use any number as long as it is

unique. It is recommended to start with 1 and increment by 1 for each

additional entry.

trailerInstitutionId this is an unique institutionid. You can use number as long as it is unique. It is

recommended to start with 1 and increment by 1 for each additional entry. The trailerInstitutionId is also used by the institutional environment and

should be equal in both environments.

Name the name of the institution

adminToken token obtained userToken token obtained

Associate user with institution

After user accounts have been created, users have to be connected to an institution.

Precondition

• The user is already created within Liferay.

• Before we can create a new account mapping, we have to know what the userId and email address of the newly created Liferay user is. You can find the userId and email address by searching for the user in the Liferay administrator console. Look up the id of the user in the editor screen.

Add record to trailer accountmapping

userId userId (see precondition)

userToken the email address of the user (see LR user management)

institutionId the corresponding institutionId of entity "trailer_institution"