

*Desire2Learn*   
**Learning Repository**

**Learning Object Repository 3.9.6  
with addendum for 4.0**

User Guide  
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**eLearning** *your way*

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305 King Street West, Suite 200  
Kitchener, Ontario  
N2G 1B9 Canada

[www.Desire2Learn.com](http://www.Desire2Learn.com)

Please send feedback on Desire2Learn documentation to: [Docs@Desire2Learn.com](mailto:Docs@Desire2Learn.com).

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## About this guide

This guide describes how to use the Desire2Learn Learning Repository from the perspective of a user publishing objects to an LOR or retrieving objects from an LOR.

**Important** Access to features in Desire2Learn Learning Repository is dependent on your permissions. You might not have sufficient permissions to access all of the features described in this guide.

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## Related Guides

Guides are available from the Documentation Library on the Desire2Learn Community website: <http://community.desire2learn.com>. You must have a username and password to access this site. Please email your Account Manager if you require access.

## What is the Learning Repository?

Online Learning Object Repositories (LORs) make learning resources more accessible through the creation and availability of shared information resources.

The Desire2Learn Learning Repository is an online library of learning objects and associated files. An LOR is a combination of topics, modules, and assets that have been tagged with specific metadata to make them accessible to multiple users.

### Glossary of Terms

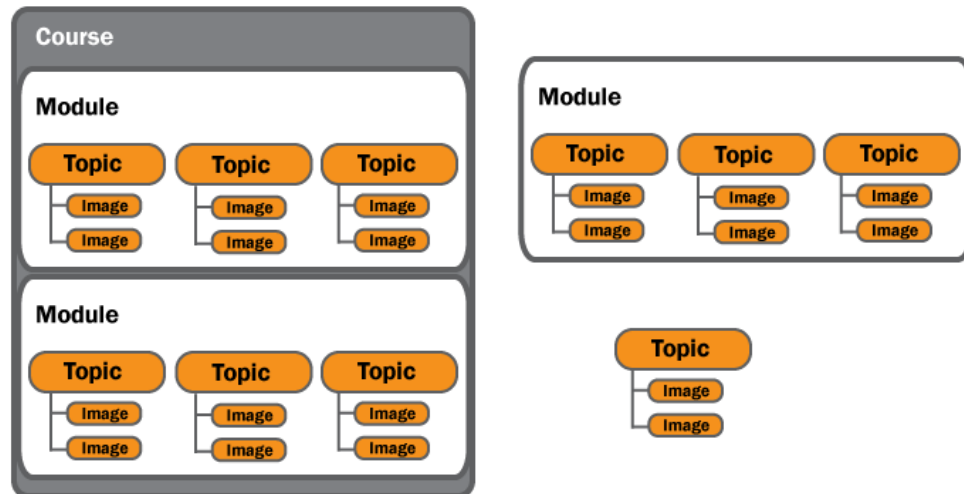
The following table is an alphabetical listing of essential LOR terms.

Term	Definition
Asset	An <b>asset</b> is an individual file with no associations. It is not considered a learning object, but must be handled by the LOR (e.g., a GIF file or a WAV file included in an HTML topic).
Course	A collection of <b>modules</b> .
Learning Object Repository (LOR)	An LOR is a library of stand-alone learning objects users can publish learning objects to or access learning objects from (e.g., <b>modules</b> , <b>topics</b> , or <b>courses</b> ).
Learning Object	An object or collection of objects that assists in the learning process (e.g., a <b>file</b> , a <b>topic</b> , a <b>course</b> , etc).
Module	A collection of <b>modules</b> and/or <b>topics</b> .
Metadata	A definition or description of data or “data about data.” The Learning Repository only accepts metadata tags created using the IEEE LOM MAP (Metadata Application Profile). All searches use the IEEE LOM metadata fields.
Topics	<b>Topics</b> are simple file associations (e.g., a PowerPoint file, an HTML file, a multimedia file, a URL, etc). Topics have no children of their own and cannot be children of a <b>course</b> (only of a <b>module</b> ). A topic can contain an <b>asset</b> ; modules and courses cannot.
Complex Learning Object	A learning object that can have sub-objects (i.e., a module or a course).

## What is stored in the LOR

Learning object repository (LOR) is a general term for an online collection of Learning Objects. A learning object is an object or collection of objects that assists in the learning process (e.g., a topic, a module, a course, etc).

A course is a collection of modules, and a module is a collection of modules and topics. Topics have no children and cannot be descendants of a course. Topics are simple file associations (e.g., a PowerPoint file, an HTML file, a multimedia file, a URL, etc).



Examples of Learning Objects

An asset is an individual file without associations, and is not considered a Learning Object, but must be handled by the LOR (e.g., a GIF file included in an HTML topic). Within the LOR, a topic can contain an asset, but modules and courses cannot.



Examples of Learning Assets

## Accessing the LOR

The LOR is directly accessible through the navbar. The LOR connects to the Learning Environment through the following:

- The Files area enables you to search, publish and retrieve objects.
- The Content tool enables you to search, publish and retrieve objects.

- The Course Management tool enables you to search and retrieve objects as part of the last step in creating a new course offering.
- The Import/Export/Copy Course Components page enables you to search and retrieve objects as part of the last step in creating a new course offering.

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## Metadata and learning object repositories

Metadata is data about data; a collection of descriptors used to describe a single quantity of information. It enables you to attach descriptive tags to your learning objects and assets to provide a searchable context for the content you publish. Metadata can make the learning objects easier to find.

You can add metadata prior to publishing an object to the LOR. After attaching metadata to a learning object or an asset in the LOR, you cannot change it in the LOR itself. To update the metadata of a learning object or asset inside the LOR, edit the metadata on the original object and then overwrite the version of the learning object or asset in the LOR with the version containing the new metadata.

While the function of metadata is very powerful, the processes involved in creating and managing it are fairly simple to understand and implement once you familiarize yourself with them.

For more information about metadata, refer to the *Metadata User Guide* document.

## Publishing learning objects and assets to a repository

You can easily publish learning objects/assets to an LOR if the learning object/asset resides in the Files area or **Content** tool. Publishing a module or course also publishes any topics or modules within that module or course. Publishing an asset such as an HTML file will also publish all of the assets that it links to (e.g., images, media files, etc).

If you want to publish an object directly from your PC, it must already be formatted in SCORM 1.2 format. This doesn't apply to files you want to publish as assets.

### Publicly available learning object repositories

You can make learning objects available to users who don't have IDs and passwords for the Learning Environment. This is beneficial if you want to open the learning object to metadata harvesting. When you create a new object, or edit an existing one, you can choose whether to make it externally available.

Users outside the Learning Environment cannot see object files or details for a publicly available learning object.

External availability requires the `D2l.tools.LOR.AllowExternalAvailabilityEdit` configuration variable.

### Ensuring a package's compliance with restrictions

The Learning Repository scans for assets on all content you are publishing to find linked files, such as images, media assets, and other HTML pages.

Limitations to the asset scanning are:

- The asset grabber only scans HTM, HTML, JS, and INC files for assets.
- The Learning Repository only packages GIF, PNG, JPG, BMP, CSS, SWF, INC, JS, DOC, FLA, PDF, PPT, TXT, MOV, WAV, WMV, ASF, MPG, RAM, MP3, RM, PK, HTM, HTML files for publication.
- Only syntactic JavaScript matches are made by the asset grabber, not semantic matches, and only in a **window.open** call. For example, if you pass a file name to a function that calls **window.open** on that file name, the file is not packaged because the file name was not in the **window.open**, only the variable name was there.

**Note** You can manually add any file that the scanner did not automatically include. The files that you add become part of the learning object.

- The scanner skips links to web files (e.g., www.google.com), non-existent files, or files without extensions.


## Publishing learning objects from course content

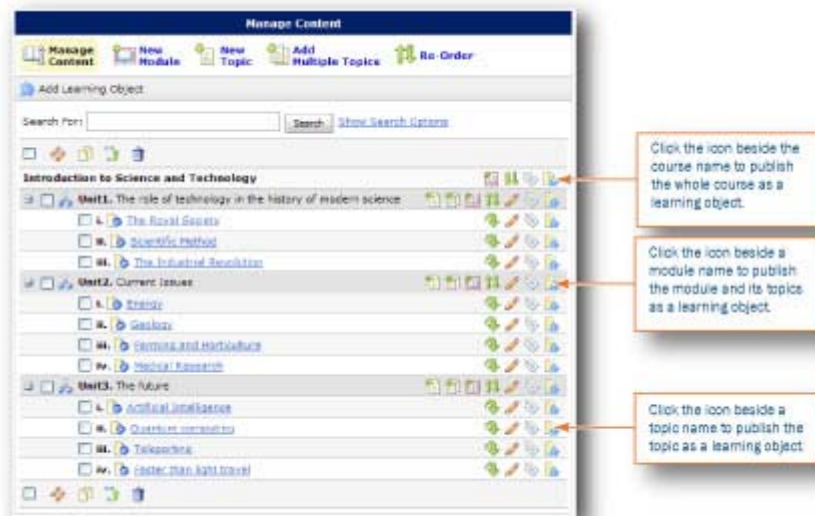
You can publish the following types of learning objects to an LOR from the Content Manager:

- Course
- Module
- Topic

When you choose to publish a module or course, the LOR publishes all children of that module or course as a single package.


### ► To publish a learning object (topic, module or course)

- 1 Go to the course you want to publish, or from which you want to publish a module or topic.
- 2 Click **Content** on the navbar to open the Manage Content page.
- 3 Click the  **Publish to LOR** icon for the topic or module that you want to publish, or at the top of the list to publish the whole course.



Manage Content with the Publish to LOR icons shown

- 4 Select one of the following:
  - Click **Create a new object** and select a repository from the **Destination repository** drop-down list.


- Click **Overwrite an existing object** and **Search** to find the learning object you want to overwrite.
- 5 If you want to hide the learning object, select **Hide learning object**. You can change this option once the object is published to the LOR.  
**Note** Only you and users with sufficient permission can view your hidden learning objects.
  - 6 If you want to make the object available publically to users without an ID and password to the Learning Environment, select the **Make Learning Object publicly available for viewing** checkbox.
  - 7 If you want to remove items from the package, clear the checkboxes next to topics or modules you do not want to publish. Clearing a module clears all its associated topics and sub-modules.
  - 8 If you want to add, edit or delete metadata, click  **Edit Metadata**. For details on editing metadata, refer to the *Metadata User Guide* document.  
**Note** The LOR automatically populates the metadata IEEE LOM title field with the name of the topic, module or course (unless a title already exists).
  - 9 Click **Next**.
  - 10 Verify that additional assets files are included.
    - To add more files, click **Add Files**.
    - To delete files, click the **delete** icon next to the files you want to delete.
  - 11 Click **Publish**.

---


## Publishing learning assets from Course Content

Instead of publishing a learning object and all of its associated files, you might want to publish a single asset (e.g., a graphic) from a course that would be useful to multiple users or departments.

► **To publish an asset (file)**

- 1 Go to the course containing the file you want to publish.
- 2 Do one of the following:
  - Click **Edit Course** on the navbar, then click **Files**.
  - In the Org Unit Administration widget on the course homepage, click **Files**.
- 3 Select the file you want to publish and click the  **Publish** icon.
- 4 Select one of the following:
  - Click **Create a new object** and select a repository from the **Destination repository** drop-down list.

- Click **Overwrite an existing object** and **Search** to find the learning object you want to overwrite.
- 5 If you want to hide the learning object, select **Hide learning object**. You can change this option once the object is published to the LOR.
 

**Note** Only you and users with sufficient permission can view hidden learning assets.
  - 6 If you want to make the object available publically to users without an ID and password to the Learning Environment, select the **Make Learning Object publicly available for viewing** checkbox.
  - 7 If you want to add, edit or delete metadata, click  **Edit Metadata**. For details on editing metadata, refer to the *Metadata User Guide* document.
 

**Note** When publishing an asset from the Files area the metadata IEEE LOM title field automatically populates with the asset's file name unless a title already exists.
  - 8 Click **Publish**.

## Publishing directly from your PC

If you have a SCORM 1.2 compliant content package (on your PC or in another location) you can publish it directly to the LOR. You can also publish files that are not part of a content package to the LOR. These files become assets once you publish them.

**Note** The LOR does not support publishing SCORM 2004 content directly from your PC.

## Formatting metadata for publishing packages

An object's metadata can be located under any applicable element in the manifest file, depending on the type of object and whether the object is a sub-element in the file. Manifest- and organization-level metadata is applied to the highest level object in the package. Metadata for modules can also appear at the item level, and metadata for topics or assets can appear at the item or resource level. A package is identified as a module if there is only one child <item> tag underneath the <organization> tag, and that <item> tag has at least one child <item> tag of its own.

Where object metadata can appear

Object	Object is package type	Object is package sub-element
Course	manifest, organization	n/a
Module	manifest, organization, item	item
Topic	manifest, organization, item, resource	item, resource
Asset	manifest, organization, item, resource	item, resource


If metadata for a single object is found under multiple elements, the LOR uses the following order of precedence: <manifest>, <organization>, <item>, <resource>.

For example, if you are uploading a content package consisting of a module with three topics and there is metadata under the <manifest> element and under the highest <item> element, both applicable to the module. The upload utility takes the metadata from the <manifest> element and discards the metadata from the <item> element. Say that one of the topics in the package has metadata under its <item> element and also under the associated <resource> element; in this case the LOR uses the metadata for the <item> element and that for the <resource> element discarded.

More information on metadata is available in the *Metadata User Guide* document.

► **To publish directly to the LOR**

- 1 Do one of the following:
  - Click **LOR** in the navbar then **Publish** in the top tool menu.
  - Click Publish to LOR in My Admin Tools on My Home.
- 2 Select a **Destination Repository** from the drop-down list.
- 3 Click **Browse** and locate the package or file that you want to publish to the LOR.
- 4 If you want to hide the learning object/asset, select **Hide learning object**. You can change this option once the object/asset is published to the LOR.

**Note** Only you and users with sufficient permission can view hidden learning objects and assets.
- 5 Click **Publish**.
- 6 If you want to add metadata to an asset, which Desire2Learn recommends, click the  **metadata** icon:
  - a) Complete the fields in the pop-up.
  - b) Click **Save**.
- 7 Click **Continue**.

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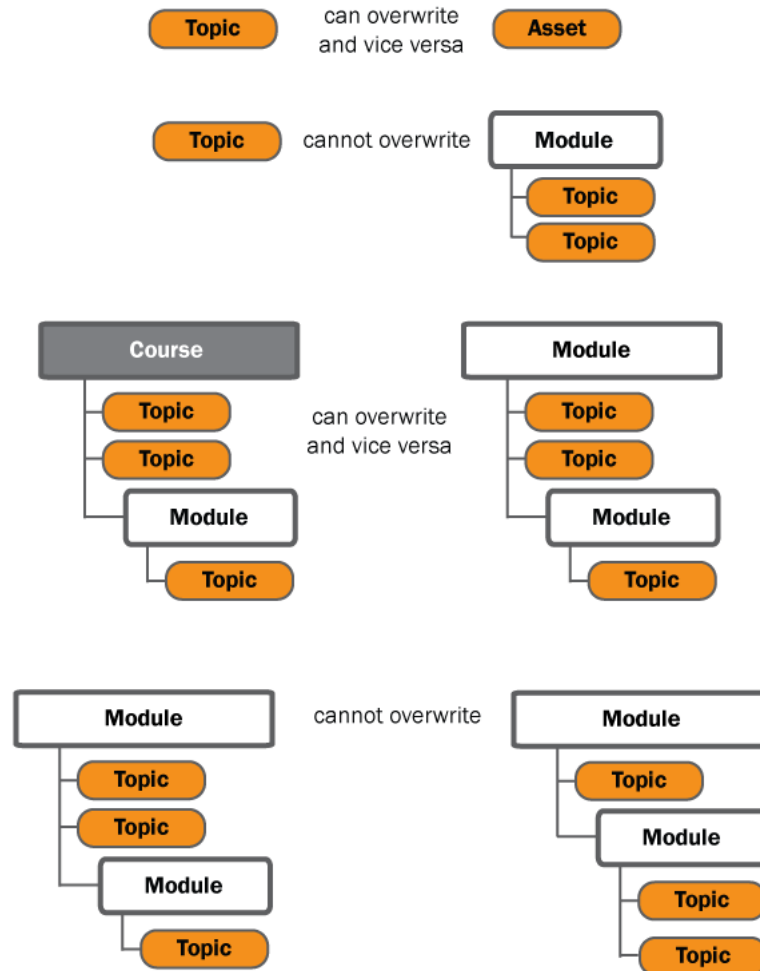
## Overwriting Learning Objects and Assets

The process of overwriting replaces, but does not delete, an existing learning object or asset in a repository. In effect, overwriting creates a new version of the learning object or asset.

The new object must have the same structure as the object it replaces. You can overwrite one module with another module, but you cannot overwrite a topic with a module. Desire2Learn recommends that you only overwrite an asset or a topic with a file of the same type (e.g., image, shockwave, etc.).

The new object appears in all searches. The overwritten object no longer appears in searches. All existing dynamic links point to the new object, however, locked links continue to point to the old object. For more details on dynamic and locked links, refer to *Retrieving Objects from the LOR*, p. 23.

**Caution** Do not overwrite a learning object or asset with a link to itself, as this may result in a circular reference.



Examples of structure matches and structure mismatches for overwriting.

# Finding Learning Objects in the LOR

## Performing a search

The Search page is the default search method when you access the Learning Repository. The search gives you results based on occurrence of your search words in a learning object's title, description or keywords.

Searches are case insensitive and results include all the words that you type in the **Search For** field. For example, if you search for mineral sciences the results include matches for both mineral and sciences. However, the matches do not necessarily have mineral sciences included as a phrase.



### ► To perform a basic search

- 1 Do one of the following:
  - Click **LOR** in the navbar.
  - From the Manage Content page, click **Add Learning Object**.
  - From the Files area, click **Retrieve Object**.
- 2 Type your search terms in the **Search For** field. Enclose phrases with quotation marks. Use "OR" to search for instances of one word/phrase or another by adding "OR" (uppercase, no quotes).



**Note** You can leave this field blank if you use the **Rating** and/or **Publish Date** operators in **Show Search Options**.





- 3 If you want to narrow your search, click **Show Search Options** and do any of the following:
  - Limit the search using the **Title**, **Description** or **Keyword** fields.
  - Choose specific repositories, listed under **Local Repositories** and **External Repositories**, to search.
  - Choose any of the other fields to search on, if required, such as **Status**, **Rating**, and **Publish Date**.
- 4 Click **Search**.

**Note** The number of actions you can access might vary between learning objects, depending on your permissions in the LORs in which the learning objects reside.

If you see the  **LO/Asset Hidden** icon next to a learning object or asset, that object is hidden from other users. You can always see hidden objects that you published. Objects from federated repositories are listed with the  icon beside their title.

From the search results, you might be able to:

- Click the learning object's name to view it.
- Click  **View Details** to view the details of the learning object or asset including:
  - overview of the modules and topics that make up the learning object (its sub-objects)
  - the metadata belonging to the learning object or asset and its sub-objects
  - event logs detailing the activity for the learning object or asset
  - reviews of the learning object or asset
  - the files that the object is composed of
- Click  **Retrieve Object** to open the retrieve object page. From this page you may be able to:
  - create a dynamic or locked link to the object
  - import the object into the Content tool keeping navigational structure of the object intact and creating a copy of all associated files in your course files
  - import the files of the learning object or asset to your course files folder, but without the object's navigational structure
  - download the learning object or asset to your desktop as a content package


**Note** For objects from MERLOT, you can only create locked links.
- Click  **Edit** for a single object, or select multiple learning objects or assets and click the  **Edit** icon at the top or bottom of the list of results to edit the following properties:
  - repository the object currently resides in
  - status as Unassigned, Draft, In Review, Approved or Archived
  - visibility
- Click  **Delete** for a single object, or select multiple learning objects or assets and click the  **Delete** icon at the top or bottom of the list of results to delete the learning objects or assets and all previous versions.

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## Performing an Advanced Local Search

The advanced local search enables you to specify more criteria for retrieving LOR content than the basic search, however it only searches local repositories and harvested metadata. This feature is especially useful if your LOR has a large amount of content on the same subject.

► **To perform an Advanced Local Search**

- 1 Click  **Advanced Local Search** in the top tool menu.
- 2 Select a Metadata category from the **Field (IEEE LOM)** drop-down list.

**Tip** You can purchase a complete list of available metadata categories, and definitions, from IEEE (<http://iee.org>).

The field associated with the metadata category is either a text box or drop-down list. For text boxes, the search string follows the same rules as those for a basic search.

- 3 If you want to narrow your search of the metadata:

Option	Procedure
Add further metadata categories to refine your search.	Click the <b>Add</b> link.
Remove metadata categories.	Click <b>Remove</b> or <b>Remove All</b> .
Make a metadata category mandatory in the search.	Click the <b>Required</b> checkbox. The search only returns results that match your criteria for this category. Clear the <b>Required</b> checkbox to make the category optional. (The search returns results that match your criteria for this category but also returns results that do not match these criteria if they match other specified criteria.)
Choose the repositories you want to search.	Click the checkboxes for the relevant Learning Repositories.

- 4 If you want to further narrow your search:
  - Select the status of the learning objects or assets that you want to find.
  - Select the rating of the learning objects or assets that you want to find.
  - Select the types of learning objects that you want to find.
  - Limit Results to learning objects/assets that you created.
  - Search the metadata of a learning object's sub-objects.
  - Select the date range during which the learning objects or assets were published.
- 5 Click the **Search** button.

## Changing what is displayed in search results

You can choose the fields that the LOR displays in the search results.

► **To change settings for the search results**

- 1 Click  **Settings** in the top tool menu.

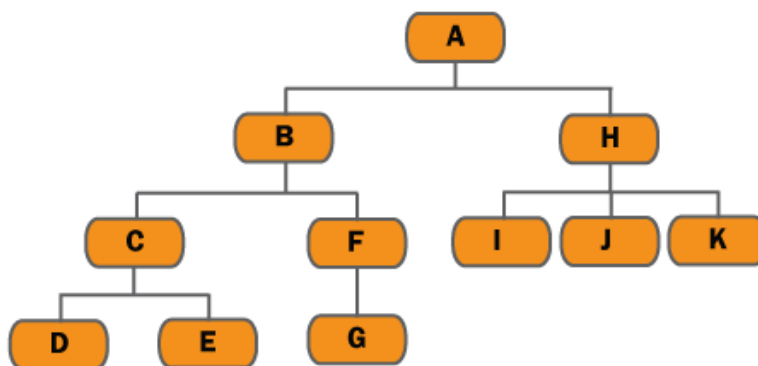
- 2 Select what fields you want displayed.
- 3 Click **Save**.

## Browsing Content

Category Browse presents a directory view of objects in the LOR that are classified according to the IEEE LOM Classification Taxonomy fields.

Organizations can choose to set up predefined schemas through the Metadata Administration page to classify learning objects. The classification organizes the objects according to a hierarchical or tree structure. Individual learning objects in the tree are nodes, and the path from the root node to any other node is a classification taxonomy path (or taxon path).

Category Browse enables you to traverse this hierarchy of learning objects. At any level in the hierarchy, you can search for all learning objects classified at that level and below. This includes objects from external repositories whose metadata has been harvested.





Example of a Classification Taxonomy Path hierarchy

For example, in the above diagram:

- Searching on “A -> B” will retrieve all learning objects classified within B, C, D, E, F and G
- Searching on “A -> B -> F -> G” will retrieve all learning objects classified within G
- Searching on “A -> H” will retrieve all learning objects classified within H, I, J and K

### ► To browse the LOR

- 1 Click  **Category Browse** in the top tool menu.
- 2 In the **Classification Schema** drop-down menu, select the schema to browse.
- 3 In the taxon list, click the name of a taxon to browse that taxon path.

- 4 Click the  **Browse** icon to the right of any taxon to search on that taxon path. The search results show you all learning objects classified at the level of this taxon path or lower.
- 5 To change your browse path, click **Refine your existing browse path**.
- 6 To start over, click **New Browse**.



From the Search Results (Category Browse), depending on your permissions, you can perform the same actions as those for any LOR search results. Refer to *Performing a search*, p. 15.

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## Viewing Learning Object and Asset Details

### Viewing an Object's Structure

On the View Contents page you can see the complete structure of the learning object or asset. This is useful when you are about to retrieve or link to a learning object or asset as it provides you with a view of the structure of what you will receive.

- 1 From any LOR search results, click the  **View Details** icon of a learning object or asset you want to view details for.
- 2 Click any topic or asset title to view it.
- 3 Click the  **View Metadata** icon next to an object to view its metadata. (For more information on metadata, refer to the *Metadata User Guide* document).


### Viewing LOR Event Logs

LOR Event Logs enable you to view information on a specific activity for a single learning object or asset. You can choose the information to include in the log. Event logs record the usage of the learning object or asset, for example, the number of people who have searched it, viewed it, linked to it, etc. You can use this to decide if you want to incorporate the learning object or asset into your content.

**Note** This information is available through the reporting tool.

The log records:

- Events, which are actions performed on the learning object or asset:
  - Link creation
  - Searches and retrievals
  - Accesses by link
  - Publication
  - Changes in visibility of a learning object or asset
  - Movement of a learning object or asset from one LOR to another

- Changes in status
  - New and deleted reviews
  - Information about the targeted learning object or asset
  - User details (i.e., who performed the action)
  - The Org Unit Name and Org Unit Id of the Org Unit containing the learning object or asset
- ▶ **To view the Event Log**
- 1 Search for the learning object or asset whose event log you want to view.
  - 2 Click the  **View Details** icon.
  - 3 Click the **Event Log** tab.
  - 4 To view all the event logs relating to the learning object or asset, leave the **Search For** field blank.
  - 5 Use the **Show Search Options** link to limit your search to particular events
  - 6 Click **Search**.

**Note** You can change the sort order of the results by clicking on the column headers.

- ▶ **To change the columns that are displayed in the event log**
- 1 Click the **Display Options** link on the **Event Log** tab.
  - 2 Select the columns you want, or clear those you don't.
  - 3 Click **Save**.

## Viewing files in a learning object or asset


This option might not be available. Contact site administration if you require access to this option.

On this page you can view the list of files—filename, size, and type—contained in the learning object or asset. This list does not show the directory structure for the files.

You can click the name of a file to open and view it.

This list might include files that are required in SCORM/IMS content packages.

**Note** The list may be empty if the learning object or asset does not contain any files (for example, a link).

- ▶ **To view the files that are contained in a learning object or asset**
- 1 From any LOR search results, click the  **View Details** icon for the learning object or asset you want to see.
  - 2 Click the **Files** tab.


## Viewing reviews of a learning object or asset

Users of learning objects can review, rate and comment on them. The review also includes the reviewer's name and the review date.

On this page you can view the list of reviews for the learning object or asset. The Overall Rating shows the average of all the ratings that were given to this learning object or asset.

### ► To view the reviews

From any LOR search results do one of the following for the learning object or asset you want to see:

- Click the  **View Details** icon and the **Reviews** tab.
- Click the **(# reviews)** link.



**Note** You can change the sort order of the results by clicking on the column headers.

## Hiding or showing review comments

You can choose to hide or show comments for reviews on a learning object or asset.

### ► To hide or show comments

On the **Reviews** tab, do one of the following:

- Select the checkbox for the review and click the  **Hide Comments** icon.
- Select the checkbox for the review and click the  **Show Comments** icon.


### ► To delete a review

On the **Reviews** tab, select the checkbox next to the reviews you want to delete and click the  **Delete Comments** icon.

## Adding a review to a learning object or asset

You can add ratings and comments to a learning object or asset.

### ► To add a review

- 1 From any LOR search results, do one of the following for the object or asset you want to review:
  - Click the  **View Details** icon and the **Reviews** tab.
  - Click the **(# reviews)** link.
- 2 Click the **Add Review** button.
- 3 If you want to rate the learning object, click one of the radio buttons in the **Rating** field.
- 4 If you want to provide a comment, type it in the **Comment** field.

**Note** You must enter either a rating or a comment to save your review.

- 5 Click the **Save Review** button.

## Retrieving Objects from the LOR

Once learning objects are in the LOR, there are multiple ways to retrieve them for use in course offerings.

- Import the learning object or asset to the Content tool with navigation structure intact by linking to the LOR or by importing them.
- Import the files of the learning object or asset to your Files area. This does not import the navigational structure of the object.
- Download to learning object or asset to your desktop as a content package.

**Note** You cannot import files for objects such as harvested metadata, only the links to those objects.



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## Retrieving LOs to Content and keeping navigation intact

You can retrieve learning objects into Content and retain the relation of topics to each other and their place in modules. There are two primary ways to retrieve learning objects into your course offering:

- Import the modules and topics into Content with modules and topics intact and creating copies of all the learning objects in your course files.
- Create links to the objects in the LOR without importing the files into your course files, but still retaining the navigational structure of the object. Links are established two ways:
  - Dynamic links always take users to the newest version of the learning object or asset, regardless of what version existed when you created the link.
  - Locked links always take users to the same version of the learning object or asset you establish the link to. Changes to future versions of the learning object or asset have no effect on the link.

► **To import learning objects into the Content tool**




Starting from	Procedure
Manage Content page	<ol style="list-style-type: none"> <li>1 Click <b>Add Learning Object</b>.</li> <li>2 Perform a search to find the learning object you want.</li> <li>3 Click the radio button for the learning object you want to retrieve.</li> <li>4 Click <b>Next</b>.</li> <li>5 Select the way you want to import the learning object: dynamic link, locked link, or import.</li> <li>6 Click <b>Next</b>.</li> <li>7 Select a parent module from the drop-down list, or select <b>None</b>.</li> <li>8 If you are importing the course files and the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>9 Click <b>Import/Create Link</b>.</li> </ol>
Manage Course	<ol style="list-style-type: none"> <li>1 From the last step of creating a course offering click <b>Import from Learning Object Repository</b>.</li> <li>2 Perform a search to find the learning object you want.</li> <li>3 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>4 Click the link in the <b>Content</b> area for the way you want to import the learning object: dynamic link, locked link, or import.</li> <li>5 Select a parent module from the drop-down list, or select <b>None</b>.</li> <li>6 If you are importing the course files and the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>7 Click <b>Import/Create Link</b>.</li> </ol>
Import/Export/Copy Course Components page	<ol style="list-style-type: none"> <li>1 Click <b>Import Components</b>.</li> <li>2 Click <b>from Learning Object Repository</b>.</li> <li>3 Click <b>Next</b>.</li> <li>4 Perform a search to find the learning object you want.</li> <li>5 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>6 Click the link in the <b>Content</b> area for the way you want to import the learning object: dynamic link, locked link, or import.</li> <li>7 Select a parent module from the drop-down list, or select <b>None</b>.</li> <li>8 If you are importing the course files and the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>9 Click <b>Import/Create Link</b>.</li> </ol>

Starting from	Procedure
LOR search page	<ol style="list-style-type: none"> <li>1 Perform a search to find the learning object you want.</li> <li>2 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>3 Click the link in the <b>Content</b> area for the way you want to import the learning object: dynamic link, locked link, or import.</li> <li>4 Select a parent module from the drop-down list, or select <b>None</b>.</li> <li>5 If you are importing the course files and the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>6 Click <b>Import/Create Link</b>.</li> </ol>

## Importing a learning object as a new topic

You can import learning objects as a single topic by using the QuickLink feature. When you do this you maintain the navigation structure of the learning object and bring it into the course.

### ► To import a learning object as a topic




- 1 On the Manage Content page, click the  **New Topic** icon beside the module that you want to add a topic to, or in the top tool menu.
- 2 Click the  **QuickLink** link on the New Topic page.
- 3 Select a parent module, type a title, and optionally a short title.
- 4 In the **Content** area, click the  **QuickLink** icon beside **URL** field.
- 5 From the **Category** drop-down list select “Learning Object Repository.”
- 6 Click **Select an Object**.
- 7 Perform a search to find the learning object you want.
- 8 Select the learning object you want to retrieve.
- 9 Click **Next**.
- 10 Select the way you want to import the learning object: dynamic link or locked link.
- 11 Click **Insert** on the Retrieve Object page.
- 12 Click **Insert** on the Insert a QuickLink pop-up.
- 13 If you want the link to open in a new window, select the **Preview/view the content topic in a new window or tab** checkbox.
- 14 Click **Save** or **Save and New**.

## Retrieving LOs to course files folder without navigation

You can import learning objects or assets directly into the course files folder. Retrieving learning objects this way breaks their navigation structure and their organization into modules. Reasons for importing learning objects and assets into course files rather than Content include:

- If you want to reorganize the topic files into a new navigation structure
- If you don't need all the files in a learning object in your course offering


### ► To import learning objects into course files folder

Starting from	Procedure
Files area	<ol style="list-style-type: none"> <li>1 Click  <b>Learning Object Repository</b>.</li> <li>2 Perform a search to find the learning object you want.</li> <li>3 Select the learning object you want to retrieve.</li> <li>4 Click <b>Next</b>.</li> <li>5 If the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>6 Click <b>Import</b>.</li> </ol>
Import/Export/Copy Course Components page	<ol style="list-style-type: none"> <li>1 Click <b>Import Components</b>.</li> <li>2 Click from <b>Learning Object Repository</b>.</li> <li>3 Click <b>Next</b>.</li> <li>4 Perform a search to find the learning object you want.</li> <li>5 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>6 Click <b>Import into Course Files</b> in the Files area.</li> <li>7 If the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>8 Click <b>Import</b>.</li> </ol>
LOR search page	<ol style="list-style-type: none"> <li>1 Perform a search to find the learning object you want.</li> <li>2 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>3 Click <b>Import into Course Files</b> in the Files area.</li> <li>4 If the destination folder listed is not the one you want, click <b>Browse</b> to select a new folder.</li> <li>5 Click <b>Import</b>.</li> </ol>

## Link to LOs or images/assets from in a topic

In an existing topic you can create links to objects or assets in the LOR. Links to learning objects appear as links in the topic instead of bringing the text into the topic the way creating a QuickLink during the new topic creation process does.


### ► To import a learning object or asset in a topic


- 1 From the Edit Topic page click the  **Insert QuickLink** icon.
- 2 From the **Category** drop-down list select “Learning Object Repository.”
- 3 Click **Select an Object**.
- 4 Perform a search to find the learning object you want.
- 5 Click the radio button for the learning object you want to retrieve.
- 6 Click **Next**.
- 7 Select the way you want to import the learning object: dynamic link or locked link.
- 8 Click **Insert** on the Retrieve Object page.
- 9 If you want to change how the link appears, or how the link opens change the options in the **Link Options** area.
- 10 If you want the link to open in a new window, select the **Preview/view the content topic in a new window or tab** checkbox.
- 11 Click **Insert** on the Insert a QuickLink pop-up.
- 12 Save the changes to the topic.

## Saving learning objects to your PC

You can save learning objects to your PC if you want to edit files outside the Learning Environment. The LOR packages the LOs you choose as a zip file.

### ► To save the learning object or asset

Starting from	Procedure
LOR search page	<ol style="list-style-type: none"> <li>1 Perform a search to find the learning object you want.</li> <li>2 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li> <li>3 Click the <b>Download to Desktop</b> link under the Download area.</li> <li>4 Click the link to download the file and save the learning object to your PC.</li> </ol>

Starting from	Procedure
Import/Export/Copy Course Components page	<ol style="list-style-type: none"><li>1 Click <b>Import Components</b>.</li><li>2 Click from <b>Learning Object Repository</b>.</li><li>3 Click <b>Next</b>.</li><li>4 Perform a search to find the learning object you want.</li><li>5 Click the  <b>Retrieve Object</b> icon for the learning object you want to retrieve.</li><li>6 Click the <b>Download to Desktop</b> link under the Download area.</li><li>7 Click the link to download the file and save the learning object to your PC.</li></ol>

## Editing Learning Objects and Assets

Once an object or asset is in the LOR, you can edit:

- Which LOR it resides in
- Its status (unassigned, approved, archived, draft, or in review)
- Its visibility to other users
- Whether it is public


If you want to make changes to an object beyond this, you must retrieve it from the LOR and then publish it again.

You cannot perform edits on non-local learning objects.

Moving learning objects and assets might cause users who follow links to these learning objects and assets to no longer be able to see those objects and assets if they do not have the necessary permissions.

Desire2Learn recommends caution when you move learning objects to different LORs since their predecessors stay in the repositories where they were overwritten. This causes problems with dynamic links generating “not accessible” errors when an overwrite and a move causes the user to lose the permission to view learning object or asset.


### ► To edit a learning object or asset

- 1 On an LOR Search Results page, click the  **Edit** icon beside the learning object or asset whose status you want to change.
- 2 Make changes to any of the object/asset’s following properties:


- To move it to a different LOR, select an LOR from the **Current LOR** drop-down list.

If you move a learning object or asset to a destination LOR where you have different permissions than you do in the source LOR, the icons that you have available to you in the LOR toolbar may change to reflect this.

- To change its status, select the status from the **Status** drop-down list.
- To change its visibility, select or clear the **Visibility** checkbox.

Hidden learning objects and assets can only be seen by the user that published them and users that have sufficient permission. Hidden learning objects or assets have the  icon next to them on the LOR Search Results page.

- To change whether an object is publicly available, select or clear the **External Availability** checkbox.

- 3 Click **Save**.
  - 4 To return to the Search Results page, click the **Go Back** link.
- ▶ **To edit multiple learning objects or assets**
- 1 On an LOR Search Results page, select the checkboxes for the objects/assets you want to edit.
  - 2 Click the  **Edit** icon at the top or bottom of the list.
  - 3 Make changes to any of the object/assets' properties the same way as for individual objects or assets.
  - 4 Click **Save**.
  - 5 To return to the Search Results page, click the **Go Back** link.



---

## Deleting Learning Objects and Assets from the LOR

Deleting a learning object or asset not only deletes the current version of it but also all previous versions of it. There is no way to undo the deletion.

Deleting learning objects and assets will cause users who follow links to these learning objects and assets to no longer be able to see them. This also applies to all links to previous versions of the learning objects and assets that you delete, as deleting a learning object or asset also deletes all of its previous versions.

You cannot delete non-local (i.e. federated) learning objects.

- ▶ **To delete a single learning object or asset**
- On any LOR Search Results page, click the  **Delete** icon beside the learning object or asset that you want to delete.
- ▶ **To delete multiple learning objects and assets**
- On any LOR Search Results page, select the checkboxes next to the learning objects and assets you want to delete and click the  **Delete** icon at the top or bottom of the list of search results.

## Appendix A: LOR 4.0.0 Addendum

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### Metadata and learning object repositories

Metadata is data about data; a collection of descriptors used to describe a single quantity of information. It enables you to attach descriptive tags to your learning objects and assets to provide a searchable context for the content you publish. Metadata can make the learning objects easier to find.

You can add metadata prior to publishing an object to the LOR. After attaching metadata to a learning object or an asset in the LOR, you can edit it in the LOR.

While the function of metadata is very powerful, the processes involved in creating and managing it are fairly simple to understand and implement once you familiarize yourself with them.

For more information about metadata, refer to the *Metadata User Guide* document.

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### Accessing the LOR

You can now also access LORs using the LOR widget, which enables you to search, or directly access browse and publish from a course home page or My Home.

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### Publishing learning objects and assets to a repository

#### Publicly available learning object repositories

You can make learning objects available to users who don't have IDs and passwords for the Learning Environment. This is beneficial if you want to open the learning object to metadata harvesting. When you create a new object, or edit an existing one, you can choose whether to make it externally available.

Users outside the Learning Environment cannot see object files or details for a publicly available learning object.

External availability requires the `D2l.tools.LOR.AllowExternalAvailabilityEdit` configuration variable.


If you want to make learning objects that are currently secured into ones that are publicly available, the best practice is to always grant the ability to view objects in the repository at the org level. This specifically affects learning objects published from the course level

and accessed through deep linking (i.e., users not signed into the Learning Environment, click a link to view a learning object and are prompted to sign in to access it).

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## Publishing learning objects from course content

► **To publish a learning object (topic, module or course)**

- 1 Go to the course you want to publish, or from which you want to publish a module or topic. You can also use the LOR widget from the course home page.
- 2 Click **Content** on the navbar to open the Manage Content page.
- 3 Click the  **Publish to LOR** icon for the topic or module that you want to publish, or at the top of the list to publish the whole course.

- 4 Select one of the following:

- Click **Create a new object** and select a repository from the **Destination repository** drop-down list.
- Click **Overwrite an existing object** and **Search** to find the learning object you want to overwrite.

- 5 If you want to hide the learning object, select **Hide learning object**. You can change this option once the object is published to the LOR.

Only you and users with sufficient permission can view your hidden learning objects.


- 6 If you want to make the object available publically to users without an ID and password to the Learning Environment, select the **Make Learning Object publicly available for viewing** checkbox.

- 7 Select the **Associate Creative Commons license with Learning Object** checkbox if you want to set a license for the object.

Creative Commons licensing enables you to retain copyright on your work while allowing different degrees of re-use to other users. You can reserve all rights to your work, some or release it to the public domain. For more information go to <http://creativecommons.org/>.

If you associate a license with your learning object, choose what restrictions you want to place on it.

- 8 If you want to remove items from the package, clear the checkboxes next to topics or modules you do not want to publish. Clearing a module clears all its associated topics and sub-modules.

- 9 If you want to add, edit or delete metadata, click  **Edit Metadata**. For details on editing metadata, refer to the *Metadata User Guide* document.

The LOR automatically populates the metadata IEEE LOM title field with the name of the topic, module or course (unless a title already exists).

- 10 Click **Next**.


- 11 Verify that additional assets files are included.
  - To add more files, click **Add Files**.
  - To delete files that you manually added, click the **delete** icon next to the files you want to delete.
- 12 Click **Publish**.

---

## Publishing learning assets from course files


Instead of publishing a learning object and all of its associated files, you might want to publish a single asset (e.g., a graphic) from a course that would be useful to multiple users or departments.

► **To publish an asset (file)**

- 1 Go to the course containing the file you want to publish. You can also use the LOR widget from the course home page.
  - 2 Do one of the following:
    - Click **Edit Course** on the navbar, then click **Manage Files**.
    - In the Org Unit Administration widget on the course homepage, click **Manage Files**.
  - 3 Select the file you want to publish and click the  **Publish** icon.
  - 4 Select one of the following:
    - Click **Create a new object** and select a repository from the **Destination repository** drop-down list.
    - Click **Overwrite an existing object** and **Search** to find the learning object you want to overwrite.
  - 5 If you want to hide the learning object, select **Hide learning object**. You can change this option once the object is published to the LOR.
- Note** Only you and users with sufficient permission can view hidden learning assets.
- 6 If you want to make the object available publically to users without an ID and password to the Learning Environment, select the **Make Learning Object publicly available for viewing** checkbox.
  - 7 Select the **Associate Creative Commons license with Learning Object** checkbox if you want to set a license for the object.

Creative Commons licensing enables you to retain copyright on your work while allowing different degrees of re-use to other users. You can reserve all rights to your work, some or release it to the public domain. For more information go to <http://creativecommons.org/>.

If you associate a license with your learning object, choose what restrictions you want to place on it.

- 8 If you want to add, edit or delete metadata, click  **Edit Metadata**. For details on editing metadata, refer to the *Metadata User Guide* document.

**Note** When publishing an asset from the Files area the metadata IEEE LOM title field automatically populates with the asset's file name unless a title already exists.

- 9 Click **Publish**.

## Publishing directly from your PC

If you have a SCORM 1.2 compliant content package (on your PC or in another location) you can publish it directly to the LOR. You can also publish files that are not part of a content package to the LOR. These files become assets once you publish them.

The LOR does not support publishing SCORM 2004 content directly from your PC.

## Formatting metadata for publishing packages

An object's metadata can be located under any applicable element in the manifest file, depending on the type of object and whether the object is a sub-element in the file. Manifest- and organization-level metadata is applied to the highest level object in the package. Metadata for modules can also appear at the item level, and metadata for topics or assets can appear at the item or resource level. A package is identified as a module if there is only one child <item> tag underneath the <organization> tag, and that <item> tag has at least one child <item> tag of its own.

Where object metadata can appear

Object	Object is package type	Object is package sub-element
Course	manifest, organization	n/a
Module	manifest, organization, item	item
Topic	manifest, organization, item, resource	item, resource
Asset	manifest, organization, item, resource	item, resource

If metadata for a single object is found under multiple elements, the LOR uses the following order of precedence: <manifest>, <organization>, <item>, <resource>.

For example, if you are uploading a content package consisting of a module with three topics and there is metadata under the <manifest> element and under the highest <item> element, both are applicable to the module. The upload utility takes the metadata from the <manifest> element and discards the metadata from the <item> element. Say that one of the topics in the package has metadata under its <item> element and also under the associated <resource> element; in this case the LOR uses the metadata for the <item> element and that for the <resource> element discarded.

More information on metadata is available in the *Metadata User Guide* document.


► **To publish directly to the LOR**

- 1 Do one of the following:
  - Click **LOR** in the navbar then **Publish** in the top tool menu.
  - Click **Publish to LOR** in My Admin Tools on My Home.
  - Click **Publish** in the LOR widget.
- 2 Select a **Destination Repository** from the drop-down list.
- 3 If you want to hide the learning object/asset, select **Hide learning object**. You can change this option once the object/asset is published to the LOR.

**Note** Only you and users with sufficient permission can view hidden learning objects and assets.
- 4 If you want to make the object available publically to users without an ID and password to the Learning Environment, select the **Make Learning Object publicly available for viewing** checkbox.
- 5 Select the **Associate Creative Commons license with Learning Object** checkbox if you want to set a license for the object.

Creative Commons licensing enables you to retain copyright on your work while allowing different degrees of re-use to other users. You can reserve all rights to your work, some or release it to the public domain. For more information go to <http://creativecommons.org/>.

If you associate a license with your learning object, choose what restrictions you want to place on it.

- 6 Click **Browse** and locate the package or file that you want to publish to the LOR.
- 7 Click **Publish**.
- 8 If you want to add metadata to an asset, which Desire2Learn recommends, click the  **metadata** icon:
  - a) Complete the fields in the pop-up.
  - b) Click **Save**.

**Note** Associating a creative commons license automatically populates the metadata rights fields with this information.
- 9 Click **Continue**.

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## Performing a search

The search page is now a basic search, which allows you to choose local and external repositories. Search restrictions are now on the Advanced Search page.

You can also now click in the **Browse** area on the name of the ten most recent browse types to go directly to the results for those.


A search sent to MERLOT might not use the exact matching criteria as the local repository search because of differences in the MERLOT service.


► **To perform a basic search**

- 1 Start from one of the following:
  - **LOR** in the navbar
  - the Manage Content page, click **Add Learning Object**
  - the Manage Files area, click **Learning Object Repository**
  - the LOR Widget on the course or My Home, type your search terms.
- 2 Type your search terms. Enclose phrases with quotation marks. Use “OR” to search for instances of one word/phrase or another by adding “OR” (uppercase, no quotes).
- 3 Click **Search**.

## Working with search results

The number of actions you can access in the search results can vary between learning objects, depending on your permissions in the LORs in which the learning objects reside.

The  **LO/Asset Hidden** icon next to a learning object or asset, indicates that object is hidden from other users. You can always see hidden objects that you published.

Objects from federated repositories are listed with the  **Federated** icon beside their title.

From the search results, you can (depending on permissions):

- view the learning object or asset.
- view the learning object’s details, including:
  - overview of the modules and topics that make up the learning object (its sub-objects)
  - event logs detailing the activity for the learning object or asset
  - reviews of the learning object or asset
  - the files that the object is composed of
- view or edit metadata for the learning object or asset and its sub-objects
- retrieve the learning object in the following ways:
  - create a dynamic or locked link to the object (For objects from MERLOT, you can only create locked links.)
  - import the object into the Content tool keeping navigational structure of the object intact and creating a copy of all associated files in your course files


- import the files of the learning object or asset to your course files folder, but without the object's navigational structure
- download the learning object or asset to your desktop as a content package
- manage the learning object's properties:
  - repository the learning object currently resides in
  - status as Unassigned, Draft, In Review, Approved or Archived
  - visibility
  - external availability
  - add or edits rights information on single learning objects
- delete the learning objects or assets and all previous versions.
- add or delete classifications.
- add a review to the learning object

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## Performing an Advanced Search

The advanced search enables you to specify more criteria for retrieving LOR content than the basic search. This feature is especially useful if your LOR has a large amount of content on the same subject.

### ► To perform an Advanced Search

- 1 Click  **Advanced Search** in the top tool menu. Click Search in the LOR Widget.
- 2 Type your search terms in the **Search For** field.
- 3 Limit the search using the **Title**, **Description** or **Keyword** fields.
- 4 Choose specific repositories, listed under **Local Repositories** and **External Repositories**, to search.
- 5 If you want to further narrow your search, choose from restrictions in the **Search Restrictions** area:
  - Search for resources with set licensing cost and restrictions.
  - Limit Results to learning objects/assets that you created.
  - Select the types of learning objects that you want to find.
  - Select the rating of the learning objects or assets that you want to find.
  - Select the status of the learning objects or assets that you want to find.
  - Search the metadata of a learning object's sub-objects.
  - Select the timeframe during which the learning objects or assets were published.

- 6 Select a Metadata view from the **Select Metadata View** drop-down list.
  - The field associated with the metadata category is either a text box or drop-down list. For text boxes, the search string follows the same rules as those for a basic search.
- 7 If you want to narrow your search of the metadata, add or remove fields from the search.
- 8 Click the **Search** button.

To see what you can do with the search results, refer to *Working with search results*.

---

## Changing what is displayed in search results

You can choose from the list of object properties that the LOR displays in the search results.

► **To change settings for the search results**


- 1 Click **Display Options** on the Search Results screen.
- 2 Edit your display options.
- 3 Click **Save**.

---

## Browsing Content

The browse page now includes a count of objects in each category the page displays. You can also now browse by author, publisher or course.

► **To browse the LOR**

- 1 Click  **Browse** in the top tool menu.
- 2 On the Browse page there are two ways to browse:
  - Use the browse path
  - Use the browse grid to access categories directly.
- 3 Click a link to refine your browse and narrow the result set returned or click the magnifying glass to browse all objects classified within the category.
- 4 To change your browse path, click **Refine Browse** or use one of the drop-down menus in the browse path.
- 5 To start over, click **New Browse**.


From the Search Results, depending on your permissions, you can perform the same actions as those for any LOR search results. Refer to *Working with search results*, p. 36.

---

## Managing objects and assets (formerly edit objects)

You can now use the Manage Object page to change whether one or more objects are associated with a Creative Commons license

▶ **To manage a learning object or asset**

- 1 On an LOR Search Results page, select **Manage Object** from the context menu of the learning object/asset you want to change.
- 2 Make changes to any of the object/asset's properties.
  - If you move a learning object or asset to a destination LOR where you have different permissions than you do in the source LOR, the actions you can perform might change to reflect this.
  - Hidden learning objects and assets can only be seen by the user that published them and users that have sufficient permission. Hidden learning objects or assets have the  icon next to them on the LOR Search Results page.
- 3 Click **Save**.

▶ **To edit multiple learning objects or assets**

- 1 On an LOR Search Results page, select the checkboxes for the objects/assets you want to edit.
- 2 Click the **Manage Object** icon on the action bar.
- 3 Make changes to any of the object/assets' properties the same way as for individual objects or assets. You cannot change rights for multiple objects.
- 4 Click **Save**.

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## Deleting Learning Objects and Assets from the LOR

Now in addition to the previous methods of deleting an LOR, you can also delete single learning objects from the manage object page.

## Appendix B: Revision History

Edition	Notes
Second, April 14, 2009	Added Addendum to update user guide for version 4.0.0