

# Discovering and becoming familiar with MDweb, the OpenSource cataloguing and localization tool

## CONTENTS

<i>Worksheet # 1: Creating a metadata record</i> .....	2
Creating a metadata record of type 'vector layer' Corine Land Cover, Hérault <i>département</i> .....	2
<i>Worksheet # 2: Importing a metadata record</i> .....	4
Importing a data set of theme type 'image – raster layer', simulation Spot 5.....	4
<i>Worksheet # 3: Managing the contacts directory</i> .....	6
<i>Worksheet # 4: Managing predefined values</i> .....	7
<i>Worksheet # 5: Modifying an existing metadata record</i> .....	8
<i>Worksheet # 6: Publication of and search for metadata records</i> .....	10
<i>Appendix 1: Information on the 'vector layer' Corine Land Cover, Hérault département</i> .....	12
<i>Appendix 2: Information on the image 'image – raster layer' simulation Spot 5</i> .....	13

### Goals:





Introduction to the module for managing metadata records in MDweb and learning its general features to:



- Create new metadata records,
- Modify these records,
- Import records in the ISO 19115 XML format,
- Manage one's contacts directory,
- Manage predefined values,
- Validate records to make them accessible.

## Worksheet # 1: Creating a metadata record

**Objective:** Use the **Create** command to add a new metadata record to a catalogue. We will create a record of type 'Vector layer' from another, existing record. You will test the features of data-entry help in the forms (thematic and geographic descriptors). Information is provided in Appendix 1 at the end of this document to help you fill in the form of the metadata record which will be created.

### Creating a metadata record of type 'vector layer' Corine Land Cover, Hérault *département*.

Approach	MDweb operation
Authenticating yourself in MDweb	<ul style="list-style-type: none"> <li>▪ Run the Internet Explorer browser, then go to this web address: <b>http://demo.mdweb-project.org/demo14</b></li> <li>▪ In the horizontal bar near the top, authenticate yourself by providing the following information: Login: <b>userTP1 to 12</b>, Password: <b>userTP1 to 12</b> (use your workstation's number).</li> </ul>
Creating a metadata record	<ul style="list-style-type: none"> <li>• In the <b>management module</b>, create a '<b>Data set</b>' metadata record of type '<b>vector layer</b>'. <div style="text-align: center; margin: 10px 0;">  </div> </li> <li>• When <b>creating a record</b>, you have to enter a <b>title</b> (type in '<b>Corine Land cover 34</b>'), choose a <b>catalogue</b> and a <b>data type</b>, here '<b>Catalogue Demo</b>' and '<b>Vector layer</b>' respectively. Leave the default value '<b>Basic</b>' as level of entry. You will use the function <b>Create from an existing record?</b> Select <b>Yes</b>.</li> <li>• The next page will contain the list of existing records that can serve as a model for the one you are trying to create. Check the green box in the '<b>Use as template</b>' column of the '<b>Lakes and ponds 34</b>' record.</li> </ul>
Entering the record's contents	<ul style="list-style-type: none"> <li>• You are now on the page containing general information of the record that you have just created. You can access its <b>data-entry forms</b> by using the menu on the left, which is divided into three sections. Each section leads to an entry form. Start with the section <b>Dataset identification</b>.</li> <li>• The fields already filled in (from the model record) should be modified by using the <b>information provided in Appendix 1</b> of this document.</li> <li>• For the <b>Keywords</b>, <b>Date</b> and <b>Geographic extent</b> sections, you can use the data-entry assistance features: <ul style="list-style-type: none"> <li>○ Accessing the dictionary or thesaurus using this icon: </li> <li>○ Accessing the calendar with this icon: </li> <li>○ Accessing the cartographic module: </li> </ul> </li> </ul> <p>For the geographic extent of the data set, select the <b>Hérault département</b> by using the cartographic module.</p>

Approach	MDweb operation
<b>Validating the entry</b>	<ul style="list-style-type: none"> <li>• After having modified the fields of a form, validate your modification by clicking one of the <b>Submit</b> buttons, on the top or bottom of the form. <b>Note: it is indispensable to click this button before proceeding to another section. If not, the data entered in the form will be lost.</b></li> <li>• Go to the next form by clicking on another section on the left.</li> </ul>
<b>Verifying the entry</b>	<ul style="list-style-type: none"> <li>• Once you have modified the values in the 3 forms, you can verify the contents of the records in their entirety. To do this, click the  icon in the menu on the left, below the different sections of the record.</li> <li>• You can also go to the '<b>General information</b>' page by clicking on the record's title on top of the sections.</li> </ul> <div data-bbox="855 801 1187 936" style="text-align: center;">  </div>



**Note:** for additional information on the **data-entry pages**, consult the User Manual, section **Data-entry environment**, p. 36-37.


**Note:** for additional information on **assisted data-entry**, consult the User Manual, section **Case of fields with assisted entry**, p. 38-43.

## Worksheet # 2: Importing a metadata record

**Objective:** Metadata could already exist, generated by, for example, commercial GIS tools or in the headers of some file types (jpg, for example). The goal is to retrieve this available metadata to help fill in a metadata record in MDweb. This worksheet consists of using the **Import** command to import (1) a metadata record in the ISO 19115 XML format, (2) a zip file containing the actual data files and (2) a thumbnail generated by ArcCatalog (Export MDweb extension).

### Importing a data set of theme type 'image – raster layer', simulation Spot 5

Approach	MDweb operation
<p><b>Importing a metadata record</b></p>	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Import/Export &gt; XML Import</b> command:           <div style="text-align: center; margin: 10px 0;">  </div> </li> <li>Use the <b>Browse...</b> button to select the <b>simul_spot5_98.img.xml</b> file in the <b>Donnees_TP_Mdweb/img/</b> folder in the <b>working folder</b>.</li> <li>If the record that you are trying to import exists already in the selected catalogue, a warning message will seek confirmation of the action to take. <b>IMPORTANT: If you land on this page, take care to select 'Create new record' in the 'Action' column so as not to overwrite an existing record.</b></li> <li>The next page contains information on the origin of the record you want to import and offers you the choice of the catalogue you want to send the record to. You can also attach directly the data files and the thumbnail. For the time being, ignore these possibilities; we shall return to them later.</li> <li>Leave the options to the default and click the <b>Submit</b> button. The conformity of the record is tested. If the XML record does not conform to the ISO 19115 standard, an error message will say that the record cannot be imported.</li> <li>Click the <b>Import</b> button. A message will confirm that the record has been added to the selected catalogue.</li> </ul>
<p><b>Attaching a zip archive</b></p>	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Import/Export &gt; Attach dataset</b> command:           <div style="text-align: center; margin: 10px 0;">  </div> </li> </ul>

Approach	MDweb operation
	<ul style="list-style-type: none"> <li>You can locate the record you have just imported by filtering the records list. Select <b>'XML import'</b> in the <b>'Sheet provenance'</b> column and <b>'Image – Raster layer'</b> in the <b>'Profile name'</b> column , then click the <b>Submit</b> button.</li> <li>The list of imported records will be displayed. To attach the zip archive, click on the <b>Ok</b> button in the <b>'Link'</b> column of the <code>simul_spot5_98.img_{wn}</code> record, where {wn} is your workstation's number (this is the record you imported in the previous step). <b>Be careful to select the record matching you workstation's number!</b></li> <li>Select the number of files you will attach (here 1), then click on <b>'Validate'</b>. Use the <b>Browse...</b> button to select the <b>simul_spot5_98.img.zip</b> file in the <b>Donnees_TP_Mdweb/img/</b> folder present in the <b>working folder</b>. Click the <b>Submit</b> button.</li> </ul>
<b>Verifying the operation</b>	<ul style="list-style-type: none"> <li>In the displayed list, you can see the zip file is now attached to the <code>simul_spot5_98.img_{wn}</code> record. The date of attachment is shown, informing you of the last update of the data attached to the record.</li> </ul>
<b>Attaching a thumbnail</b>	<p>In the <b>management module</b>, use the <b>Import &gt; Attach quicklook</b> command:</p>  <ul style="list-style-type: none"> <li>Execute the same operations as above to locate your record: <code>simul_spot5_98.img_{wn}</code>.</li> <li>To attach a thumbnail, click the <b>Ok</b> button in the <b>'Link'</b> column of the <code>simul_spot5_98.img_{wn}</code> record.</li> <li>Use the <b>Browse...</b> browse to select the <b>simul_spot5_98.img.jpg</b> file in the <b>Donnees_TP_Mdweb/img/</b> folder in the <b>working folder</b>. You can also enter a comment about the image submitted. Click the <b>Submit</b> button.</li> </ul>
<b>Verifying the operation</b>	<ul style="list-style-type: none"> <li>In the displayed list, you can see the name of the image file in the <b>'Linked quicklook'</b> column of the <code>simul_spot5_98.img_{wn}</code> record.</li> </ul>

**Note:** for additional information on **importing references**, refer to the MDweb User Manual, section **Importing metadata records**, p. 54-56.

## Worksheet # 3: Managing the contacts directory

**Objective:** Use the **Manage your contacts** command to become familiar with managing contacts.

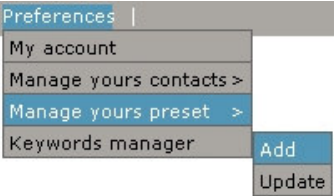
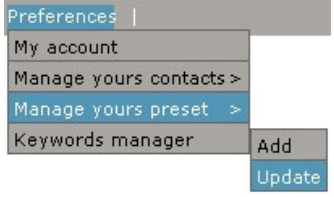
### Adding contact details of your institution

Approach	MDweb operation
<p><b>Entering a new contact</b></p>	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Preferences &gt; Manage your contacts &gt; Add</b> command:           <div style="border: 1px solid gray; padding: 2px; margin: 5px 0;"> <pre> Preferences   My account Manage yours contacts &gt; Manage yours preset &gt; Add Keywords manager Update           </pre> </div> </li> <li>In the <b>'Contact name'</b> field, enter a name that will easily identify the contact that you are entering. Leave <b>'No'</b> for the <b>'Create from an existing contact?'</b> field. You can select in the following fields whether this new contact will automatically be associated with all new metadata records under different sections. Leave <b>'No'</b> for the time being. Click the <b>Submit</b> button.</li> <li>Enter the new address details of your contact, then click <b>Submit</b>. The new contact will be created.</li> </ul>
<p><b>Updating an existing contact</b></p>	<ul style="list-style-type: none"> <li>If you want to modify an existing contact, use the <b>Preferences &gt; Manage your contacts &gt; Update</b> command to return to the entry form for the contact:           <div style="border: 1px solid gray; padding: 2px; margin: 5px 0;"> <pre> Preferences   My account Manage yours contacts &gt; Manage yours preset &gt; Add Keywords manager Update           </pre> </div> </li> </ul>

## Worksheet # 4: Managing predefined values

**Objective:** Use the **Manage your preset** command to become familiar with managing predefined values.

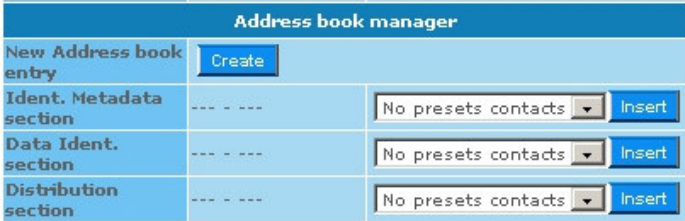

### Adding predefined values for metadata


Approach	MDweb operation
<p><b>Entering a new set of predefined values</b></p>	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Preferences &gt; Manage your preset &gt; Add</b> command:           <div style="margin-left: 20px;">  </div> </li> <li>In the <b>'Preset values set name'</b> field, enter a name that will allow easy identification of the predefined values data set that you are entering. Select <b>'Image – Raster layer'</b> as <b>'Data type'</b> for these predefined values. Leave <b>'No'</b> for the <b>'Create from an existing preset values set?'</b> setting. In the last field, you can choose to automatically associate this new set of predefined values with all new metadata records of the same type. Leave it at <b>'No'</b> for the time being. Click <b>Submit</b>.</li> <li>Enter the predefined values and click on <b>Submit</b> button in the different tabs. <b>Be careful to click on Submit button for each tab!</b> The new set of values will be created.</li> </ul>
<p><b>Updating an existing set of values</b></p>	<ul style="list-style-type: none"> <li>To modify an existing set of values, use the <b>Preferences &gt; Manage your preset &gt; Update</b> command to return to the entry form for that set of values.           <div style="margin-left: 20px;">  </div> </li> </ul>

## Worksheet # 5: Modifying an existing metadata record

**Objective:** Using the **Update** command to view and modify the different characteristics of a metadata record: synchronizing the contacts section with your contacts directory, synchronizing the predefined values of the associated data type, changing the level of entry of a record.

### Modifying the simul\_spot5\_98.img\_{wn} record imported earlier

Approach	MDweb operation
Locating the record to be modified	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Update</b> command:                     <div style="text-align: center; margin: 5px 0;"> <span style="background-color: #ADD8E6; padding: 2px 5px;">Create</span> <span style="background-color: #ADD8E6; padding: 2px 5px; margin-left: 10px;">Update</span> </div> </li> <li>Locate the simul_spot5_98.img_{wn} ({wn} is your workstation's number) record by using the search filters. Select it by clicking the  icon in the <b>'Update'</b> column.</li> </ul>
Synchronizing the record with the directory contacts	<ul style="list-style-type: none"> <li>To complete the description of a metadata record, the <b>'General information'</b> page allows the synchronization of the <b>contact details</b> of the managers of the catalogue and the data.</li> <li>The synchronization with the directory contacts is done by using the <b>Insert</b> button in the <b>'Address book manager'</b> panel. Each line corresponds to one contact type that we can insert in the record (Identification of metadata, Identification of data and Distribution of data).</li> </ul> <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> <li>Select a contact in each drop-down list, then click <b>Insert</b>. The name and synchronization date of the contact will be displayed on the left.</li> <li>You can directly access the form to create a new contact (see worksheet #.3) by using the <b>Create</b> button.</li> </ul>
Synchronizing the record with predefined values of the same data type	<ul style="list-style-type: none"> <li>The <b>'General information'</b> page allows a record to be synchronized with a set of predefined values for the data type associated with the record.</li> </ul> <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> <li>In the <b>'Default values'</b> drop-down list, select a set of values to synchronize the record with, then click <b>Modify</b>. The selected set of values and the synchronization date will be displayed on the left of the drop-down list</li> </ul>
Changing the input level of a record	<ul style="list-style-type: none"> <li>In the <b>'General information'</b> page, it is possible to change a record's data-entry level to be able to enter more information about the data being catalogued.</li> </ul>



Approach	MDweb operation
	 <ul style="list-style-type: none"> <li data-bbox="584 383 1453 577">• In the <b>'Input level'</b> drop-down list, select the <b>'Extended'</b> level, then click <b>Modify</b>. In the menu on the left containing the list of sections, you will notice that two new sections, <b>'Dataset quality'</b> and <b>'Dataset distribution'</b>, have been added. In the basic 3 sections too, some fields will have been added. You can now enter all these values to complete the record's information. (use the <b>information provided in Appendix 2</b> of this document).</li> <li data-bbox="584 600 1453 725">• There exist a 3rd data-entry level called <b>'Complete'</b> that contains even more fields to hold more information about the record. For some data types, however, this final level does not have any additional fields as compared to the <b>'Extended'</b> level.</li> </ul>

**Note:** for additional information on **modifying a record's properties**, consult the MDweb User Manual, section **Modifying the properties of a metadata record**, p. 45-50.

## Worksheet # 6: Publication of and search for metadata records

**Objective:** Learn the validation and publication procedures for metadata records. Modify the status of confidentiality of a metadata record and its archives so that it can be consulted via the search module. Use the search module.

Approach	MDweb operation
<p><b>Use the public search module to locate metadata records</b></p>	<ul style="list-style-type: none"> <li>▪ Log out (Menu &gt; <b>Exit</b> on top right) and use the search module to search for existing records.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div> <ul style="list-style-type: none"> <li>▪ Launch a search <b>By Data type &gt; Vector layer</b></li> <li>▪ Launch a search, <b>New references</b></li> <li>▪ Launch a <b>Multi-criteria search</b>. What do you observe?</li> </ul>
<p><b>Validating existing records</b></p>	<p><b>Reauthenticate yourself by connecting as valTP1 to 12</b>, password: <b>valTP1 to 12</b> (use your workstation number). This user has <b>validation rights</b>. Use the <b>Update</b> command to display the list of records you created earlier (select userTP matching to your workstation's number in 'Login' drop-down list) .</p> <ul style="list-style-type: none"> <li>▪ You can now <b>validate records</b>, i.e., make them searchable for both types of consultations by toggling the icons  &gt;  .</li> </ul>
<p><b>New public search</b></p>	<p>Log out and re-launch the previous search. What do you observe?</p>

<b>Modifying the confidentiality status of entered records</b>	<p><b>Reconnect once again as valTP1 to 12.</b> Use the <b>Update</b> command to display the list of records you created earlier (select userTP matching to your workstation's number in 'Login' drop-down list).</p> <ul style="list-style-type: none"> <li>You can now <b>change the confidentiality status of records</b>, i.e., make them visible only for authenticated users, by toggling the icons  &gt; .</li> </ul>
<b>Authenticated search</b>	<ul style="list-style-type: none"> <li>In the <b>management module</b>, use the <b>Search</b> command:           <div style="border: 1px solid gray; padding: 2px; display: inline-block; margin: 5px 0;">Search</div> <div style="border: 1px solid gray; padding: 2px; display: inline-block; margin: 5px 0;">Preferences</div> </li> <li>Re-launch the previous search.</li> </ul>
<b>New public search</b>	<p>Log out and re-launch the previous search. What do you observe?</p>

Appendix 1: Information on the 'vector layer' Corine Land Cover,  
Hérault *département*.

<b>Identification of the data set (1st section)</b>	
Summary	Corine Land Cover is a homogeneous inventory of land use at the European level characterized by specific technical choices: a methodology of computer-assisted photo-interpretation of satellite images; a working scale of 1:100,000; a minimal threshold of cartographic units of 25 hectares; a nomenclature with 3 levels and 44 designations.
Title	Corine Land Cover – Extract covering the <i>Département</i> of Hérault
Topic category	To define oneself
Keywords	To define oneself
Resource creation date	1996
Spatial representation type	Vector
<b>Geographic extent of dataset</b>	
Toponym	<i>Département</i> of Hérault
Format of dataset	shapefile
Format version	ArcGIS 8.3
<b>Spatial representation of the data set (2nd section)</b>	
Topology level of dataset	Geometry only
Vector object type	Surface
Geometric object count	4755
<b>Spatial reference system of the data set (3rd section)</b>	
System of projection	Lambert Carto II projection

## Appendix 2: Information on the image 'image – raster layer' simulation Spot 5

<b>Identification of the data set (1st section)</b>	
Summary	Simulation image of the multispectral sensor SPOT5 on the site of the Remote Sensing Centre ( <i>Maison de la Télédétection</i> ).
Title	Simulation SPOT 5
Topic category	To define
Keywords	To define
Resource creation date	2005
Spatial representation type	Raster
Pixel size (metres)	2.5
Geographic extent of dataset	
Toponym	City of Montpellier
Format of dataset	Raster Dataset - IMG
Format version	Unknown
<b>Spatial representation of the data set (2nd section)</b>	
Number of dimensions (axes)	2
Name of the axis	X axis
Number of lines	646
Pixel size (metres)	2.5
Name of the axis	Y axis
Number of lines	449
Pixel size (metres)	2.5
Cell geometry	Pixel
<b>Spatial reference system of the data set (3rd section)</b>	
System of projection	Lambert Carto II projection