

GeoNetwork opensource – User Training

Module II for Editors – Metadata and data publishing

Exercise 4

Creating a metadata using XML

A local version of GeoNetwork has been installed for the training's exercises.

This tutorial leads you through the process of including new metadata record into the GeoNetwork system using an XML document. This is an advanced procedure of creating new metadata based on the XML format, widely used by several GIS applications to store geographic information.

With this exercise you will create a new metadata record using the XML Metadata Insert tool. This tool is particularly useful if you already have a metadata in XML format and you want to import it into the GeoNetwork database. It is very important that the metadata is in one of the standards used by GeoNetwork: ISO19115, FGDC and Dublin Core.

Here is the list of actions that you have to perform for each metadata in order to successfully complete the process:

1. Be sure that the fist line `<?xml version="1.0" encoding="UTF-8"?>` is present;
2. Remove all links to external files, i.e. thumbnails or data for download, to avoid any conflict within the data repository. Remove any content (in red in the examples below) of the graphic overviews and the on line resources for download from the following tags in **blue**:

Examples:

```

.....
<gmd:graphicOverview>
  <gmd:MD_BrowseGraphic>
    <gmd:fileName>
      <gco:CharacterString>thumbnail_s.png</gco:CharacterString>
    </gmd:fileName>
    <gmd:fileDescription>
      <gco:CharacterString>thumbnail</gco:CharacterString>
    </gmd:fileDescription>
    <gmd:fileType>
      <gco:CharacterString>png</gco:CharacterString>
    </gmd:fileType>
  </gmd:MD_BrowseGraphic>
</gmd:graphicOverview>
<gmd:graphicOverview>

```

```

    <gmd:MD_BrowseGraphic>
      <gmd:fileName>
        <gco:CharacterString>thumbnail.png</gco:CharacterString>
      </gmd:fileName>
      <gmd:fileDescription>
        <gco:CharacterString>large_thumbnail</gco:CharacterString>
      </gmd:fileDescription>
      <gmd:fileType>
        <gco:CharacterString>png</gco:CharacterString>
      </gmd:fileType>
    </gmd:MD_BrowseGraphic>
  </gmd:graphicOverview>.....
.....
  <gmd:onLine>
    <gmd:CI_OnlineResource>
      <gmd:linkage>
        <gmd:URL>http://localhost:8080/geonetwork/srv/en/resources.get?
id=12&fname=&access=private</gmd:URL>
      </gmd:linkage>
      <gmd:protocol>
        <gco:CharacterString>WWW:DOWNLOAD-1.0-http—
download</gco:CharacterString>
      </gmd:protocol>
      <gmd:name>
        <gco:CharacterString>file.zip</gco:CharacterString></gmd:name>
      <gmd:description>
        <gco:CharacterString>Detailed text description of what the online resource
is/does</gco:CharacterString>
      </gmd:description>
    </gmd:CI_OnlineResource>
  </gmd:onLine>
.....

```

3. Replace any & with **and** or **&** in the text content

You are now ready to insert an XML into the system.

In the **GeoNetwork Training** folder you will find the **iso19130.xml** document. Follow the actions below and you will be able to easily perform the present exercise.

As usual, the login in GeoNetwork through password authentication is the starting point to be able to locate and use the XML Metadata Insert tool from the Administration page (Fig. 1).

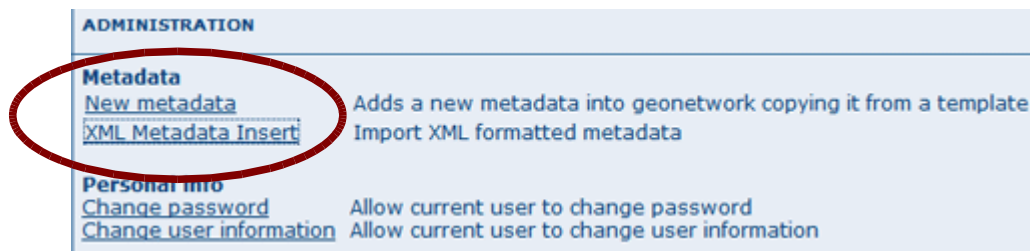


Figure 1

As shown in figure 2 below, the main steps for the metadata entry:

1. Paste the XML file content with metadata information in the **Metadata** text area;
2. Select Metadata as **type** of record that you will create;
3. Select the metadata **schema** ISO19139; it will be the final metadata format within GeoNetwork;
4. Select the **validate** check box if you want your metadata to be validated according to the related schema. Note that the validation is presently available only for the ISO19115 schema.
5. Select the **group** in charge of the metadata;
6. Select **Maps and Graphics** from the list of categories;
7. Click the **Insert** button and the metadata will be imported into the system.

The screenshot shows the 'IMPORT XML FORMATTED METADATA' form. The 'Metadata' text area contains the following XML code:

```
<?xml version="1.0" encoding="UTF-8"?>
<gmd:MD_Metadata xmlns:gmd="http://www.isotc211.org/2005/gmd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:gml="http://www.opengis.net/gml"
xmlns:gts="http://www.isotc211.org/2005/gts"
xmlns:gco="http://www.isotc211.org/2005/gco">
<gmd:fileIdentifier>
<gco:CharacterString></gco:CharacterString>
</gmd:fileIdentifier>
<gmd:language>
<gco:CharacterString>eng</gco:CharacterString>
</gmd:language>
<gmd:characterSet>
<gmd:MD_CharacterSetCode codeListValue="utf8"
codeList="/resources/codeList.xml#MD_CharacterSetCode"/>
</gmd:characterSet>
<gmd:contact>
<gmd:CI_ResponsibleParty>
<gmd:individualName>
<gco:CharacterString/>
```

The form has the following fields and values:

- Type: Metadata
- StyleSheet: none
- Destination schema: iso19139
- Validate: ☒
- Group: Sample group
- Category: Maps & graphics

At the bottom, there are 'Back' and 'Insert' buttons.

Figure 2