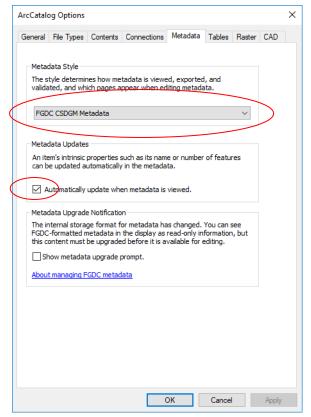
## Publishing Guide for the KYGEONET

## Prepared by the Kentucky Division of Geographic Information

Information that describes items in ArcGIS is called metadata. When care is taken to provide good descriptions, you can find appropriate resources with a search and evaluate which of the items in your results is the correct one to use. In an item's metadata you can record whatever information is important for your organization to know about that item. This might include information about how accurate and recent the item is, restrictions associated with using and sharing the item, important processes in its life cycle such as generalizing features, and so on. You view and edit an item's metadata in the Description tab, either in ArcCatalog or by opening the Item Description window from other ArcGIS Desktop applications. Refer to online help for additional information on how metadata works in ArcGIS 10.x.



Select correct metadata style<sup>1</sup>. Open ArcCatalog and select Customize > ArcCatalog Options. Click the
Metadata tab and under Metadata Style heading, change the style FGDC CSDGM Metadata<sup>2</sup>. Next, check
the box allowing for Automatic updates. Click Apply and then OK. This needs to be done only once (set it
and forget it).



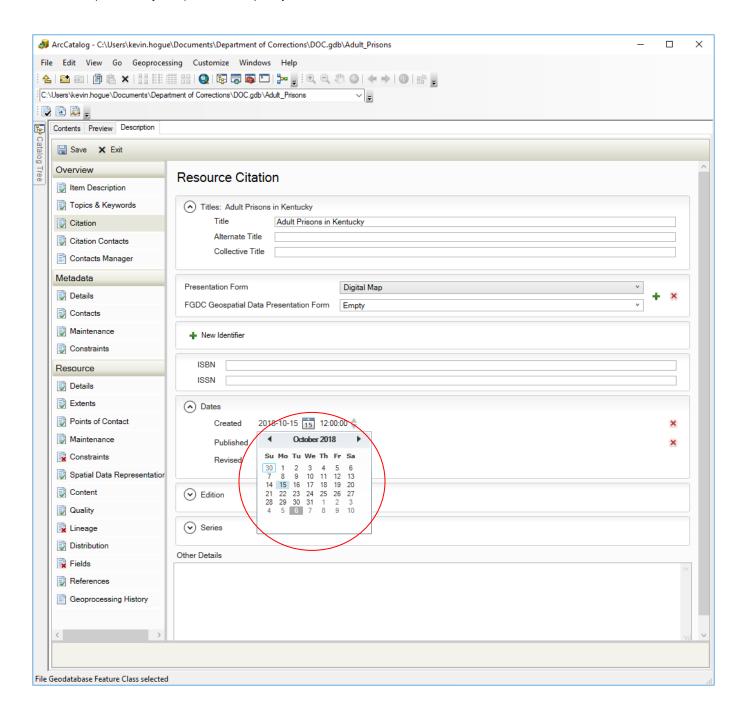
- 2. In ArcCatalog, click the item (e.g., shapefile) in the Catalog tree whose metadata you want to edit.
- 3. In the view window, click the **Description** tab, then click the **Edit** button.
- 4. In section headings to the left and under the **Overview** chapter, click on the **Citation** page.
- 5. Expand the *Titles* heading, add a title that best describes what the data represents (ex. "Kentucky 5k Image Grid").



<sup>&</sup>lt;sup>1</sup> http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/Creating and managing FGDC metadata/003t00000031000000/

<sup>&</sup>lt;sup>2</sup> http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/Illustrated guide to complete FGDC metadata/003t00000037000000/

Next, enter the publication date. Staying in the *Overview > Citation* section, expand *Dates*. If you are unsure of a specific date or month use "01". Also, it is acceptable to enter only month and year (2012-04-01) or even year (2012-01-01). Adjust *Published* time to read 12:00:00

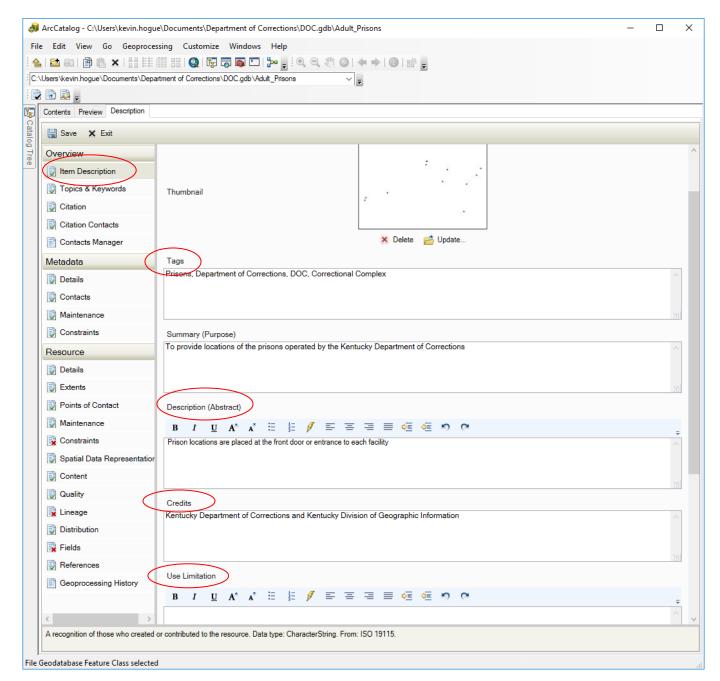


7. Now please enter an Abstract and the Purpose of the resource. Remaining in the *Overview* section, click *Item Description* at the top. Add tags (separated by commas) in the box under *Tags* (same as *Keywords*). Try to use as many descriptive tags as possible so that it is easier for users to find your resource.

Next add the Resource Purpose in the box under Summary (Purpose).

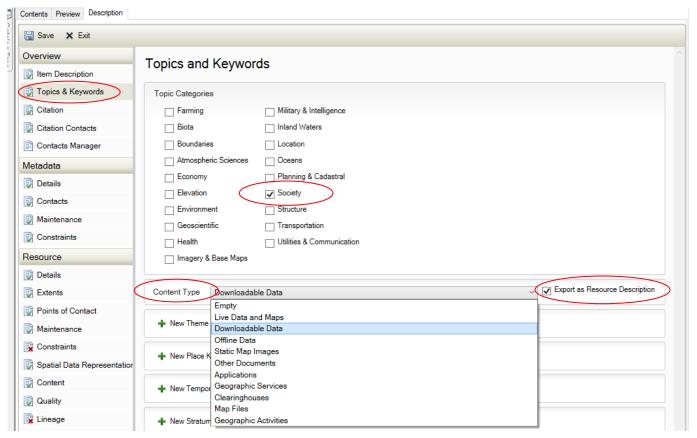
Then, add the Resource Abstract in the box under *Description (Abstract)*.

Lastly, please be sure to enter the appropriate information in the Credits and Use Limitation boxes within this section. It is important that you let people know whether there are any use limitations and it is always appropriate to give agencies or individuals credit for the work they have performed.



8. Define the resource's Topic Category and Content Type. In the *Overview* section, click *Topics & Keywords*. Choose the *Topic Category(s)* that are most associated with the resource. These categories are based on ISO Topic Categories and allow for associating a resource with a given data theme. For example a layer of Fire Districts should be categorized as *Boundaries* and a layer of Streams would be categorized as *Inland Waters*. Please reference the following URLs for more information on selecting the most appropriate Topic Category:

http://www.spatial.redlands.edu/redlandsinstitute/external/ISOTopicCategoriesfromMetadataQuickGuide.pdf http://gcmd.nasa.gov/User/difguide/iso\_topics.html

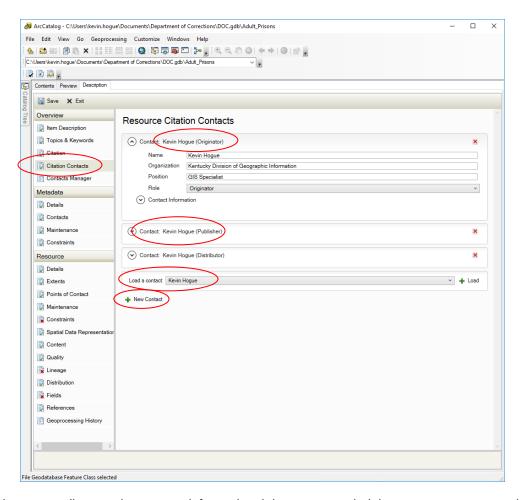


Now, Define the Resource Content Type. *Note: You must have ArcGIS 10.0 SP4 or later installed to have this functionality.* The content type is very important as it relates to searches on the Geoportal. It is crucial that this information is included. Click on *Content Type* and then select the appropriate type from the pulldown list. For example, a Shapefile would be considered *Downloadable Data*, a PDF of a Map would be considered a *Static Map Image*, and an ArcGIS Server Service would be considered a *Live Data and Maps* content type.

Additionally, select the *Export as Resource Description* box so that it behaves correctly when published to the Geoportal.

9. Any FGDC Citation requires a Citation (Originator), AND a Citation (Publisher) with their respective contact information to be provided. To do this, click *Overview* > *Citation Contacts*. To add the Citation Originator or Citation Publisher contact information. Click + *New Contact* and complete the *Name, Organization, Position* and *Role* fields. Expand *Contact Information* and enter publication/origination location (e.g., Frankfort, Kentucky) to the *City* and *State* fields.

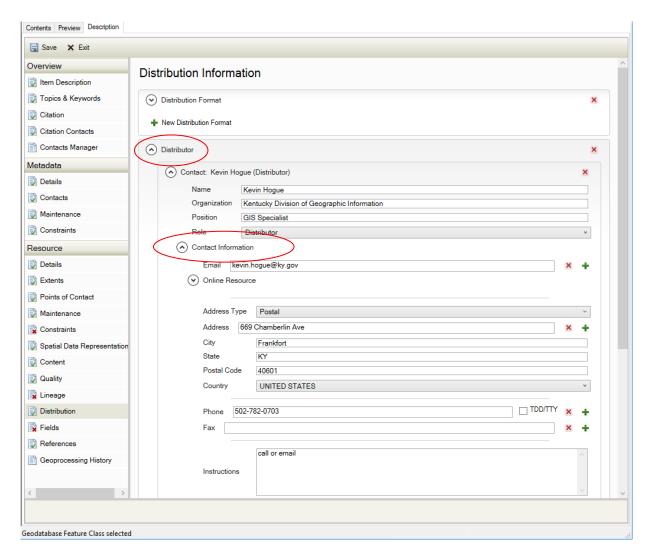
Now, Repeat this step for both data *Originator* and again for the data *Publisher*. Both are required.



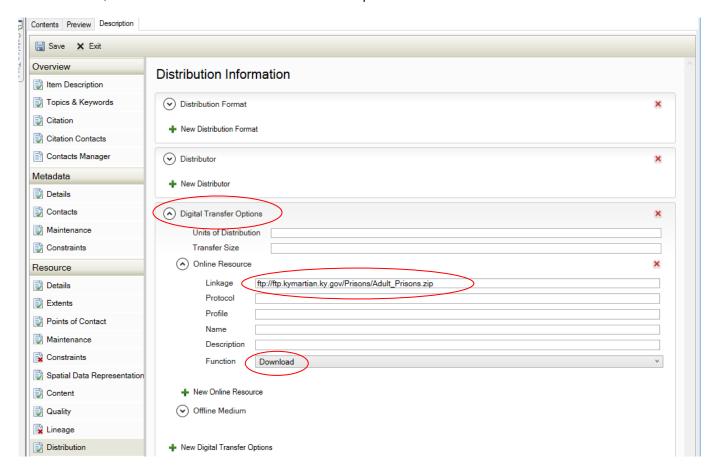
Note: In order to expedite entering contact information, it is recommended that you prepare a template containing ALL information publishing to the Kentucky Geography Network requires. At ArcGIS 10.1 you have the option to save your contact information and then complete this section of the form by simply using the "Load a contact" function. This streamlines the workflow when it comes to filling out all the required contact information.

Next, add Online Linkage and Distributor Information to all downloadable data resources. Click Resource > Distribution and click on Distributor or New Distributor. Click on Contact Information or New Contact Information.

Now, fill in all contact information by entering the Name, Organization, Position and Role (Distributor). Then expand Contact Information so that you can add email address, mailing address, phone, fax and contact instructions/hours and so forth.

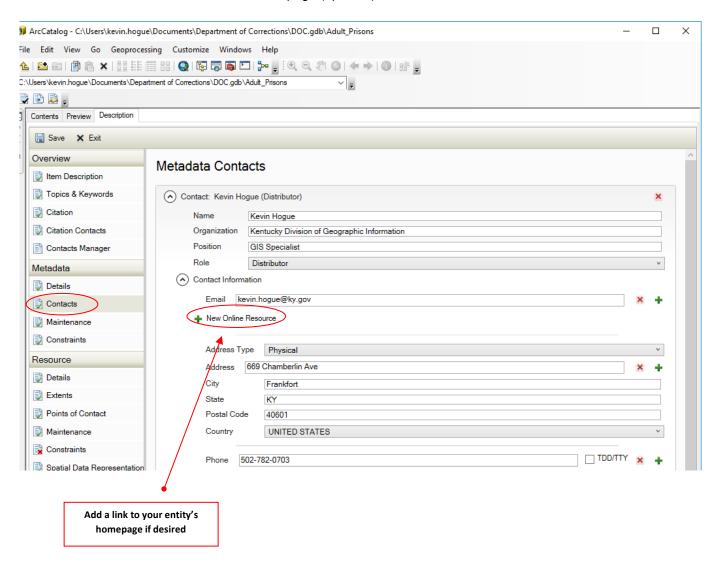


11. Also under the *Resource > Distribution* section, click on **Digital Transfer Options** or **New Digital Transfer Options**. Click on Online Resource or New Online Resource and put the link to the data in the Linkage field. Please make sure to test the link to ensure it is a working link to the data. Also under **Online Resource**, under **Function** select Download from the pulldown menu.

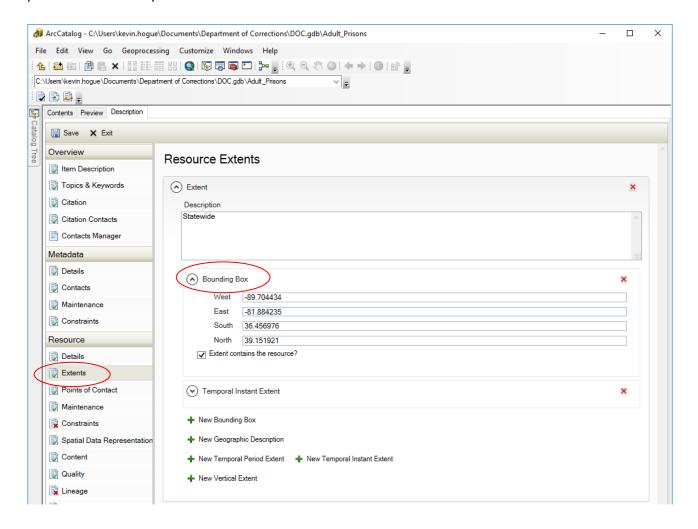


Note: Please make sure to test your link as this is how people will access the posted resource. For example, the link could be a link to zipped up shapefile that is accessible via FTP or the URL of a Web Mapping Viewer.

12. Add Contact Information. Click *Metadata* > *Contacts* and add basic information, then expand Contact Information to add email address, mailing address, phone, fax and contact instructions/hours. Expand *Online Resource* to add resource home page (optional).



13. Add spatial extent information. Navigate to *Resource > Extents* and click *Extent* and then click + *New Bounding Box.* If data fields are unpopulated, you will need to enter an appropriate extent. Each resource must have an extent defined so that users know the footprint of the data. Additionally, the extent values are leveraged by spatial searches within the Geoportal. Check the box for *Extent Contains the Resource* and provide a brief description.



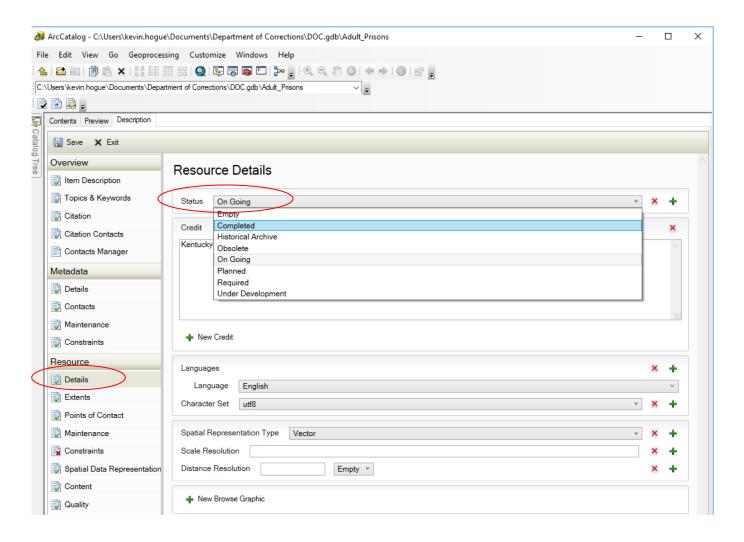
The spatial extent values for a resource that is considered "statewide" are shown below and can be copied and pasted into the metadata form.

Spatial Domain for Kentucky

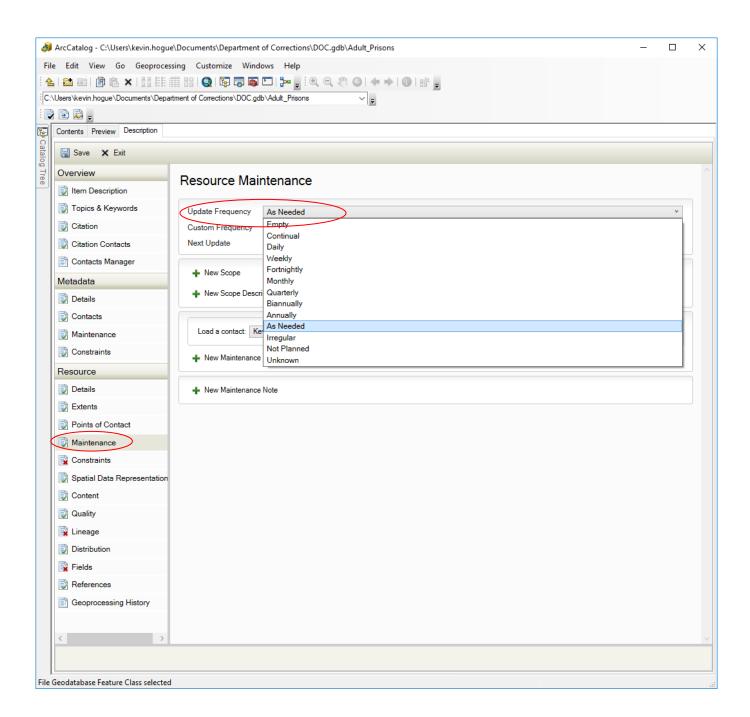
WEST	-89.704434
EAST	-81.884235
SOUTH	36.456976
NORTH	39.151921

**NOTE:** It is recommended that you SAVE YOUR WORK periodically while creating or editing metadata.

14. Define the resource's progress and update frequency. To update progress, navigate to Resource > Details and Click + New Status. In the pull-down that appears, assign the status (progress) for the resource. Additionally, use this portion of the form to provide credit to agencies or individuals that are responsible for the creation, maintenance, or processing of the resource.



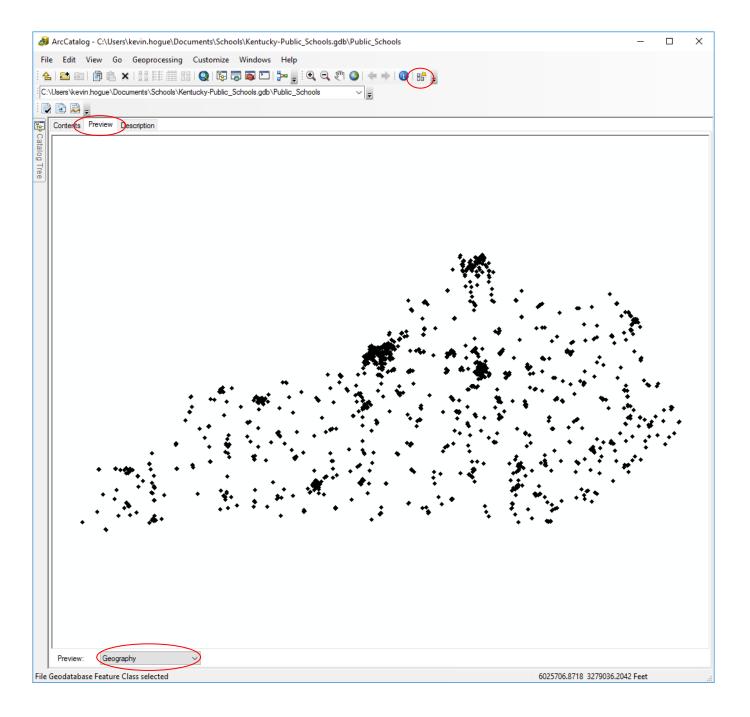
15. Next, enter the update frequency. Navigate to **Resource > Maintenance** and under **Update Frequency**, assign the appropriate expected update frequency.



16. Once all the steps above have been completed, please save and exit the edit session.

17. To create a thumbnail for the resource, select the resource again in the directory tree in ArcCatalog and select the Preview tab for the resource, set the Preview to Geography and use the zoom tools if necessary to best represent the resource. Click the Create Thumbnail button located on the Geography toolbar to create the thumbnail.

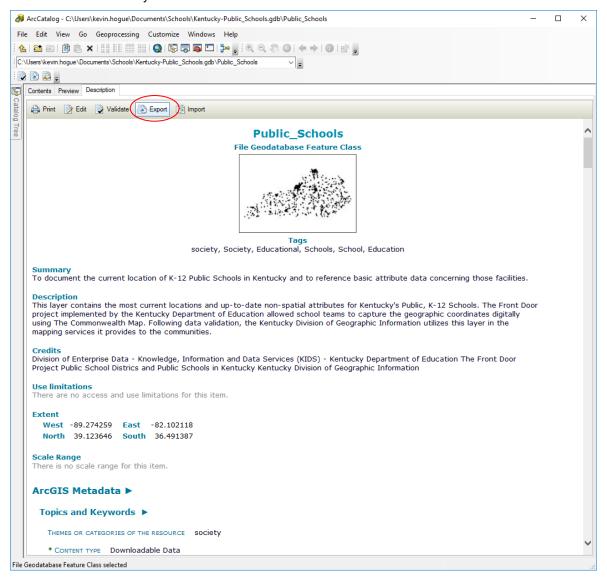
Note: Exporting the metadata to other formats may not always preserve the thumbnail.



18. Export ArcGIS style metadata to an FGDC standards format. In ArcCatalog, select the file (XML) to be exported. In the preview window, Click the *Description* tab then click *Export*. Under *Translator*, verify that the path is set to <Install Drive>:\ (C: for example) and then browse to the directory shown below and select the file ArcGIS2FGDC.xml:

## <Install Drive>:\Program Files\ArcGIS\Desktop10.0\Metadata\Translator\ArcGIS2FGDC.xml

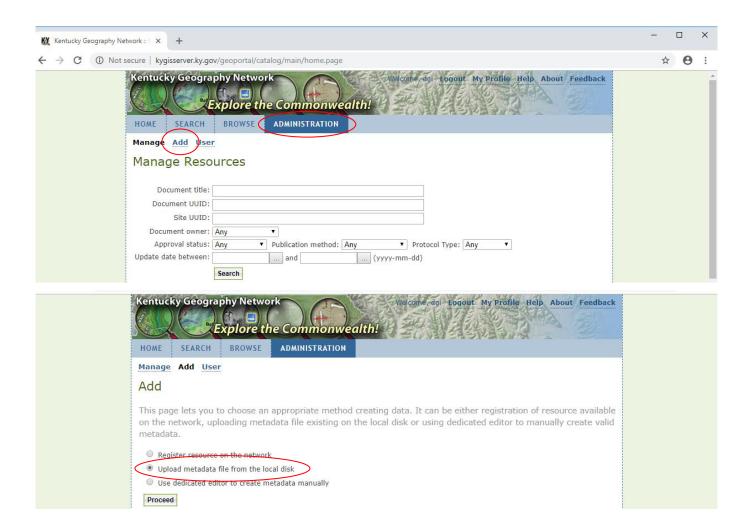
Under *Output File* name the FGDC metadata appropriately and use the browser to change the file destination if necessary. Click *OK*.



19. Once the export process is complete, upload exported FGDC metadata to the Geoportal. Open the Kentucky Geography Network and the login to your publishing account.



20. Click ADMINISTRATION > Add. Choose Upload metadata file from local disk and select Proceed.



21. Under *Local Path*, use the Browse button and select the FGDC metadata created in step 18.

To validate and upload, click the *Upload* button under the *Local Path* entry. Once FGDC metadata has been validated, it will be uploaded and posted for approval. To check for FGDC validation without uploading, use the *Validation button*.

Once you have completed this step, please let one of the DGI Staff know that you have published a resource. We will review the document and approve it for posting.

