

LESSON 12 - WMS Client Plug-in

This lesson presents the TerraView plug-in *WMS Client*. This plug-in is a tool to access data sources, external to the database being used, as Themes. The external data sources can be: shape files, remote TerraLib databases, and WMS servers. To access these external data sources, a database with at least one selected view should be used.

The *WMS Client* plug-in is the tool that allows the visualization of information layers from WMS servers. WMS stands for *Web Map Service*, a service to create maps on the web from geo-referred data.

With this plug-in, TerraView provides the capability to create maps (themes) from WMS servers. The plug-in works as a WMS client and requests and displays maps created by this type of service. TerraView can connect to servers compliant with any Open Geospatial Consortium (OGC) official WMS specification.

O WMS Client plug-in provides TerraView with the following capabilities:

- Creation of themes from WMS servers to be visualized in an integrated way with other ordinary TerraView themes. There is no limitation on the number of servers and maps that can be added to the same view;
- Display of a WMS theme legend if the server provides this support correctly;
- Acquisition of information about the features presented on the maps from WMS servers through pointing over the draw area. However, this capability may not be available in the WMS server.

To display a map from a WMS server, execute the following steps:

1. Create a view, select it, and then access the **Plugins → WMS Client** menu. The window presented in Figure 12.1 will appear.
2. Type the address of the WMS server that will provide the required map, or select a previously used service that is available in the list, by clicking on the corresponding number. Then click on **Next** button and the window presented in Figure 12.2 will appear.

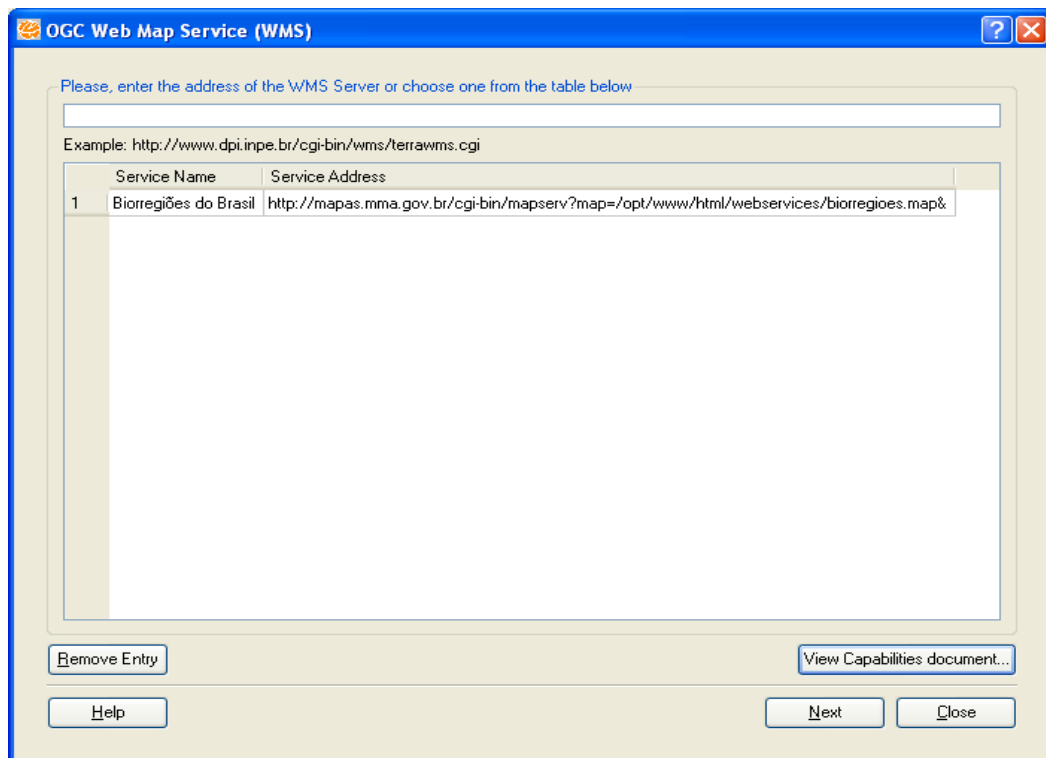


Figure 12.1 - Connection to WMS.

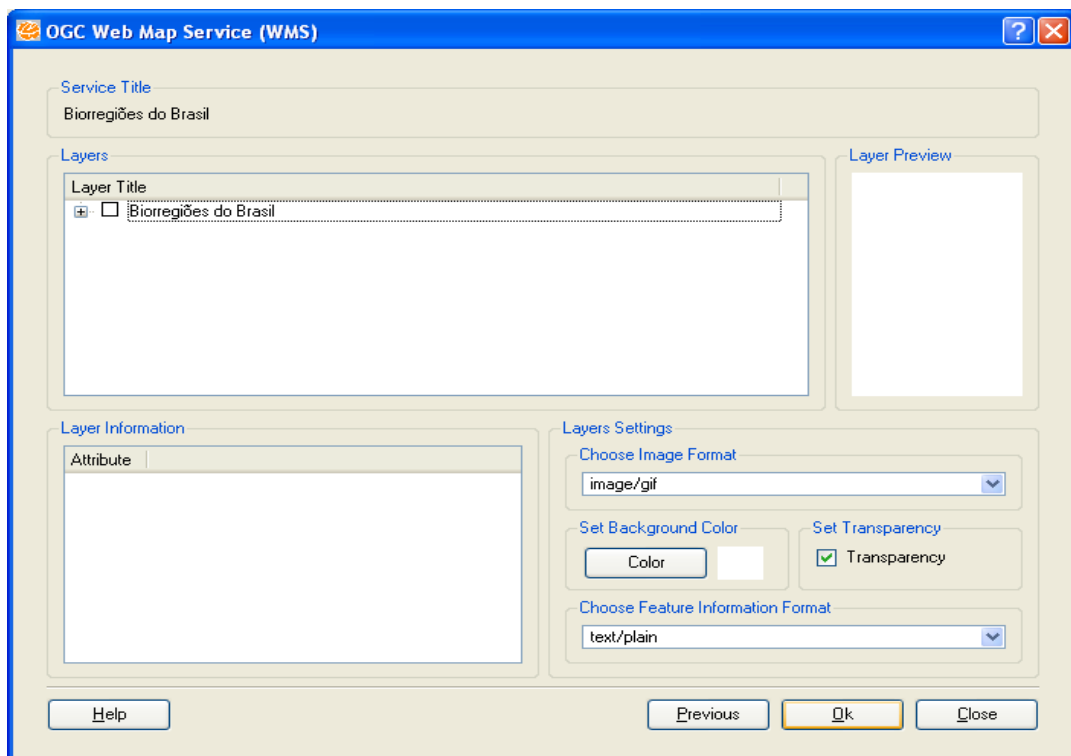


Figure 12.2 - Selection of information layers.

3. This window allows the selection of the information layers of interest. If the + sign is shown in the list of layers, the item can be open by clicking

on the sign, and the list of layers that are available at the server linked to that item will be displayed.

4. Click the check box on the left of the selected layer and wait for the corresponding map to be drawn on the right panel (Layer Pre-visualization), as shown in Figure 12.3.

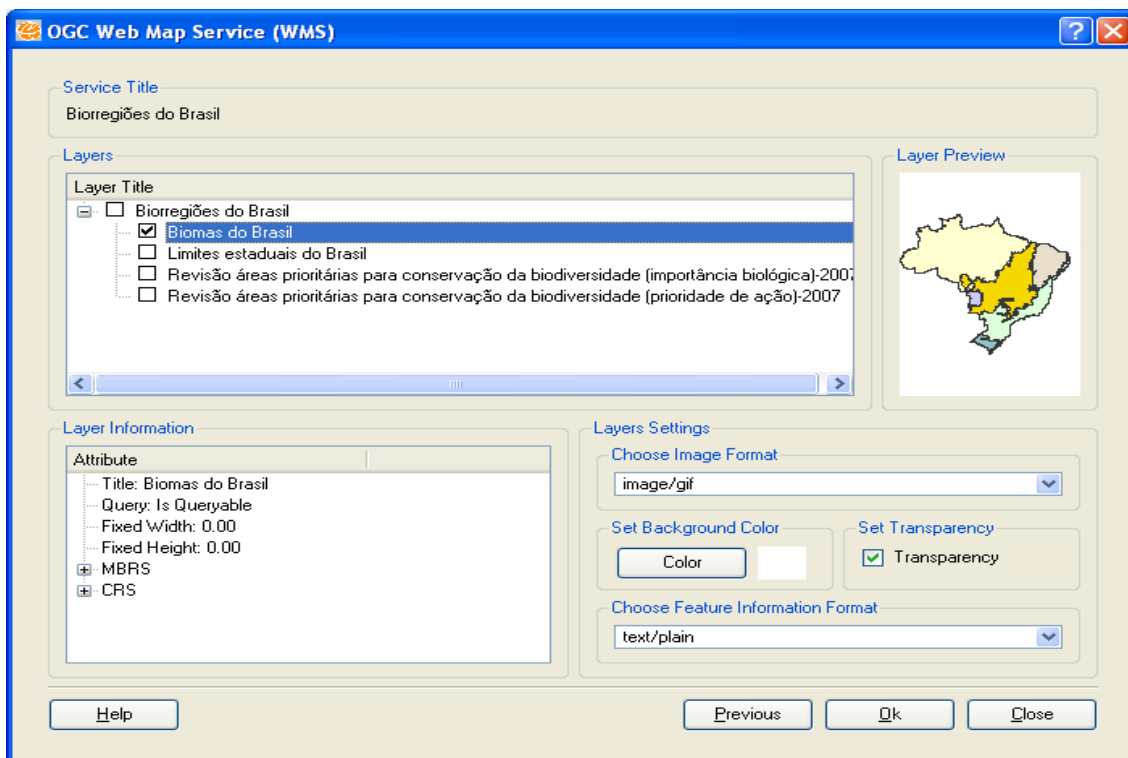


Figure 12.3 - Pre-visualization of the selected layer.

5. In the previous step, the message presented in Figure 12.4 will appear if the **.gif** is not supported by the plug-in. When this happens, one must exchange for another format by clicking **Layer Settings** button.



Figure 12.4 - Non-supported image format.

6. Once a supported extension is selected, click **Previous** button and select again the requested layer to be visualized.
7. Repeat step 4 to choose all required layers (Figure 12.3); to finish, select **OK**. A confirmation window will be presented, as shown Figure 12.5.
8. Select **Yes** to create the WMS Theme(s).



Figure 12.5 - Confirmation window for WMS themes creation.

9. When the operation is confirmed, the themes are created and shown in the current view, as illustrated in Figure 12.6. It can be seen that the icon for WMS themes is letter **T** followed by letter **w**.

Note that various themes can be created, from different WMS servers.



Figure 12.6 - View after WMS themes are created.

To display a WMS theme legend, click the mouse right button on the theme name to open a pop-up menu. If the WMS server has legend associated to the layer, option **Show Legend** will be enabled and be selectable. Otherwise, the option will be disabled.

When **Show Legend** option is selected, the WMS plug-in will retrieve the legend from the server and made available under the name of the theme for which the option was selected.

To hide a legend, click the – (minus) sign besides the theme name or forever remove the legend from the views tree by selecting **Hide Legend** option.

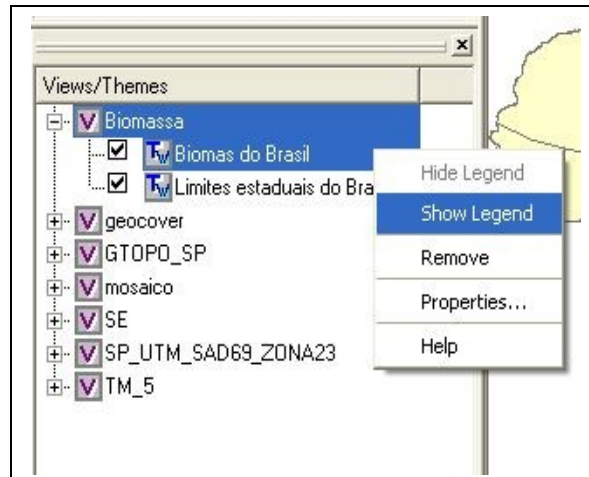


Figure 12.7 - Pop-up menu associated to a WMS theme.

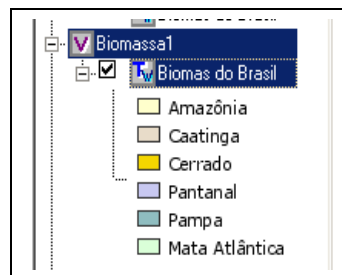


Figure 12.8 - Legend related to a WMS theme.

To query the attributes of a feature or geometry in a WMS map, use the information cursor (icon **(i)** in the tool bar) and click on the feature. A window with information about that feature will be presented, as shown in Figure 12.9.

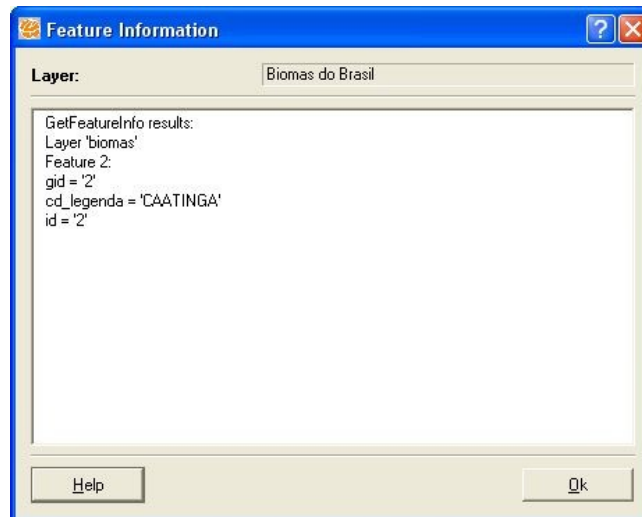


Figure 12.9 - Information about a map feature.

When the WMS server does not provide this functionality, a message similar to the one presented in Figure 12.10 will be shown.



Figure 12.10 - Functionality not supported by the WMS server.