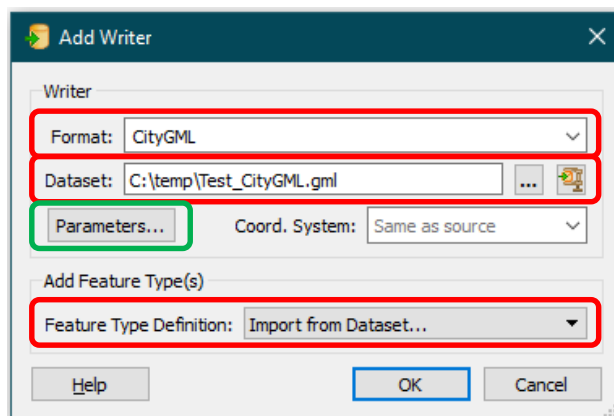Chair of Geoinformatics

TUM

Importing the CityGML UtilityNetwork ADE in an FME Workspace

FME provides a CityGML Writer which can be used for writing CityGML instance documents. However, to be able to do so, the feature types defined in the CityGML standard first need to be made known to the CityGML Writer. This is done by importing the corresponding feature type definitions into the FME workspace. Every FME installation ships with two sample datasets which contain these feature type definitions (see http://docs.safe.com/fme/html/FME_Desktop_Documentation/FME_ReadersWriters/ citygml/Tutorial/writing_citygml_from_fme.htm for further information). Based on these sample datasets the file *CityGML_UtilityNetworkADE_feature_types.xml* was created which contains not only the feature type definitions of the CityGML standard, but also the feature type definitions of the CityGML UtilityNetwork ADE.

The following steps describe how you can import the feature type definitions from this file into a CityGML Writer. You need to conduct these steps whenever a CityGML Writer is to be added to an FME workspace which should not only be able to write the feature type definitions of the CityGML standard, but also the feature type definitions of the CityGML UtilityNetwork ADE. (When the CityGML Writer only needs to be able to write the feature type definitions of the CityGML standard, please use the sample dataset *CityGML_ feature_types.xml* provided within the FME installation.)

1. From the menu, select **Writers → Add Writer…** The Add Writer dialog window opens:

Set the following parameters:

- **Format**: CityGML
- **Dataset**: Dataset, to which the transformation result will be written
- **Feature Type Definition**: Import from Dataset…

→ Click the **Parameters…** button

2. After clicking the **Parameters…** button, the CityGML Parameters dialog window opens:
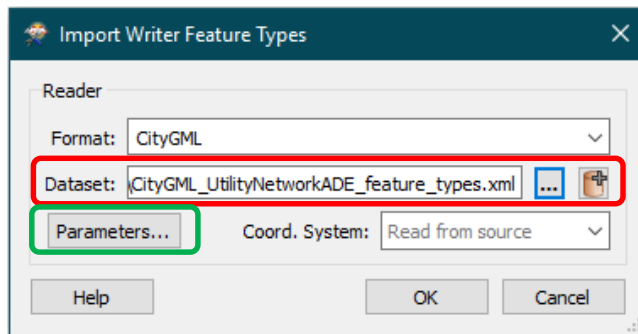

Set the following parameters:

- **CityGML Version**: 2.0
- **Application Domain Extension**: Other
- **ADE Schema File(s)**: The XML Schema file of the UtilityNetwork ADE, i.e. \<filepath>\CityGML_UtilityNetworkADE.xsd
- **xsi:schemaLocation**: The namespace and the location of the XML Schema file, e.g. http://www.citygml.org/ade/utility/0.9.2 CityGML_UtilityNetworkADE.xsd
- **GML srsName**: The epsg code for the dataset you will write
- **GML SRS Axis Order**: 1,2,3

→ Click **OK** in the CityGML Parameters dialog window
→ Click **OK** in the Add Writer dialog window

3. Since in step one the option „Import from Dataset…" was chosen, an Import Writer Feature Types dialog window opens now automatically, which allows for importing the feature type definitions into the CityGML Writer:
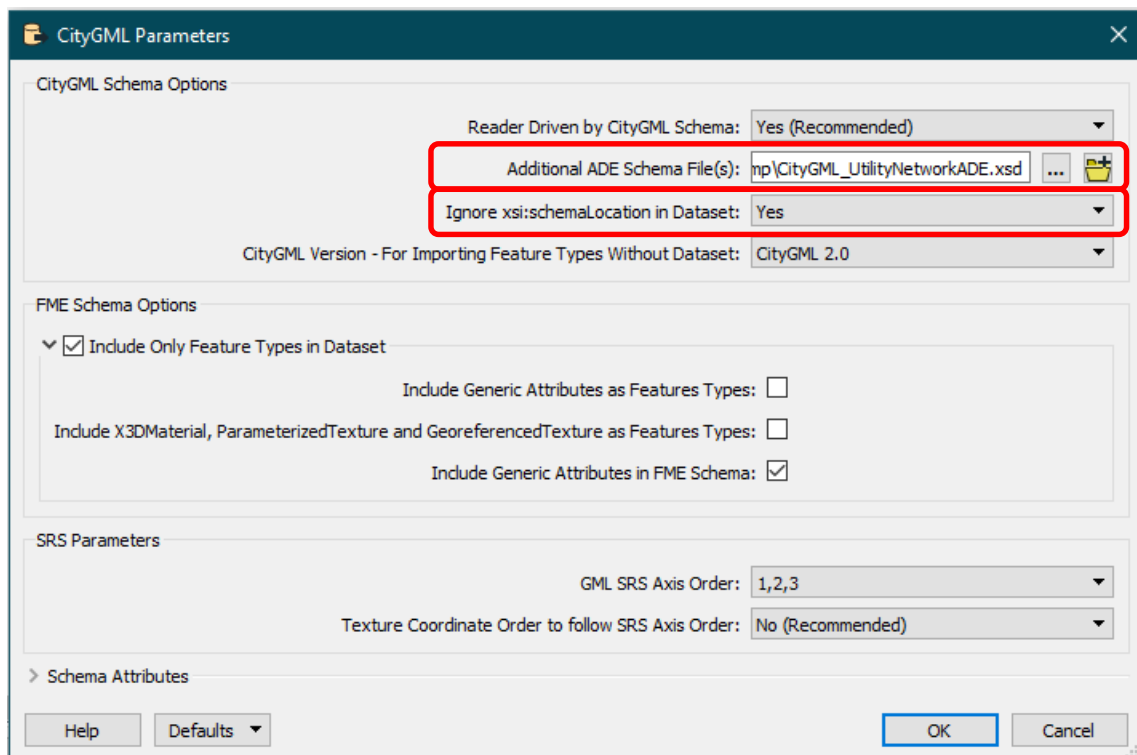

Set the following parameters:

- **Dataset**: The file containing the CityGML and UtilityNetwork ADE feature type definitions, i.e.
  \<filepath\>\CityGML_UtilityNetworkADE_feature_types.xml

→ Click the **Parameters…** button

4. After clicking the **Parameters…** button, another CityGML Parameters dialog window opens:
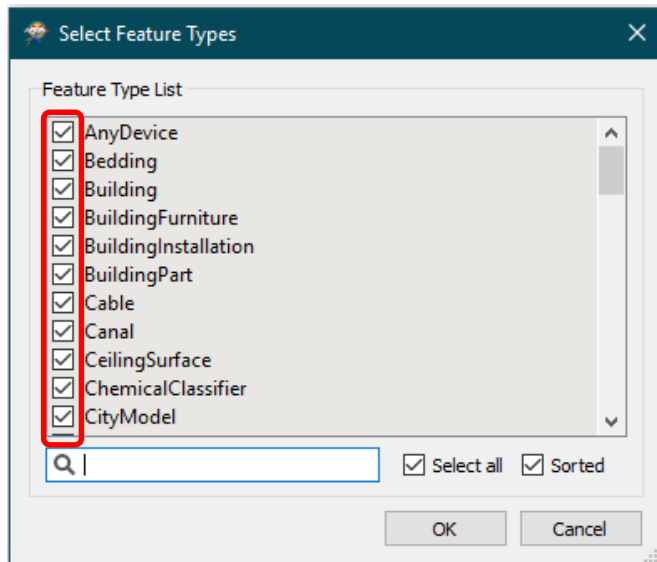

Set the following parameters:

- **Additional ADE Schema File(s)**:   The XML Schema file of the UtilityNetwork ADE, i.e.
  \<filepath\>\CityGML_UtilityNetworkADE.xsd

- **Ignore xsi:schemaLocation in Dataset**: Yes

→ Click **OK** in the CityGML Parameters dialog window
→ Click **OK** in the Import Writer Feature Types dialog window

5. FME reads the feature type definitions and displays them in the Select Feature Types dialog window:

→ Select the feature types you want to import into the FME workspace. By default, all feature types are checked.

→ Click **OK**

→ Now the imported CityGML and UtilityNetwork ADE feature types appear in the FME workspace.