



ArcGIS 10.1 SP1 for INSPIRE: INSPIRE Annex I Geodatabase Template Installation Guide

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1 Introduction

The purpose of this document is to provide instructions on installation of the ArcGIS 10.1 for INSPIRE Geodatabase Template. The target audience of this document is existing ArcGIS for INSPIRE 1.0 service pack 2 (SP2) users who want to upgrade the software to ArcGIS 10.1 for INSPIRE and first-time users who want to install ArcGIS 10.1 for INSPIRE directly on their machines.

2 System Requirements

See the System Requirements section of the ArcGIS for INSPIRE web help at resources.arcgis.com/en/help/arcgis-for-inspire/10.1/index.html.

3 Installation

To apply the ArcGIS 10.1 for INSPIRE Geodatabase Template, you must first install the template and then follow instructions to create the INSPIRE database.

3.1 Prerequisites

3.1.1 Database User Rights

3.1.1.1 ArcGIS 10.1 SP1 for INSPIRE

Prior to ArcGIS 10.1 SP1 for INSPIRE, there have been some limitations when connecting to an enterprise geodatabase. The user connecting to the geodatabase when running the service needed to be the data owner.

With service pack 1, this limitation has been eliminated. The product now supports connecting to and creating INSPIRE services as a user but not necessarily the INSPIRE data owner. This upgrade allows a clear separation of database roles, as the "service user" only needs read access to the INSPIRE schema data. This is more in alignment with common security practices for IT production environments.

With service pack 1, the following privileges are necessary for the user to connect to the INSPIRE geodatabase, and it no longer requires the create view privilege.

- Read privilege to the INSPIRE geodatabase.
- Insert, update, and delete access for the PredefinedDatasets table. The table is used for creating stored queries for INSPIRE download services.

3.1.1.2 ArcGIS 10.1 for INSPIRE

Make sure that the user interacting with the database layer is allowed to create and delete database views. For that, grant specific rights on the database level to the user:

```
GRANT CREATE VIEW TO <USER | ROLE> ;
```

```
GRANT DELETE VIEW TO <USER | ROLE> ;
```

3.1.2 Microsoft SQL Server GEOMETRY Keyword

If you are installing on SQL Server, you will have to change the configuration string of the GEOMETRY_STORAGE parameter from SDEBINARY to GEOMETRY prior to importing data. This can be done by following the steps below:

1. Open a command line window.
2. Run the sdedbtune command with the alter option (e.g., sdedbtune – o alter).
3. Run the sdedbtune command with the export option to update the dbtune file, or alter the value in the dbtune table within the database (e.g., sdedbtune – o export).

For detailed syntax on running the sdedbtune command, see http://help.arcgis.com/en/geodatabase/10.0/admin_cmds/support_files/serveradmin/sdedbtune.htm.

3.1.3 Oracle ExtProc Configuration

If you are installing on an Oracle database, make sure that the Oracle ExtProc configuration is set up correctly. ArcGIS for INSPIRE makes use of the ST_AS* functions on SQL basis. To check whether your Oracle database is set up correctly, see resources.arcgis.com/en/help/main/10.1/index.html#/Configuring_the_Oracle_extproc_to_access_the_geodatabase_with_SQL/002n00000091000000/.

3.2 Install

The geodatabase implementation of the INSPIRE Annex I data models is defined using the Esri geodatabase XML description. For more detailed information, see "XML Schema of the Geodatabase" at support.esri.com/en/knowledgebase/whitepapers/view/productid/43w/metaid/695.

The latest version of the INSPIRE Annex I Esri geodatabase file can be found in the ArcGIS for INSPIRE distribution folder (e.g., *D:\GDB Templates*).

3.3 Create the INSPIRE Geodatabase

Follow the steps below to create the geodatabase:

1. Start ArcCatalog.
2. Right-click your spatial database connection and choose Import > XML Workspace Document (figure 1).

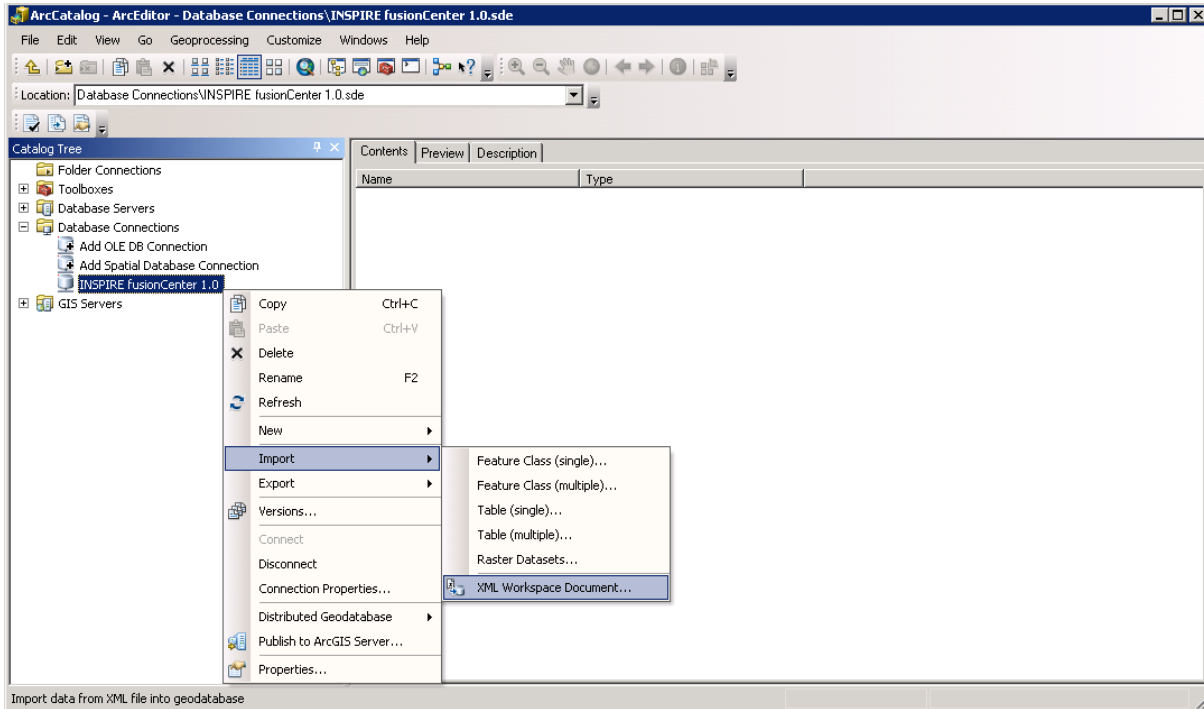


Figure 1: Import of XML Workspace Document

3. Navigate to the file <ArcGIS for INSPIRE_DVD>\GDB Templates\GDBTemplate \GDB_Template_Annex_1.xml and click Next (figure 2). Make sure you have selected the Data option, because the workspace document contains some information required to run ArcGIS for INSPIRE correctly.

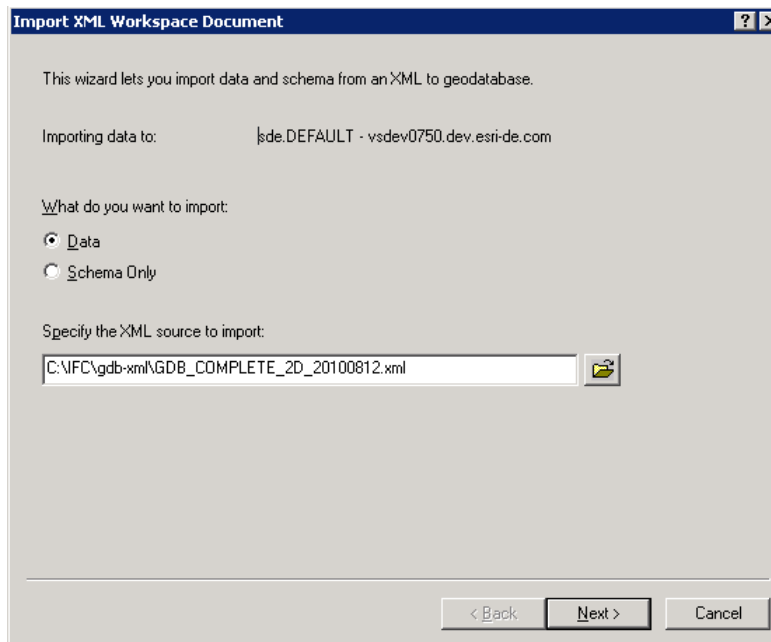


Figure 2: Specify XML Workspace Document to Be Imported

4. Click Next. ArcCatalog displays a table that indicates the details of objects to be created (figure 3). The table includes the following columns: Type, Source Name, Target Name, and Config. Keyword. Each type can be a table, a feature class, or a domain.

Type	Source Name	Target Name	Config. Keyword
Table	LayerInfo	LayerInfo	DEFAULTS
Table	RelationshipInfo	RelationshipInfo	DEFAULTS
Table	SpatialObjectTypeInfo	SpatialObjectTypeInfo	DEFAULTS
Table	SubtypesInfo	SubtypesInfo	DEFAULTS
Table	PredefinedDatasets	PredefinedDatasets	DEFAULTS
Table	adAddress	adAddress	DEFAULTS
Table	adAddress_locator	adAddress_locator	DEFAULTS
Table	adAddress_locator_de	adAddress_locator_de	DEFAULTS
Table	adAddress_locator_na	adAddress_locator_na	DEFAULTS
Table	adAddress_locator_na	adAddress_locator_na	DEFAULTS
Feature class	adAddress_position	adAddress_position	DEFAULTS
Table	adComponent	adComponent	DEFAULTS
Table	adComponent_name	adComponent_name	DEFAULTS
Table	adComponent_postNa	adComponent_postNa	DEFAULTS
Feature class	auAdmBoundaryL	auAdmBoundaryL	DEFAULTS
Table	auAdmBoundaryL_nati	auAdmBoundaryL_nati	DEFAULTS

Figure 3: Overview of Feature Classes and Tables to Be Imported

5. Click Finish to complete the import. ArcCatalog imports the data and creates the geodatabase for INSPIRE Annex I data models.

Detailed documentation can also be found in the web help topic "Importing a geodatabase schema from an XML workspace document," at help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/Importing_a_geodatabase_schema_from_an_XML_workspace_document/003n0000002q000000.

3.4 Update the INSPIRE Geodatabase

3.4.1 Updating the INSPIRE Geodatabase from ArcGIS 10.1 to 10.1 SP1

- The LayerInfo table has been updated to better handle layer order and support definition queries.
 - Updated LayerInfo table changes the ID values of point, multipoint, line, and surface sublayers to allow an "order by" selection from Addin so line layers will automatically be placed above surface layers.
 - All point layers will not reside within the 4000–4999 range.
 - All multipoint layers will not reside within the 5000–5999 range.
 - All line layers will not reside within the 6000–6999 range.
 - All surface layers will not reside within the 7000–7999 range.
 - For example: The layer PS.ProtectedSitesHealthAndWelfare.MP had ID 196; now it has ID 5196.

- Updated LayerInfo table adds the {0} placeholder for those definition queries pointing to a different table. The placeholder will be replaced during runtime with the qualified table name prefix.
- If you don't have any custom change to the LayerInfo table for 10.1, you can simply rename the old LayerInfo table and import the new LayerInfo table for 10.1 SP1 (GDB_Template_Annex_I_Table_LayerInfo.xml).
- There are no other geodatabase template changes to 10.1 SP1.

3.4.2 Updating the INSPIRE Geodatabase from ArcGIS 10 to 10.1

There are basically five changes that have been made to the geodatabase template in comparison to the template included in ArcGIS for INSPIRE 1.0 SP2:

- Renaming of field isolation from table sdSpeciesDistribution
Makes an update of your existing geodatabase mandatory
- Definition queries for Administrative Units theme in table LayerInfo
Makes an update of your existing geodatabase and services mandatory if you are exposing Administrative Units data
- Introduction of several indexed fields on the whole data model
Update of your geodatabase is strongly recommended as it improves performance
- New Table A4I_Info
Geodatabase update optional
- Improved antialiasing for feature classes and fields
Geodatabase update optional

See "ArcGIS 10.1 for INSPIRE Migration Guide" for a detailed explanation of the changes and improvements.