



# ArcGIS for INSPIRE 10.8.2: INSPIRE Geodatabase Templates Installation Guide

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## 1 Introduction

The purpose of this document is to provide instructions on installation of the ArcGIS for INSPIRE 10.8.2 Geodatabase Templates. The target audience of this document is existing ArcGIS for INSPIRE users who want to upgrade the geodatabase to ArcGIS for INSPIRE and first-time users who want to install ArcGIS for INSPIRE 10.8.2 directly on their machines.

**Note:** Please check the web help at <https://desktop.arcgis.com/en/quick-start-guides/latest/arcgis-for-inspire-quick-start-guide.htm> for reference to the latest version of this document.

## 2 System Requirements

See the System Requirements section of the ArcGIS for INSPIRE web help at

- [English](#)
- [French](#)
- [German](#)
- [Spanish](#)

If you plan to install the geodatabase template to an enterprise DBMS such as PostgreSQL and Microsoft SQL Server and publish inspire services, make sure you are using the ST\_Geometry as the storage type for geometry, also ArcGIS for INSPIRE currently does not support user schema geodatabase where sde and gdb related tables are under the user schema for Oracle databases.

## 3 Installation

To apply the ArcGIS for INSPIRE 10.8.2 Geodatabase Template, you must first install the template and then follow instructions to load data for the INSPIRE database.

If you are doing a new installation, you can create the geodatabase by importing workspace file A4I\_ALLINONE\_1082.XML, which contain all the data theme updates and info tables for 10.8.2.

The 10.8.2 geodatabase template is the same as 10.8.1 P1/P2 geodatabase template, if you have 10.8.1 Patch 1/2 geodatabase, no updates are needed to the geodatabase template”.

If you have 10.8.1 geodatabase, you will have to upgrade to 10.8.1 Patch 1/P2/10.8.2 by following steps in “3.4.2 Updating the INSPIRE Geodatabase from ArcGIS 10.8.1 to 10.8.1 Patch 1”.

If you already have ArcGIS 10.3, 10.3.1, ArcGIS 10.3.1 Update 1, ArcGIS 10.4, ArcGIS 10.5, or ArcGIS 10.6.1, 10.7, 10.7.1, 10.8 geodatabase, you can still use it with 10.8.1 software (except MR, which has

issue with geodatabases created before 10.7). If you have ArcGIS 10.2.1 or 10.2.2 for INSPIRE Geodatabase, you will need to upgrade to 10.3 or newer version.

### 3.1 Prerequisites

#### 3.1.1 Database User Rights

##### 3.1.1.1 ArcGIS for INSPIRE 10.8.2

The following privileges are necessary for the user to connect to the INSPIRE geodatabase:

- 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.

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>;
```

### 3.2 Installation

The geodatabase implementation of the INSPIRE 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](http://support.esri.com/en/knowledgebase/whitepapers/view/productid/43w/metaid/695).

The latest version of the INSPIRE Esri geodatabase template file can be found in the ArcGIS for INSPIRE distribution folder (e.g., <*ArcGIS for INSPIRE\_DVD*>|GDB Templates).

### 3.3 Create a new INSPIRE Geodatabase

If you want load all implemented data themes all at once, you can load ArcGIS Workspace document "A4I\_AllInOne\_10.8.2.xml" in one simple step.

Starting with ArcGIS for INSPIRE 10.3, users have the option to create geodatabase data themes either individually or any of the combinations, by the following process:

1. Create the common info tables for ArcGIS for INSPIRE
  - Import ArcGIS XML workspace document a4icommon.xml (e.g., <*ArcGIS for INSPIRE\_DVD*>|GDB Templates)
2. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Annex I, load the respective record sets into the tables created in step 1. Precisely:
  - a. Select the "Load XML RecordSet Document" option on LayerInfo table and select <*ARCGIS FOR INSPIRE\_DVD*>|GDB Templates|A1\A1\_LayerInfo.xml as the source to load

- b. Select the “Load XML RecordSet Document” option on RelationshipInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_RelationshipInfo.xml as the source to load

- c. Select the “Load XML RecordSet Document” option on SpatialObjectTypeInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_SpatialObjectTypeInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- d. Select the “Load XML RecordSet Document” option on SubtypesInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1\_SubtypesInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- e. Import (schema only) the XML workspace document <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\A1\A1.xml into the geodatabase

3. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Land Cover, load the respective record sets into the tables created in step 1. Precisely:

- a. Select the “Load XML RecordSet Document” option on LayerInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_LayerInfo.xml as the source to load

- b. Select the “Load XML RecordSet Document” option on RelationshipInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_RelationshipInfo.xml as the source to load

- c. Select the “Load XML RecordSet Document” option on SpatialObjectTypeInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_SpatialObjectTypeInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- d. Select the “Load XML RecordSet Document” option on SubtypesInfo table and select <ARCGIS FOR INSPIRE\_DVD>\GDB Templates\LC\lc\_SubtypesInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).

- e. Import (schema only) the XML workspace document <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|LC|lc.xml into the geodatabase
4. If you would like to create or add the ArcGIS Geodatabase for INSPIRE Geology, load the respective record sets in the tables created in step 1. Precisely:
  - a. Select the “Load XML RecordSet Document” option on LayerInfo table and select <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|GE|ge\_LayerInfo.xml as the source to load. If you will have both GE and MR, load GE\_LayerInfo\_MR.xml instead.
  - b. Select the “Load XML RecordSet Document” option on RelationshipInfo table and select <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|GE|ge\_RelationshipInfo.xml as the source to load
  - c. Select the “Load XML RecordSet Document” option on SpatialObjectTypeInfo table and select <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|GE|ge\_SpatialObjectTypeInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this have been observed for PostgreSQL).
  - d. Select the “Load XML RecordSet Document” option on SubtypesInfo table and select <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|GE|ge\_SubtypesInfo.xml as the source to load

**Note:** When loading recordset, make sure SPATIAL\_OBJECT\_TYPE field matches between source and target, due to case sensitivity difference among databases, sometimes the source and target fields have to be matched manually (this has been observed for PostgreSQL).
  - e. Import (schema only) the XML workspace document <ARCGIS FOR INSPIRE\_DVD>|GDB Templates|GE|ge.xml into the geodatabase
5. Follow steps as above if you want to create or add the ArcGIS Geodatabase template for INSPIRE Mineral Resources, Land Use, Statistical Units, etc. Please note that some data themes specifications have dependencies on other data themes. For example, Mineral Resources requires the Geology data model and therefore the Geology geodatabase template must be loaded in the enterprise geodatabase as well. The following table lists the dependencies:

Data theme	Dependencies
MR	GE
HB	SD
SU	A1 (if link to AdministrativeUnits)
PD	SU
AM	A1
NZ	EF (if link to EnvironmentMonitoringProgramme)
SR	A1
PF	BU
ER	A1
HH	SU

**Note:** when creating a map document including a theme with dependencies on other themes, all related themes must be added to the map document as well.

**Note:** Some domains (e.g. VoidReasonValue) are used by multiple geodatabase templates, when importing XML workspace document, ArcCatalog might report a name conflict and suggest a new name by adding “\_1” at the end when importing. If you are using GP tool “import XML Workspace Document” for the import task you can turn option “Overwrite the outputs of geoprocessing operations” on.

Some domains (such as pfProductCPAValue and pfWasteValue in PF data theme) have a very large list of values and the list can change depending on data provider, thus ArcGIS for INSPIRE does not populate the domain by default. The provided python script can import the value from a text file. Please see the ImportCodedValueDomains - Readme.txt file in the GDBTemplates\PF directory for details.

After completing the steps above, the geodatabase can be used as target geodatabase for populating INSPIRE data for the data themes installed in the geodatabase.

**Example:** General steps for importing ArcGIS XML workspace:

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

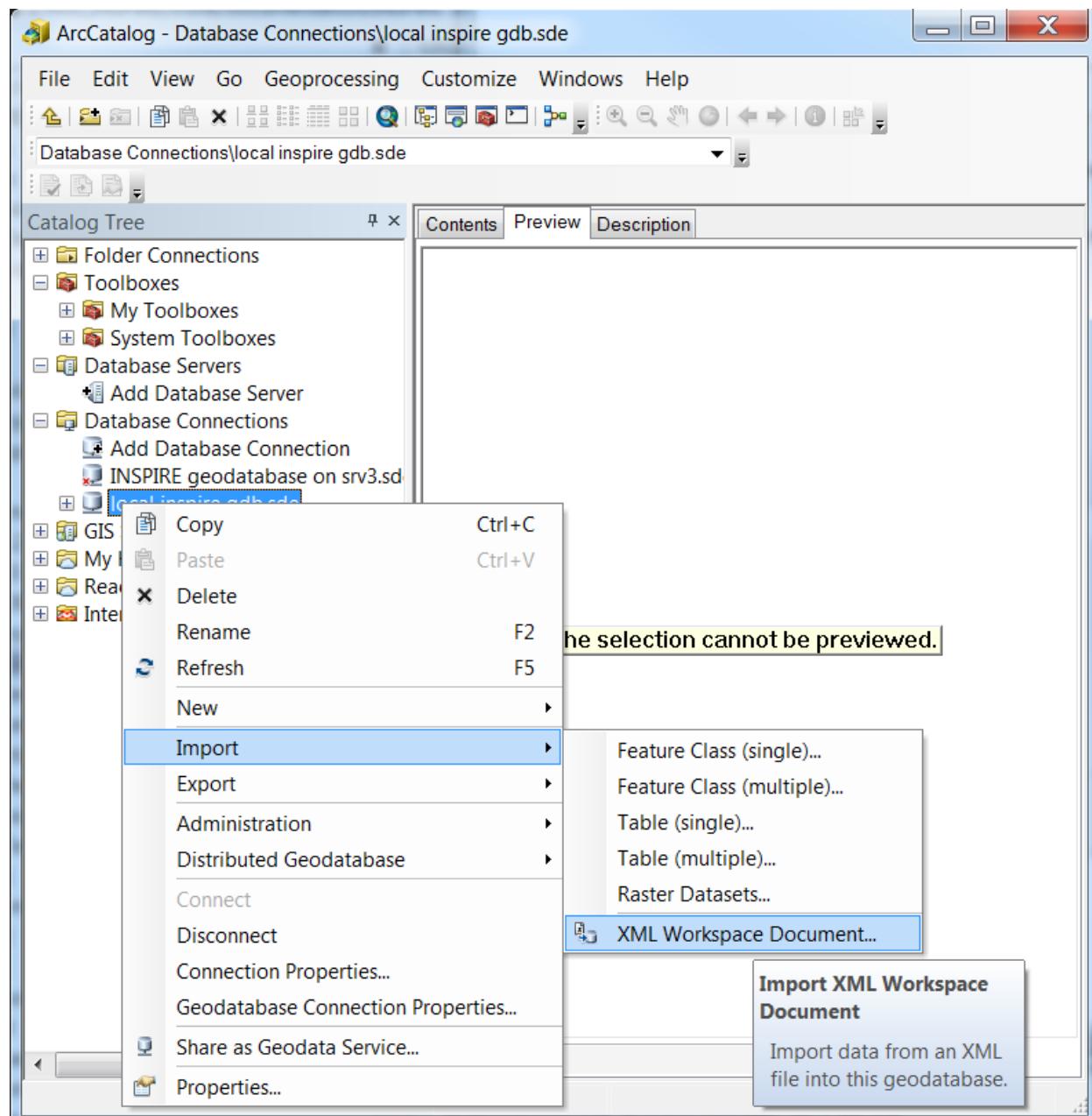
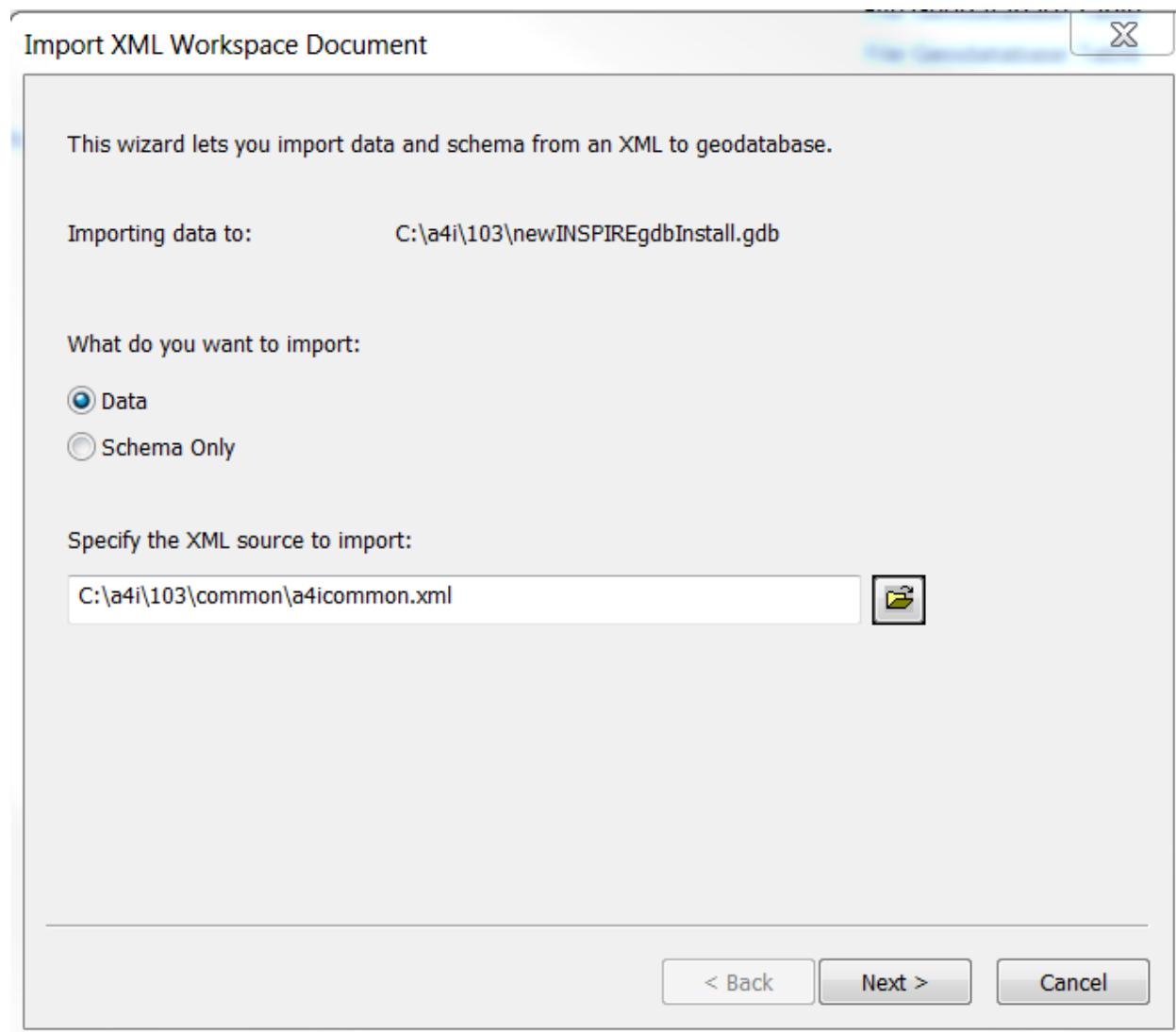


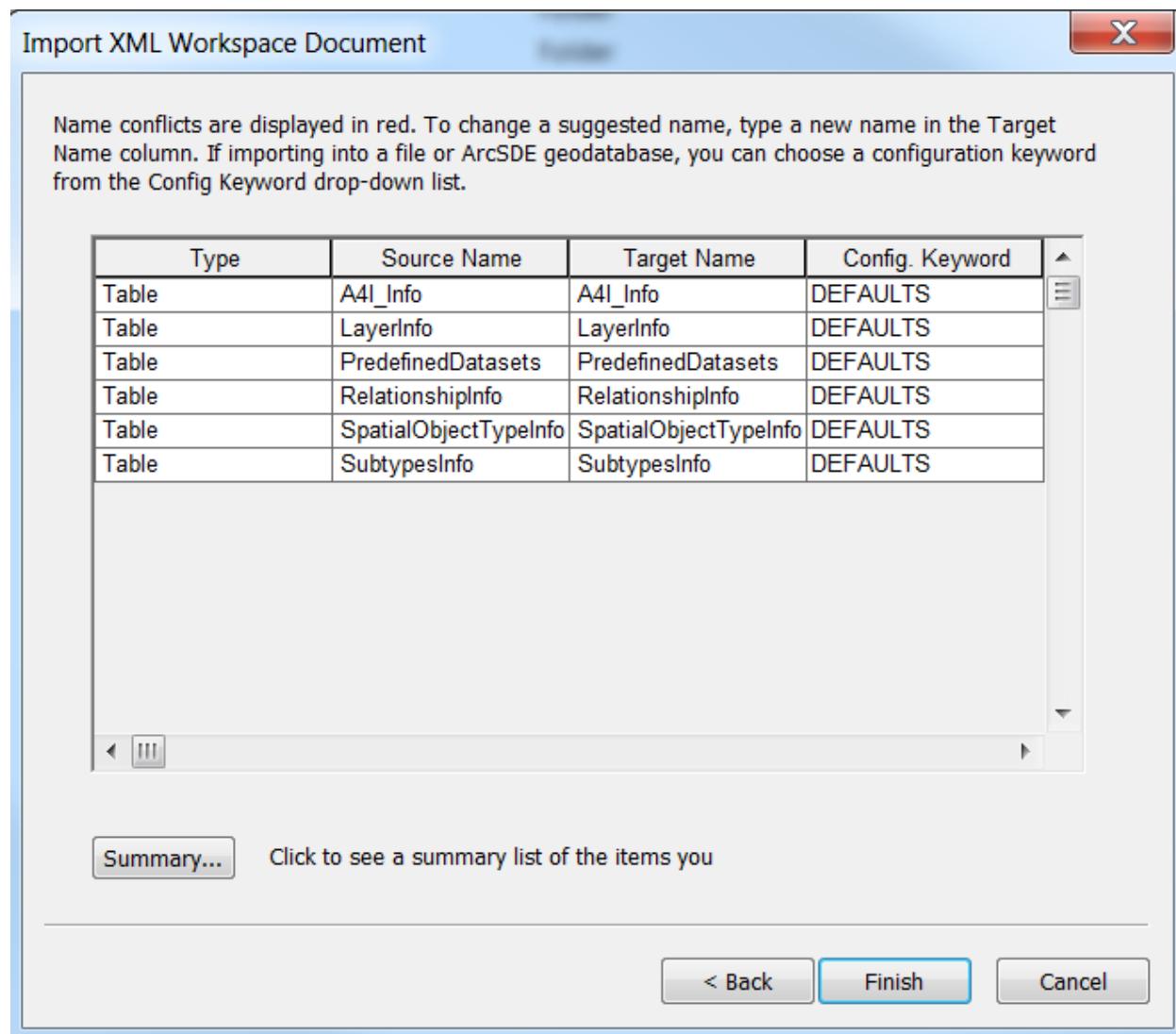
Figure 1: Import of XML Workspace Document

- 3) Navigate to the desired xml workspace file (e.g. <ArcGIS for INSPIRE\_DVD>\GDB Templates\a4icommom.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.



**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 common tables.

Detailed documentation can also be found in the web help topic "Importing a geodatabase schema from an XML workspace document," at

[http://resources.arcgis.com/en/help/main/10.2/#/Importing\\_a\\_geodatabase\\_schema\\_from\\_an\\_XML\\_workspace\\_document/003n0000002q00000000](http://resources.arcgis.com/en/help/main/10.2/#/Importing_a_geodatabase_schema_from_an_XML_workspace_document/003n0000002q00000000).

### 3.4 Update the INSPIRE Geodatabase

Read this section if you would like to upgrade from an earlier version of ArcGIS for INSPIRE geodatabase template, and to verify that your database is still supported at ArcGIS for INSPIRE.

**Note:** You will need to apply the changes below incrementally starting from your current version to 10.8.2.

### 3.4.1 Updating the INSPIRE Geodatabase from ArcGIS 10.8.1 Patch 1 to Patch 2/10.8.2

The ArcGIS for INSPIRE 10.8.1 Patch 2 or 10.8.2 geodatabase template is the same as 10.8.1 P1 geodatabase template, thus no updates are needed to the geodatabase template between 10.8.1 Patch 1, Patch 2 and 10.8.2".

### 3.4.2 Updating the INSPIRE Geodatabase from ArcGIS 10.8.1 to 10.8.1 Patch 1

Many updates have been made to the data themes to improve compliance, following are the steps to make the updates.

If you would like to update the data themes all at once

- Copy the database connection file to GDBTemplates\AllInOne\ThemeUpdates if you are updating the enterprise database, make sure it is the only connection file ended with "sde"
- Open command prompt
- Go to GDBTemplates\AllInOne\ThemeUpdates
- Run "RunUpdate.bat"

If you would like to update individual data theme (use BR as an example, please check release notes for data theme has been updated for 10.8.1 Patch 1.)

- Go to GDBTemplates\BR\ThemeUpdates folder
- Following the instruction in BU\_Updates\_Readme.txt to update the data theme
- Manually increase the field length for field 'regionClassification\_uri' to 255 in the brBioGeoRegionS feature class (BR only).

### 3.4.3 Updating the INSPIRE Geodatabase from ArcGIS 10.8 to 10.8.1

If you already have a 10.8 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.8.1. If you already have a 10.5/10.6/10.6.1/10.7/10.7.1 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.8.1, except the MR data theme.

Following are the major changes in 10.8.1 compared to 10.8:

- 1) Implemented Environmental Management Facilities and AdministrativeandSocialGovernmentServices schema of Utilities and Governmental Services (US) data theme
- 2) Implemented Hydrogeology application schema of the Elevation Geology (GE) data theme

### 3.4.4 Updating the INSPIRE Geodatabase from ArcGIS 10.7.1 to 10.8

If you already have a 10.7.1 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.8. If you already have a 10.5/10.6/10.6.1/10.7/10.7.1 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.8, except the MR data theme.

Following are the major changes in 10.8 compared to 10.7.1:

- 3) Implemented two new data themes named Bio-geographical regions (BR) and ElevationVectorElements of Elevation (EL).

- 4) Fixed issues existed in data template:
  - a. Update tables with correct CLSID
  - b. Remove domain for nativeness\_cl and add domain gnNativenessValue for nativeness in gnNamedPlaceL\_name gnNamedPlaceP\_name gnNamedPlaceMP\_name gnNamedPlaceS\_name
  - c. Fix value for domain roFormOfWay from tractor to tractorRoad
  - d. set domain for field formOfNode, navaidType, airRouteLinkClass, pointRole, formofwaterwaynode in netElementP, netElementS and netElementL
  - e. Correct CRS for MR and AF dataset

#### 3.4.5 Updating the INSPIRE Geodatabase from ArcGIS 10.7 to 10.7.1

If you already have a 10.7 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.7.1. If you already have a 10.5/10.6/10.6.1 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.7.1, except the MR data theme.

Following are the major changes in 10.7.1 compared to 10.7:

- 5) Implemented a new data theme named “Human health and safety (HH)”.

#### 3.4.6 Updating the INSPIRE Geodatabase from ArcGIS 10.6.1 to 10.7

If you already have a 10.5/10.6/10.6.1 geodatabase, it will continue to work with ArcGIS for INSPIRE 10.7, except the MR data theme. ArcGIS for INSPIRE 10.7 added some additional fields to MR (see below), therefore you will need to upgrade them to the 10.7 version.

Following are the major changes compared to 10.6.1:

- 6) ArcGIS for INSPIRE 10.7 implemented three new data themes: Agricultural and aquaculture facilities (AF), Energy Resources (ER), Production and industrial facilities (PF). You can add these new themes individually or add them on top of other data themes by following the steps in Section 3.3.
- 7) Change mrOreMeasure.includesReserves and mrOreMeasure.includesResources data type from String(255) to SmallInteger(2), its value will be Boolean: 0 (no) or 1 (yes).
- 8) Add field linearO\_plunge\_uom, linearO\_trend\_uom, planarO\_azimuth\_uom, planarO\_dip\_uom to mrMineralOccurrence, the datatype would be String(255).
- 9) Update field cutOffGrade to cutOffGrade\_low in table mrCommodityMeasure, and add field cutOffGrade\_high, the datatype would be Double(8).
- 10) Add field linearO\_cgivector\_mag\_high, linearO\_cgivector\_mag\_low as data type double (8), and add linearO\_cgivector\_mag\_uom as string (255) to mrMineralOccurrence.
- 11) There are also some info table updates in 10.7 to support additional feature types from Annex I.

### 3.4.7 Updating the INSPIRE Geodatabase from ArcGIS 10.6 to 10.6.1

If you already have a 10.5/10.6 geodatabase, ArcGIS for INSPIRE 10.6.1 will continue to work with 10.5/10.6 version of the geodatabase template without any changes.

If you would like to upgrade existing geodatabase to 10.6.1, there are two major changes compared to 10.6:

- 1) ArcGIS for INSPIRE 10.6.1 implemented three new data themes: Area management / restriction / regulation zones & reporting units (AM), Natural risk zones (NZ), Sea regions (SR). You can add these new themes individually or add them on top of other data themes by following the steps in Section 3.3.
- 2) In 10.6.1 geodatabase template the relationship classes for the MR data theme has been shortened to work with Oracle database. A python script is provided to shorten the names, following are the steps:
  - a. Disconnect all other connections to the database to release schema lock.
  - b. On a system that contains ArcMap or ArcCatalog 10.6.1, open a Command Prompt as Administrator.
  - c. Locate the RenameMRRRelationships.py file in the GDBTemplates directory installed with the ArcGIS for INSPIRE 10.6.1 Desktop Extension.  
(Example: C:\Program Files (x86)\ESRI\ArcGIS for INSPIRE\Desktop\GDBTemplates\RenameMRRRelationships.py)
  - d. Run the following command in the Command Prompt Window:  
`<Path to Python 2.7 ArcGIS 10.6>\python.exe "<Path to GDBTemplates Directory>\RenameMRRRelationships.py"`  
(Example: C:\Python27\ArcGIS10.6\python.exe "C:\Program Files (x86)\ESRI\ArcGIS for INSPIRE\Desktop\GDBTemplates\RenameMRRRelationships.py")  
Enter the path to the SDE connection file for the Geodatabase to update. (e.g. C:\Data\Connections\myGDBConnection.sde)  
The Python script will update the Relationship class names for the MR theme.
  - e. Connect to the database and verify MR related relationship classes has been shortened successfully.

### 3.4.8 Updating the INSPIRE Geodatabase from ArcGIS 10.5/10.5.1 to 10.6

ArcGIS for INSPIRE 10.6 will continue to work with 10.5/10.5.1 version of the geodatabase template without any changes. ArcGIS for INSPIRE 10.6 implemented two new data themes: Environmental monitoring Facilities, Population distribution and demography. You can add these new themes individually or add them on top of other data themes by following the steps in Section 3.3.

### 3.4.9 Updating the INSPIRE Geodatabase from ArcGIS 10.4 to 10.5

ArcGIS for INSPIRE 10.5 will continue to work with 10.4 version of the geodatabase template without any changes. ArcGIS for INSPIRE 10.5 implemented four new data themes: Buildings, Species distribution, Habitats and biotopes, and Soil. You can add these new themes individually or add them on top of other data themes by following the steps in Section 3.3.

Comparing to the 10.4 (V4) version of the INSPIRE schema, following are the updates have been made to the template:

- For Annex I (A1.xml), the field names for tables and feature classes has been restored to camel cases, and some deprecated objects has been removed
- For Geology (GE.xml), data type for the following fields has been changed from esriFieldTypeSingle to esriFieldTypeDouble: geBorehole.length, geMappedInterval.mappedIntervalBegin, geMappedInterval.mappedIntervalEnd, geCompositionPart.proportion\_valueL, geCompositionPart.proportion\_valueH.

### 3.4.10 Updating the INSPIRE Geodatabase from ArcGIS 10.3.1 Update 1 to 10.4

INSPIRE 10.3.1. Update 1 geodatabase implements the new V4 of the INSPIRE schema, it includes Annex I, LC, GE data themes. If you are using this geodatabase template version of Annex I, LC or GE, there is no other updates are needed for 10.4. If you want to use new data themes added in 10.4, you can add those data themes (MR, LU and SU) by following the steps in Section 3.3.

### 3.4.11 Updating the INSPIRE Geodatabase from ArcGIS 10.3/10.3.1 to 10.3.1 Update 1

10.3/10.3.1 geodatabase implement V3 of the INPIRE schema, it contains Annex I, LC and GE data theme, the 10.4 software continues to work with this version of the INSPIRE geodatabase.

If you are planning to implement the new geodatabase template and you already have the geodatabase at version 10.3/10.3.1, please see table below to help you understanding the differences between version 3 of the application schemas (included in ArcGIS 10.3/10.3.1 for INSPIRE) and the new version 4 (included with ArcGIS 10.3/10.3.1 Update 1 for INSPIRE and ArcGIS 10.4 for INSPIRE). Land Cover and Geology templates are not different from the version in 10.3/10.3.1.

Please also be aware that when transitioning to version 4 the ArcGIS map documents (mxd) previously generated must be recreated.

Theme	FeatureType	GDB template change	GML schema change	added	deleted
AD	ad:Address		x		
	ad:AddressAreaName		x		
	ad:AdminUnitName		x		
	ad:PostalDescriptor		x		
	ad:ThoroughfareName		x		

	au:AdministrativeBoundary		x		
	au:AdministrativeUnit		x		
	au:Condominium				
<b>AU</b>	stat:NUTSRegion				x
	mu:Baseline	x	x	x	
	mu:MaritimeBoundary	x	x	x	
	mu:MaritimeZone	x	x	x	
	bgr:Bio-GeographicalRegion		x		x
	bui:Building				x
	bui:ControlTower				x
<b>CP</b>	cp:BasicPropertyUnit				
	cp:CadastralBoundary				
	cp:CadastralParcel				
	cp:CadastralZoning		x		
<b>GN</b>	gn:NamedPlace		x		
	hb:Habitat				x
<b>HY</b>	hy-n:HydroNode		x		
	hy-n:WatercourseLink		x		
	hy-n:WatercourseLinkSequence				
	hy-n:WatercourseSeparatedCrossing				
	hy-p:DrainageBasin				
	hy-p:RiverBasin				
	hy-p:FluvialPoint				
	hy-p:Rapids				
	hy-p:Falls				
	hy-p:LandWaterBoundary		x		
	hy-p:Crossing		x		
	hy-p:Lock		x		
	hy-p:ShorelineConstruction		x		
	hy-p:Sluice		x		
	hy-p:Ford		x		
	hy-p:DamOrWeir		x		
	hy-p:Watercourse		x		

	hy-p:StandingWater		x		
	hy-p:Embankment*		x	x	
	hy-p:Shore*		x	x	
	hy-p:Wetland*		x	x	
	geo:SpringOrSeep				x
	geo:VanishingPoint				x
	er:HydroPowerPlant		x		x
	nrz:Embankment*		x		x
	ugs:PumpingStation		x		x
	ugs:Pipe		x		x
	nrz:InundatedLand		x		x
	lc:GlacierSnowfield				x
	lc:Shore*		x		x
	lc:Wetland*				x
TN	net:CrossReference				
	net:Network				
	net:NetworkConnection		x		
	net:GradeSeparatedCrossing				
	tn:TransportNetwork				
	tn:MaintenanceAuthority		x		
	tn:AccessRestriction		x		
	tn:MarkerPost				
	tn:VerticalPosition		x		
	tn:ConditionOfFacility		x		
	tn:TrafficFlowDirection		x		
	tn:RestrictionForVehicles		x		
	tn:OwnerAuthority		x		
	tn-a:AirLinkSequence				
	tn-a:AirRoute		x		
	tn-a:AirNode				
	tn-a:DesignatedPoint				
	tn-a:RunwayCentrelinePoint		x		
	tn-a:AerodromeNode				
	tn-a:Navaid		x		
	tn-a:TouchDownLiftOff				
	tn-a:ProcedureLink				
	tn-a:StandardInstrumentArrival				
	tn-a:StandardInstrumentDeparture				
	tn-a:InstrumentApproachProcedure				
	tn-a:AirRouteLink		x		
	tn-a:AirspaceArea		x		
	tn-a:TaxiwayArea				

	tn-a:RunwayArea		x		
	tn-a:ApronArea				
	tn-a:AerodromeArea				
	tn-a:LowerAltitudeLimit		x		
	tn-a:ElementLength		x		
	tn-a:AerodromeCategory		x		
	tn-a:UpperAltitudeLimit		x		
	tn-a:ElementWidth		x		
	tn-a:FieldElevation		x		
	tn-a:UseRestriction		x		
	tn-a:SurfaceComposition		x		
	tn-a:AerodromeType		x		
	tn-a:ConditionOfAirFacility		x		
	tn-c:CablewayLinkSet				
	tn-c:CablewayLinkSequence				
	tn-c:CablewayNode				
	tn-c:CablewayLink		x		
	tn-ra:RailwayLine				
	tn-ra:RailwayLinkSequence				
	tn-ra:RailwayNode		x		
	tn-ra:RailwayStationNode				
	tn-ra:RailwayYardNode				
	tn-ra:RailwayLink				
	tn-ra:RailwayYardArea				
	tn-ra:RailwayStationArea				
	tn-ra:RailwayArea				
	tn-ra:RailwayStationCode		x		
	tn-ra:RailwayElectrification		x		
	tn-ra:DesignSpeed		x		
	tn-ra:RailwayUse		x		
	tn-ra:RailwayType		x		
	tn-ra:NominalTrackGauge		x		
	tn-ra:NumberOfTracks		x		
	tn-ro:RoadNode		x		
	tn-ro:RoadLinkSequence				
	tn-ro:RoadLink				
	tn-ro:RoadServiceArea				
	tn-ro:RoadArea				
	tn-ro:VehicleTrafficArea				
	tn-ro:Road				
	tn-ro:ERoad				
	tn-ro:RoadServiceType		x		
	tn-ro:NumberOfLanes		x		
	tn-ro:FormOfWay		x		
	tn-ro:RoadSurfaceCategory		x		

	tn-ro:RoadName		x		
	tn-ro:FunctionalRoadClass		x		
	tn-ro:SpeedLimit		x		
	tn-ro:RoadWidth		x		
	tn-w:WaterwayLink				
	tn-w:WaterLinkSequence				
	tn-w:PortNode				
	tn-w:WaterwayNode		x		
	tn-w:FairwayArea				
	tn-w:PortArea				
	tn-w:TrafficSeparationSchemeRoundabout				
	tn-w:TrafficSeparationSchemeLane				
	tn-w:TrafficSeparationSchemeSeparator				
	tn-w:TrafficSeparationSchemeCrossing				
	tn-w:FerryCrossing				
	tn-w:MarineWaterway				
	tn-w:InlandWaterway				
	tn-w:Buoy				
	tn-w:Beacon				
	tn-w:FerryUse		x		
	tn-w:CEMTClass		x		
	tn-w:ConditionOfWaterFacility		x		
	tn-w:WaterTrafficFlowDirection		x		
	tn-w:RestrictionForWaterVehicles		x		
PS	ps-f:ResponsibleAgency				x
	ps-f:ProtectedSite		x		x
	ps:ProtectedSite				
	sr:OceanRegion				x
	sd:SpeciesDistribution				x
	wfd:WFDGroundWaterBody				x
	wfd:WFDT transitional Water				x
	wfd:WFDRiver				x

	wfd:WFDLake				x
	wfd:WFDCoastalWater				x

\* Ic:Shore gdb tables (IcShoreS\_hyId, IcShoreS\_name, IcShoreS\_relHyObj) has been reused for newly added hy-p:Shore, same is true for Ic:Wetland and nrz:Embankment (a subtype of hypManMadeObj).

#### About Geographic named place

When switching to version 4 of the geodatabase template you will have the option of implementing the simple profile or the full GN profile for NamedPlaces. The simple profile corresponds to the one implemented in previous releases of ArcGIS for INSPIRE.

The A4I\_info table included in the geodatabase template indicates which profile will be used, by default the value (see row with GN\_PROFILE property) is SIMPLE\_NP\_FULL which implements the full and richer content model, if the value is set to "SIMPLE" the simple profile is used. The INSPIRE Feature Download Service for the named place spatial object will honour the A4I\_Info table GN\_PROFILE configuration.

When using the simple profile, the `gml` property "`gn:name/gn:GeographicalName/gn:spelling/gn:SpellingOfName/gn:text`" is mapped to the geodatabase field "`gnNamedPlace(P|L|MP|S)_name/name`". When using the full profile, this field is ignored. The property is mapped to "`gnNamedPlace(P|L|MP|S)_name_spelling/text`" instead.

## 4 Migrating from Retired Versions

Upgrading from a retired version may require the older version be uninstalled before installing ArcGIS for INSPIRE 10.7.1. See the installation guide for the version in question. See Esri Product Support Life Cycle <https://support.esri.com/en/Products/Enterprise/GIS-Server-Extensions/arcgis-for-inspire/10-8#product-support>