



ArcGIS for INSPIRE 1.0 SP2 Release Notes

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1 Introduction

Service Pack (SP) 2 provides updates on ArcGIS for INSPIRE 1.0. This document contains a list of features and describes how the software with SP2 aligns with the Infrastructure for Spatial Information in Europe (INSPIRE) regulations. Furthermore, it lists the known issues for this product.

Enhancements and new features include the following:

- The file geodatabase can be utilized for creating View services (not Feature Download services).
- Product localization includes English, French, German, and Spanish and covers
 - User interface for ArcCatalog INSPIRE capabilities editing forms,
 - ArcMap INSPIRE toolbar,
 - Geoportal Web User Interface,
 - INSPIRE Discovery, View and Download service exception messages,
 - Online Web Help (accessible from ArcGIS for INSPIRE Resource Center).
- Geoportal
 - The metadata details page is now configurable via XSLT; INSPIRE metadata details page can therefore be customized to display multiple instances of the elements (see for instance Keywords).
 - Metadata validation now supports XSD schemas and also schematron.
 - GEMINI 2.1 UK metadata standard support is included in the product capabilities.
 - The Map Viewer is based on ArcGIS Flex Viewer 2.4.
- The ArcCatalog editing form for INSPIRE Service capabilities includes an intuitive user interface highlighting mandatory elements.
- INSPIRE View services can be configured to support additional CRS (see Installation Guide for ArcGIS for INSPIRE Server Extension SP2).
- Documentation is being enriched to include configuration aspects such as scale dependencies and INSPIRE layer definitions (LayerInfo table). This functionality requires SP2 and allows for a more flexible management of layers in INSPIRE View Services. Detailed documentation is available in a new PDF document (CustomizationGuide_ArcGISForINSPIRE_LayerInfo_1_0_0_SP2_EN.pdf).
- Geodatabase template has been updated to support View Service layers configuration. The upgrade is NOT mandatory, current instances can be updated (see InstallationGuide_ArcGISForINSPIRE_GDB_1_0_0_SP2_EN.pdf).
- INSPIRE services can be configured to support solutions using reverse proxy.
- There are several enhancements on the server extension installer and SQL Server support.

For a detailed description of what's new in the Geoportal component please visit http://sourceforge.net/apps/mediawiki/geoportal/index.php?title=Version_1.2

2 Standards and Conformity

2.1 General

- Aligns with ArcGIS Server system architecture
- Response streaming support between all layers:
 - Web tier—ArcGIS server object extension (SOE)
 - ArcGIS server object extension—Feature server back end
- Convenient and flexible programming interface between the web tier and ArcGIS SOE tier
- Web tier design prepared for any future web technology (SOAP, REST, etc.) that may arise in INSPIRE context
- Multilingual support for all components: INSPIRE network services, administration/configuration pages, ArcMap INSPIRE tools
- Multilinguality achievable without recompiling the code
- Convenient administration/configuration user interface (UI) within Esri ArcCatalog

2.2 INSPIRE View Service

Concerning INSPIRE view services, ArcGIS for INSPIRE provides

- Implementation of INSPIRE view services following the Technical Guidance document 3.0¹
- Support for GetFeatureInfo operation returning INSPIRE-conformant GML response on INSPIRE layers
- Support for Web Map Service (WMS) 1.1.1 profile as described by Technical Guidance View Service 3.0
- Styled Layer Descriptor (SLD) support for Annex I INSPIRE layers
- Support for INSPIRE style (SLD based) and custom style (ArcMap layout)
- Several bug fixes to ArcGIS Server WMS extension
- Support for both MXD- and MSD-based map services
- ArcMap INSPIRE tools for analysing INSPIRE-compliant geodatabase layer and allowing you to immediately add those to your map document
 - Combined knowledge about INSPIRE data models and Esri geodatabase implementation
 - Creates relates and joins automatically
- Automatic support for all relevant INSPIRE reference systems

¹ See

http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_ViewServices_v3.0.pdf.

- Support for all capabilities/metadata extension elements
- Display of INSPIRE layers in capabilities metadata; hides "technical" geodatabase layers

2.3 INSPIRE Feature Download Service

Concerning INSPIRE feature download services, ArcGIS for INSPIRE provides

- Implementation of INSPIRE feature download direct access service following “Draft Technical Guidance for INSPIRE Download Services,” based on the approved standard Web Feature Service 1.1 instead of the obsolete draft document ISO/DIS 19142 referenced in the draft technical guidance; support for approved Web Feature Service (WFS) 2.0 standard is currently planned for the next minor release²
- Full support of INSPIRE data models and GML output
- Feature server configuration for geodatabase and INSPIRE XML schema models

2.4 INSPIRE Feature Download Service: Predefined Dataset Service

Concerning INSPIRE predefined dataset services, ArcGIS for INSPIRE provides

- Implementation of INSPIRE feature download predefined dataset service following “Draft Technical Guidance for INSPIRE Download Services”
- The functionality to execute queries specified by the user as an extension to the feature download service
- Ability to store queries
- Ability to store output files in ArcGIS Server output folder

2.5 INSPIRE Annex I Data Models Esri Geodatabase Implementation

- Esri geodatabase XML schema for INSPIRE Annex I data themes
- XML/HTML documentation on geodatabase structure

2.6 INSPIRE Discovery Service

Concerning INSPIRE discovery services, ArcGIS for INSPIRE provides

- Implementation of INSPIRE discovery services following the Technical Guidance document 3.0
- Improved metadata editor that supports validation and editing of unbounded multiple instances of metadata elements

² See

http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_DiscoveryServices_v3.0.pdf.

3 Known Issues

3.1 ArcCatalog: Administration of MSD-Based Map Services

Description

During the configuration of an INSPIRE view service, it is necessary to gather detailed information about the map to be published. This is achieved in a programmatic way by investigating the underlying map document using the ArcObjects API. This approach works well for all MXD-based map documents. However, ArcObjects currently does not provide a way to do this for MSD based map documents.

Solution

The Administration page will check for an MXD document with the same name in the same folder as the MSD.

Example

A user tries to create an ArcGIS Server map service (with INSPIRE view service enabled) based on the MSD file `c:\arcgisserver\maps\AdministrativeUnits.msdc`.

When switching to the View Service Configuration tab, the software recognises the MSD extension and tries to open `c:\arcgisserver\maps\AdministrativeUnits.mxd`.

Note: This does not affect the service instance to be created. The View Service Configuration page just analyses the MXD document for available layers and so forth.

3.2 View Service: GetFeatureInfo on Mixed Layer Documents

Description

If executing a GetFeatureInfo request with a number of query layers (more than one) and layers from both INSPIRE layers and non-INSPIRE layers, the view service does not return a response that is processed by WMS Server (non-INSPIRE layers). It just returns the responses from the feature server back end.

3.3 View Service: Usage of INSPIRE SLD Files

Description

INSPIRE data specifications contain visualisation rules that are not expressible using SLD documents (please see ProtectedSites layers). Furthermore, there may be differences in the rendering result when applying SLD documents on map services based on MXD documents versus MSD documents (different rendering engine used).

Solution

If ArcGIS for INSPIRE does not find an SLD document for a specific layer, it will use the defined ArcMap visualisation rules and use them for both the INSPIRE_COMMON:DEFAULT style and default styles.

3.4 View Service: Start fails when using 'sdSpeciesDistribution' on MS SQL Server

Description

After ArcCatalog copy/paste of data from an existing geodatabase into MS SQL Server no View Service cannot be created. The log file (in verbose mode) shows messages like

No type metadata for table "sdSpeciesDistribution" column "isolation" in the database. (table/column does not exist supposably.)

Some column names are reserved keywords in MS SQL Server. Normally, ArcGIS for INSPIRE takes care of this if necessary. In some cases (e.g. keyword 'isolation') an import of XML workspace and copy/paste operations via ArcCatalog differ, so that column names gets '_'-postfixed (i.e. 'isolation' becomes 'isolation_').

Solution

Renaming the column 'isolation_' to 'isolation' will fix the issue without having an effect on database usage or SQL statements.

3.5 Feature Download Configuration: User Interface Displays All INSPIRE Layers

Description

The Feature Download Configuration user interface analyses the underlying geodatabase schema and offers a list of INSPIRE feature types to be provided by the feature download service. As the INSPIRE geodatabase contains feature classes and tables of all Annex I data themes, the configuration user interface lists all INSPIRE feature types of Annex I, although some of them might contain no data.

3.6 INSPIRE Geodatabase: Profile of Names and Text Strings

Description

The INSPIRE data specification Geographical Names allows the implementation of a simplified profile of the complex data type GeographicalName. For many cases, a simple implementation is sufficient and requires a significantly less complex model and database representation.

In the standard geodatabase template for the Annex I themes, the simplest profile, a text string, has been implemented. For datasets that require support for a more complex profile, contact Technical Support.

Similarly, string-valued properties are limited to 255 characters in the standard geodatabase for the Annex I themes. This should be sufficient for most datasets. For datasets, however, that require support for longer text value, contact Technical Support.

3.7 INSPIRE Geodatabase: Arcs in Cadastral Parcel Features

Description

In the theme Cadastral Parcels, nonlinear interpolations are allowed (circular arcs). In this release, only geometries with linear interpolations in accordance with the Simple Feature standard (ISO 19125-1) are supported.

3.8 No Support for Oracle User-Schema Geodatabases

Description

ArcGIS for INSPIRE does not currently support data storage and data access in the so-called Oracle user-schema geodatabases. See <http://help.arcgis.com/en/arcgisserver/10.0/help/arcgis>

[_server_java_help/index.html#/Multiple_geodatabases_in_Oracle/002n000000r000000/](#) if this affects your database setup.

3.9 No Support for Export Services Handler within ArcGIS Server Manager

Description

ArcGIS for INSPIRE currently does not support using the Export Services Handler in ArcGIS Server Manager. The ArcGIS for INSPIRE setup adds additional filter information to the default ArcGIS/services web app that are not reflected when using the export function.

Solution

Ask Tech Support for additional information.

3.10 ArcCatalog Configuration Page of INSPIRE Services Displays Black

Description

In rare cases, when invoking the INSPIRE service extension configuration page of ArcCatalog, the panel just displays a black square.

Solution

Use the program JavaConfigTool to disable DirectDraw. The tool can be found here:
<installation>ArcGIS\Desktop10.0\Bin\JavaConfigTool.exe.

1. Uncheck Use default.
2. Add the string "-Dsun.java2d.noddraw=true" to the text field Java VM arguments.
3. Click OK.
4. Restart ArcCatalog.