

EME v 3.1.1 and ArcGIS 10

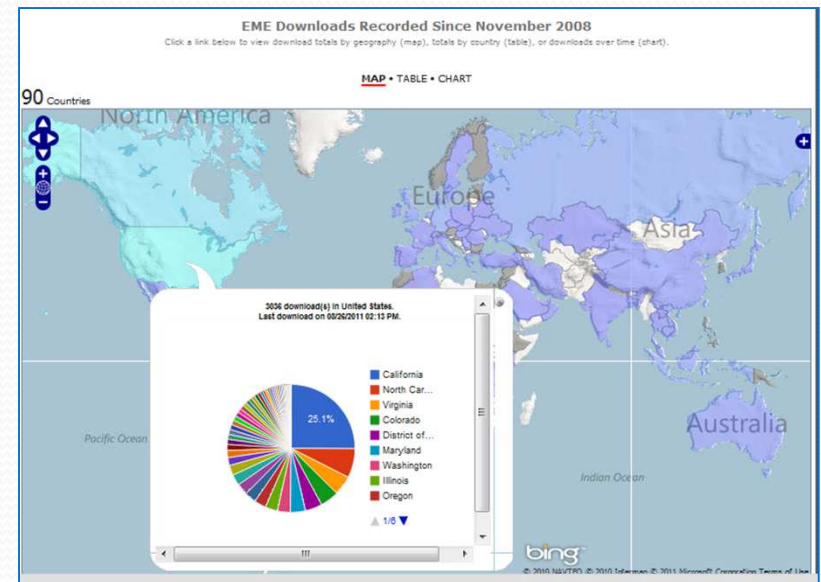
Working with FGDC metadata in ArcGIS 10



Innovate!
www.InnovateTeam.com

Welcome

- Second 2011 EME/ArcGIS 10 Training
- First training held April 2011
 - Basic Updates on AGIS 10
 - Overview of EME in ArcGIS 10
- This training includes:
 - AGIS 10 Metadata
 - Basic Changes
 - Recent patches/updates
 - FAQs
 - Update on EME 3.1.1 (July 2011)
 - Plans for EME 3.2 (November 2011)
 - EME Overview/Refresher

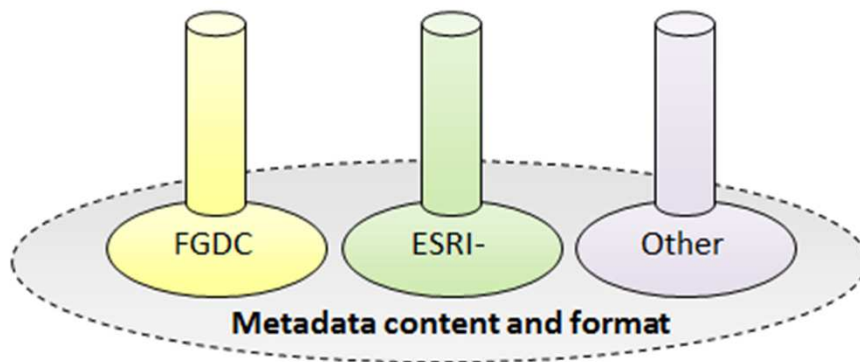


ArcGIS 10 Changes

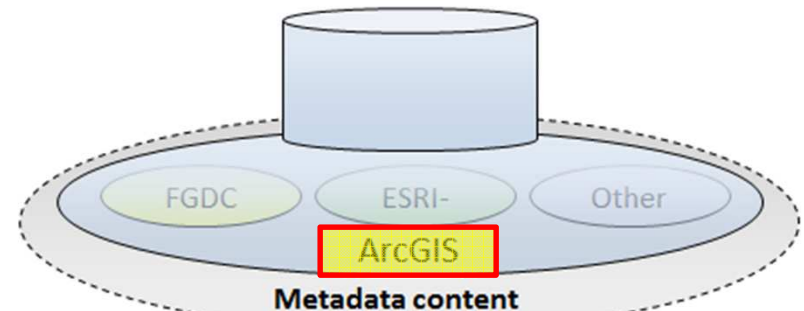
- New approach to metadata storage
 - ‘Unified’ approach (as opposed to old “stovepipe” approach)
 - Idea was to make it **easier** to support multiple standards
 - Originally moving away from FGDC CSDGM



Stovepipes are out.



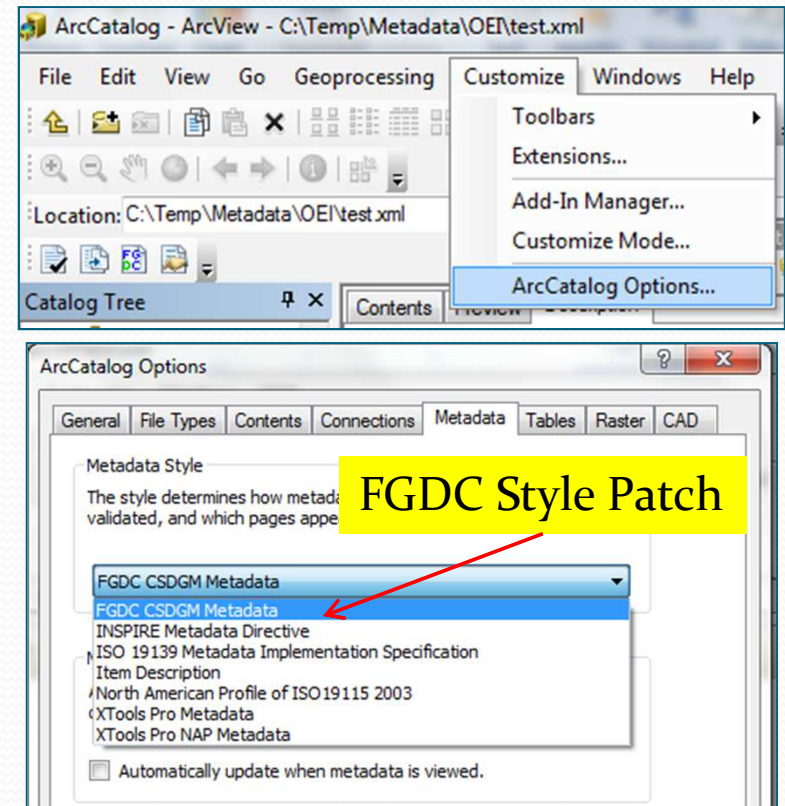
The ArcGIS 9.3.1 stovepipe model for managing metadata



ArcGIS 10 metadata includes content for all standards

ArcGIS 10 Changes

- Metadata **styles** and **standards**
 - **Style:** View/create metadata based on standard you choose
 - Default is **Item Description**
 - *Customize*->*ArcCatalog Options*
 - Esri software synchronizes between “Description” style and common standards
- **Be Careful!** Synchronizing between Esri style and FGDC CSDGM has a few bugs
 - Should be addressed with forthcoming patch
 - In the meantime, it may be best to not edit description elements



BUG: If you enter information the AGIS **Summary** and **Description** fields, FGDC abstract/purpose fields are updated with AGIS Summary and description information, and the old info that used to exist in FGDC abstract/purpose fields *is removed*.

ArcGIS 10

- **Look and feel changes**

- Metadata tools moved to ArcToolbox
 - Conversion Tools->Metadata
- Old 9.3 tools have changed a bit
 - 'Metadata Import/Export'
 - Concept of "upgrading" metadata

- **Common Question:**

- "Error with metadata configuration file"
- Users must remove the "&" or "<" in their records

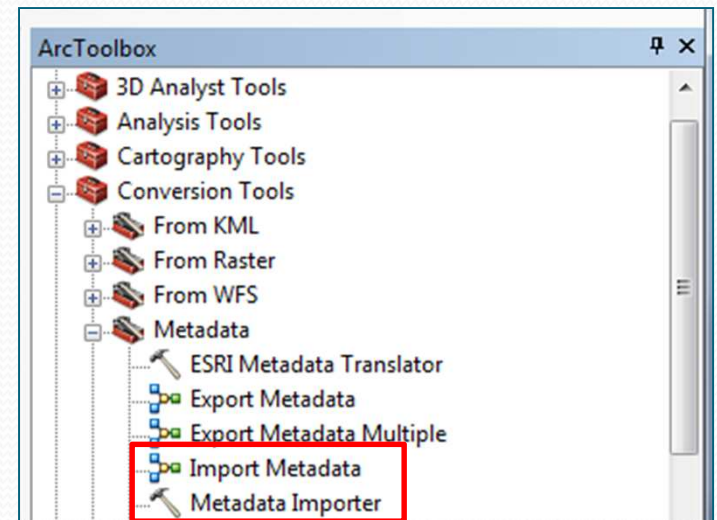
- <http://forums.arcgis.com/threads/9523-ArcCatalog-Metadada-quot-There-is-an-error-in-the-metadata-editor-configuration-file-quot->

- **Recent Updates**

- **Esri FGDC Editor:** <http://blogs.esri.com/Dev/blogs/arcgisdesktop/archive/2010/06/25/FGDC-Metadata-Editor-for-ArcGIS-10.aspx>
- **FGDC Style Patch:** <http://resources.arcgis.com/content/patches-and-service-packs?fa=viewPatch&PID=160&MetaID=1637>

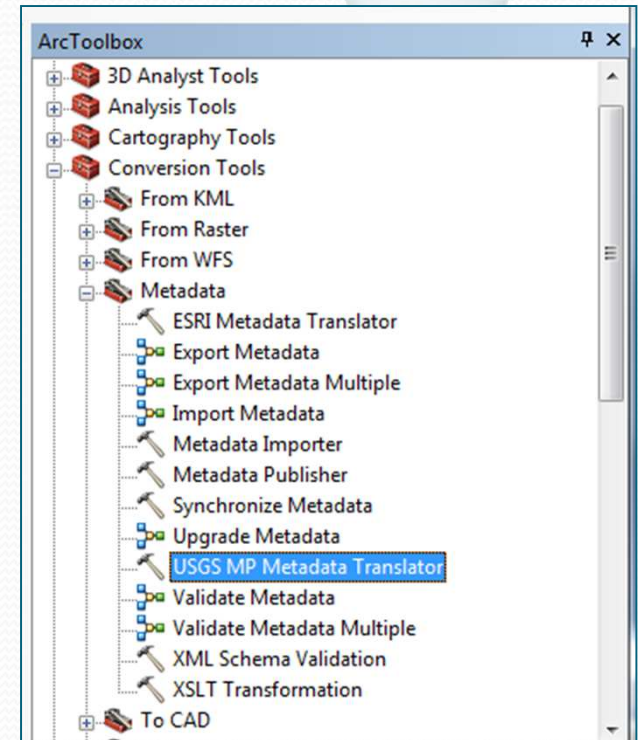
- **Coming Soon: New Esri patch to address many issues**

- Timing and processes to be confirmed



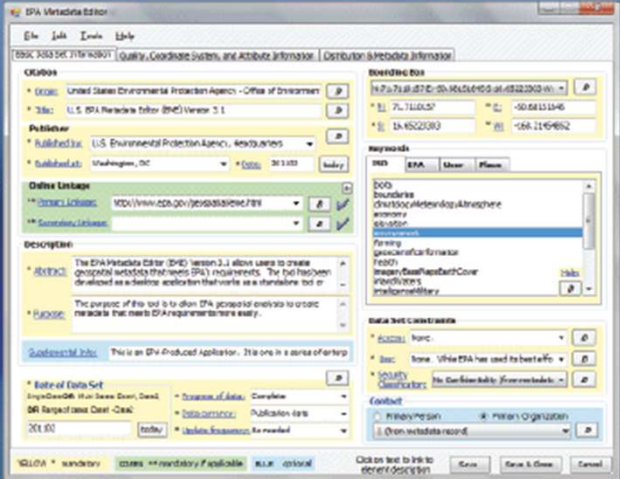
ArcGIS 10 Changes

- Removing Unwanted Tags
 - Validation “warnings”
 - Esri tags and ISO tags
- **Step 1:** Use the Remove Esri Tags function in EME to remove Esri Elements
- **Step 2:** Use the USGS MP Metadata Translator tool in Toolbox to remove ISO Elements



Enter EME v3.1.1

New: EME Version 3.1.1
MGM: FWF VERSION 3



Compatible with ArcGIS 10!

- Same simple geospatial metadata editor (3 tabs)
- Maintains ArcGIS 9.X metadata business processes in ArcGIS 10
- Works as a standalone tool
- Download from <https://edg.epa.gov/EME/>




EME v3.1.1

- Newest Features

- ***Bug Fixes:***

- Addresses synchronization issue when exporting or copy/pasting feature classes
 - Allows '**Save as**' without requiring that the user first edit the record,
 - When user selects multiple processing steps for deletion, EME no longer only deletes the first step upon save,

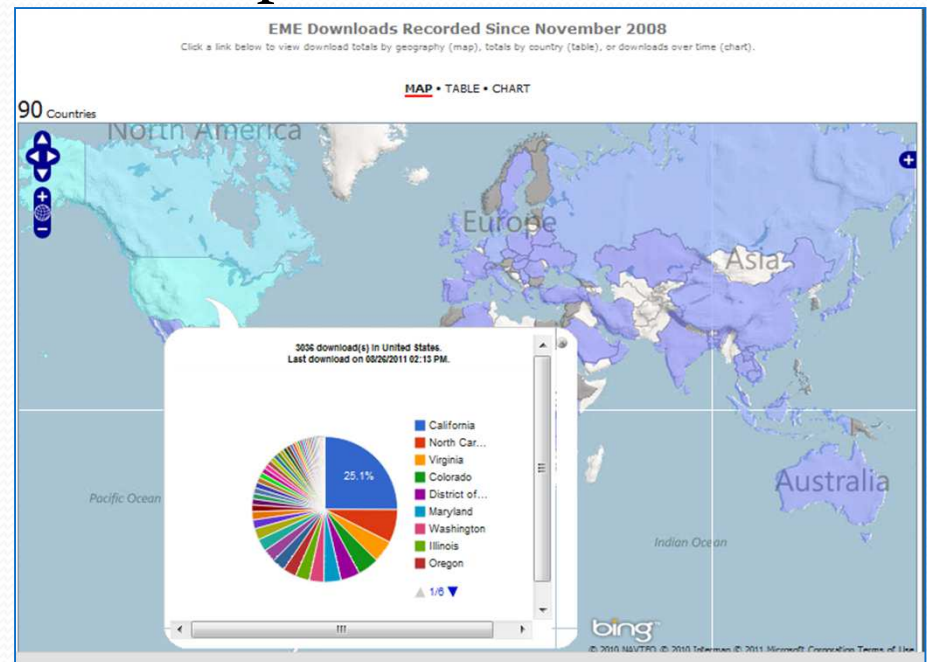
- ***Enhancements***

- Keyboard shortcuts for Copy ,Cut and Paste
 - Metadata **Export & Import** tools from the EME Toolbar,
 - Provides direct access to EME Help from the EME Toolbar
 - Provides a number of small edits to the EME database
 - Provides EME source code from EME website.
- 

EME v3.2

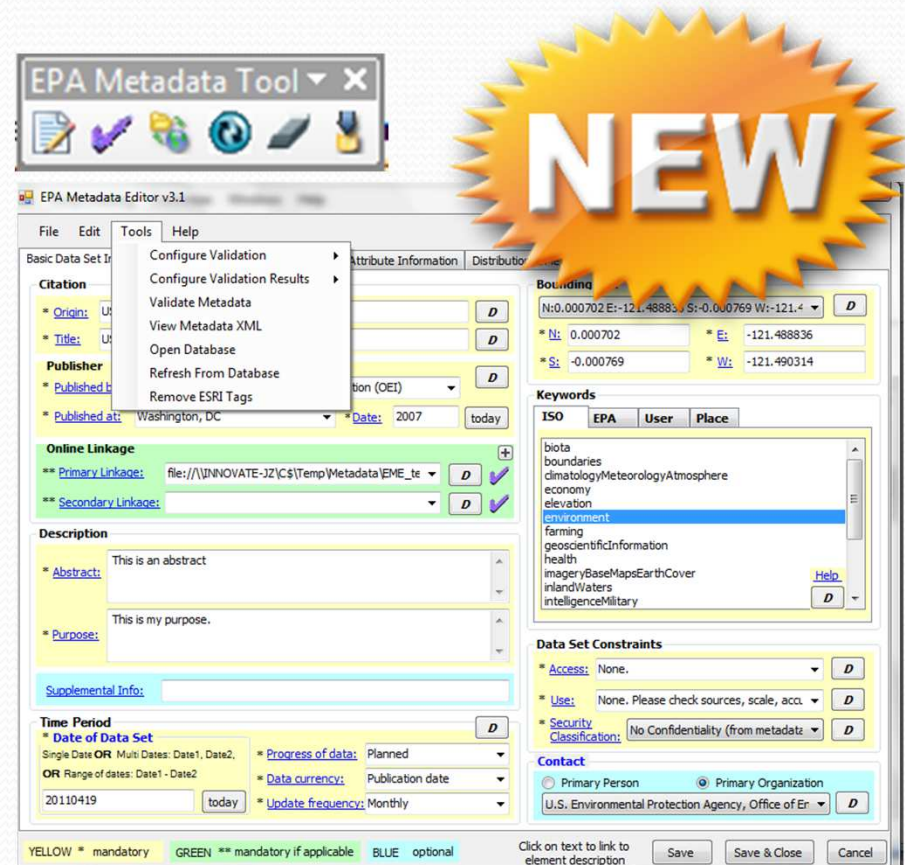
- What's Planned for a November Update

- Include additional fields
 - Source citation information
 - Spatial data organization
 - Standard order process
- Stylesheet for EPA FGDC metadata
 - Highlight FGDC Fields
 - Avoid Translation Errors
- Validation Updates
 - Batch results summary
 - Ordering results details



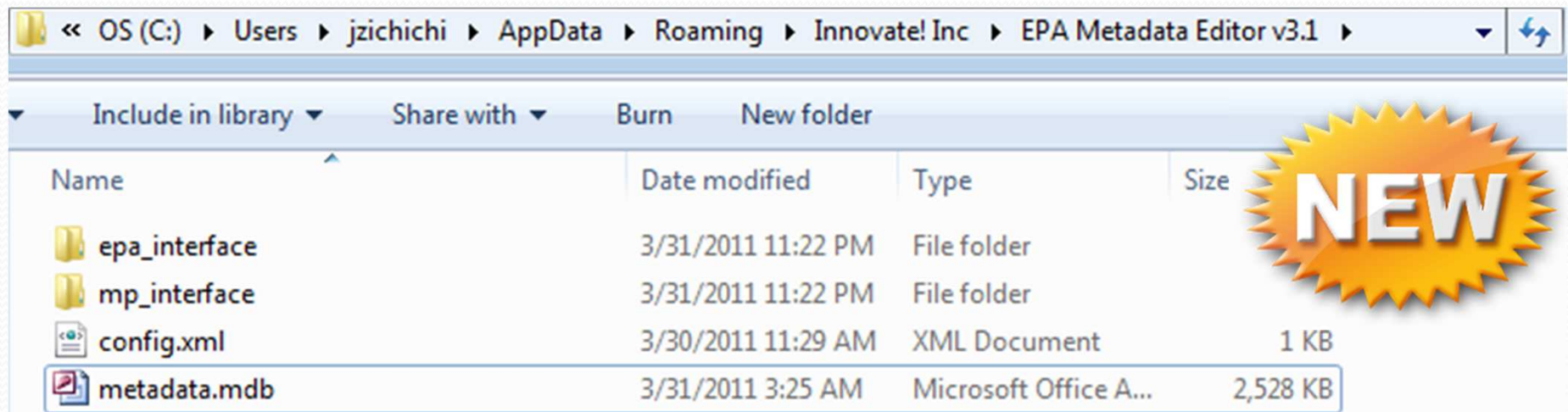
EME for AGIS 10

- On the face of it – not much has changed
But....
- Compatible with ArcGIS 10
- Runs as a standalone application
 - ArcGIS 10 extension calls standalone tool
- Synchronizes FGDC metadata in ArcGIS 10
 - Same configurable EPA Synchronizer
 - Allows user to retain published doc ID if removing ESRI tags
- **Clear all & import** buttons in toolbar
 - One or more records
- Many functions moved to menu bar



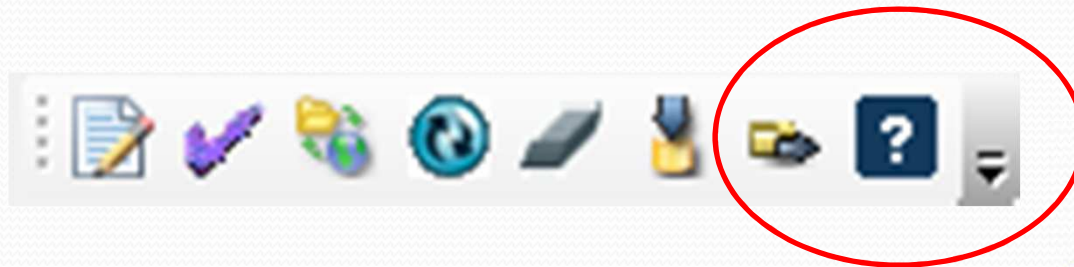
New in EME v 3.1.1 (cont'd.)

- EME database moved to new location
 - Makes an operational copy of EME database in user directory (e.g., C:\Users\jzichichi\AppData\Roaming\Innovate! Inc)
 - *Still allows user to point to alternative db location in config.xml*
- Allows users to include more than two online linkages in metadata
- Fixes bugs from previous version of EME



New in EME v 3.1.1 (cont'd.)

- Version 3.1.1 released in July, 2011
 - Metadata Import and Export tool
 - Keyboard shortcuts for copy/cut/paste in the EME user interface
 - Access to EME help files directly from EME Toolbar
 - Bug fixes



Using the EME

- Installing v. 3.1.1
 - EME 3.0 must be uninstalled **prior** to uninstalling ArcGIS 9.X.
 - EPA has developed a patch to help address this issue (Included in EME v3.1.1 download package)
- EME v3.1.1 Installation Reqts:
 - .Net Framework 3.5 required
 - ArcGIS 10 (for ArcGIS extension)
 - FGDC Style Patch (for ArcGIS extension)

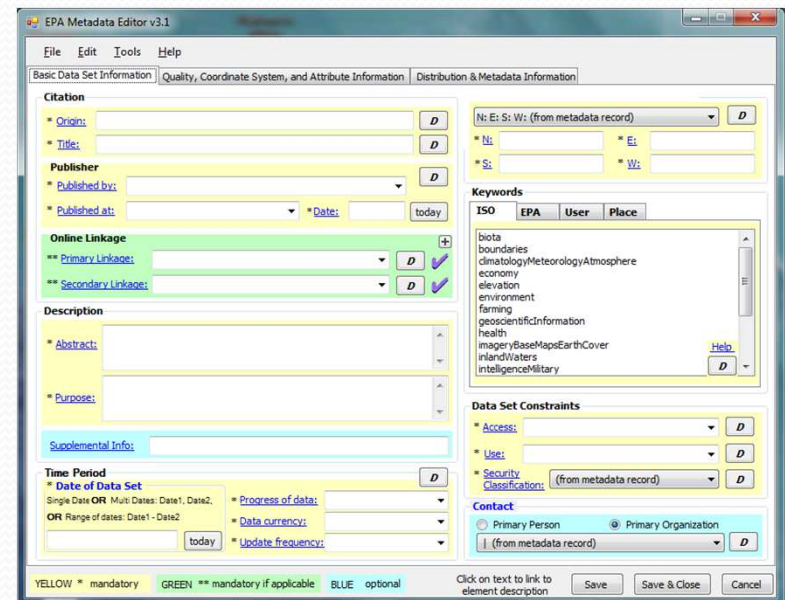
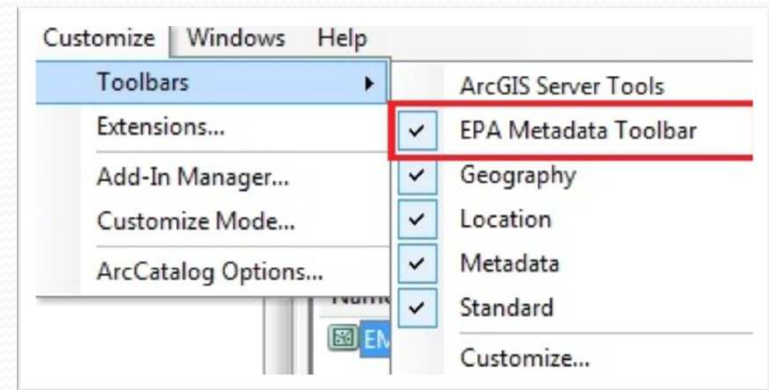
```
graph TD; A([Uninstall EME 3.0]) --> B([Uninstall ArcGIS 9.x]);
```

Uninstall EME 3.0

Uninstall ArcGIS 9.x

Using the EME

- Access EME as an Extension from ArcCatalog
- Access EME as a standalone application
 - Start → EPA Metadata Editor



Using the EME

The screenshot shows the EPA Metadata Editor v3.1 interface. The 'Citation' section is highlighted in yellow, indicating mandatory fields. The 'Online Linkage' section is highlighted in green, indicating mandatory if applicable fields. The 'Supplemental Info' field is highlighted in blue, indicating optional fields. The 'Description' section is also highlighted in yellow. The 'Time Period' section is highlighted in blue. The 'Keywords' section is highlighted in yellow. The 'Data Set Constraints' section is highlighted in yellow. The 'Contact' section is highlighted in yellow. The legend at the bottom indicates: YELLOW * mandatory, GREEN ** mandatory if applicable, BLUE optional.

Citation

- * Origin:
- * Title:
- Publisher
- * Published by:
- * Published on:

Online Linkage

- ** Primary Linkage:
- ** Secondary Linkage:

Description

Mandatory if applicable

- * Abstract:
- * Purpose:

Supplemental Info: Optional

Time Period

- * Date of Data Set:
- Single Date OR Multi Dates: Date1, Date2,
- OR Range of dates: Date1 - Date2,
- * Progress of data:
- * Data currency:
- * Update frequency:

Keywords

ISO EPA User Place

- biota
- boundaries
- climatologyMeteorologyAtmosphere
- economy
- elevation
- environment
- farming
- geoscientificInformation
- health
- imagerYBaseMapsEarthCover
- inlandWaters
- intelligenceMilitary

Data Set Constraints

- * Access:
- * Use:
- * Security Classification: (from metadata record)

Contact

- Primary Person Primary Organization
-

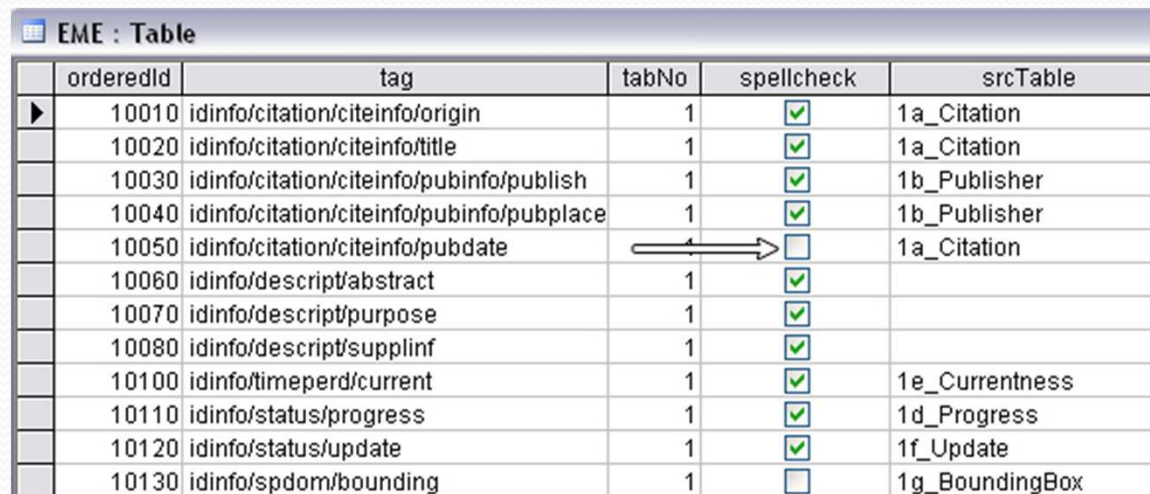
YELLOW * mandatory GREEN ** mandatory if applicable BLUE optional

User interface

- Specify information that corresponds to all EPA required elements in Sections 1, 2, 4, 6, and 7 of the FGDC CSDGM.
- Specify some information for Section 5 (Attributes) of the FGDC CSDGM.
- Fields are color-coded
 - Yellow = 'mandatory',
 - Green = 'mandatory if applicable'
 - Blue = considered 'optional'.

Using the EME

- EME Database
 - EME uses a Microsoft Access database to supply default information within the user interface
 - Database is structured to align closely with the flow of the user interface
 - Modify the database from the EME user interface
 - Change the location of the database as needed

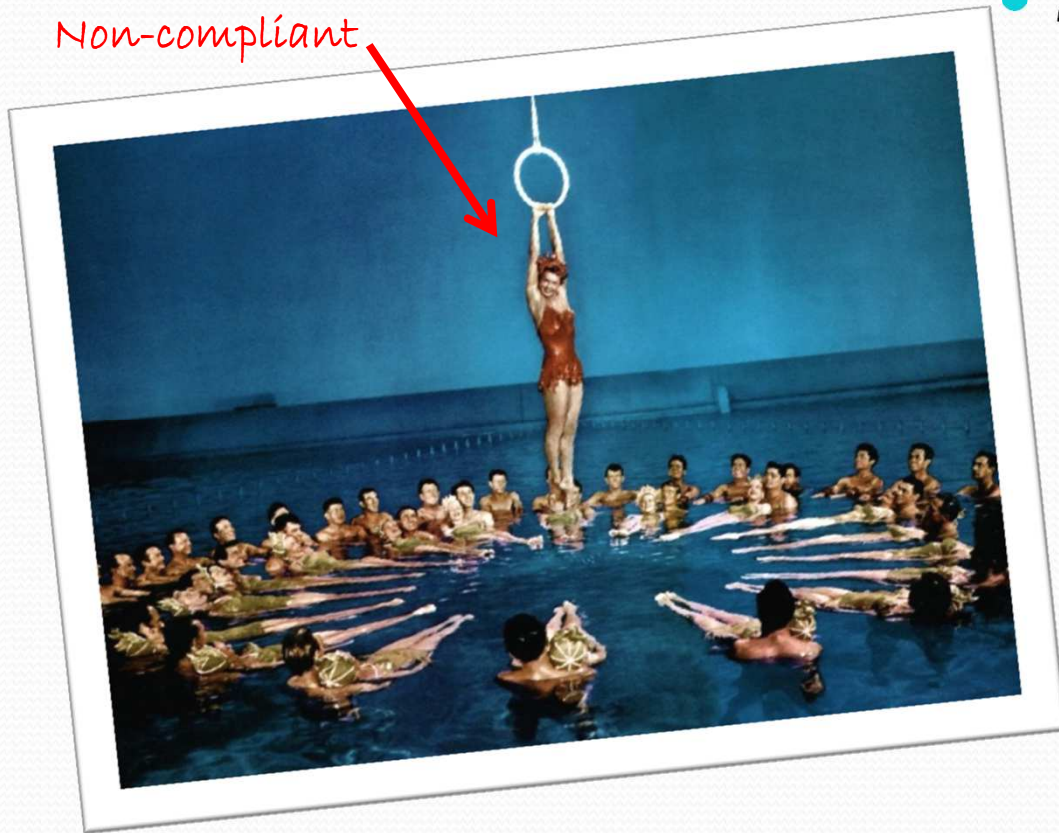


orderedId	tag	tabNo	spellcheck	srcTable
10010	idinfo/citation/citeinfo/origin	1	<input checked="" type="checkbox"/>	1a_Citation
10020	idinfo/citation/citeinfo/title	1	<input checked="" type="checkbox"/>	1a_Citation
10030	idinfo/citation/citeinfo/pubinfo/publish	1	<input checked="" type="checkbox"/>	1b_Publisher
10040	idinfo/citation/citeinfo/pubinfo/pubplace	1	<input checked="" type="checkbox"/>	1b_Publisher
10050	idinfo/citation/citeinfo/pubdate	1	<input type="checkbox"/>	1a_Citation
10060	idinfo/descript/abstract	1	<input checked="" type="checkbox"/>	
10070	idinfo/descript/purpose	1	<input checked="" type="checkbox"/>	
10080	idinfo/descript/supplinf	1	<input checked="" type="checkbox"/>	
10100	idinfo/timeperd/current	1	<input checked="" type="checkbox"/>	1e_Currentness
10110	idinfo/status/progress	1	<input checked="" type="checkbox"/>	1d_Progress
10120	idinfo/status/update	1	<input checked="" type="checkbox"/>	1f_Update
10130	idinfo/spdom/bounding	1	<input type="checkbox"/>	1g_BoundingBox

Using the EME



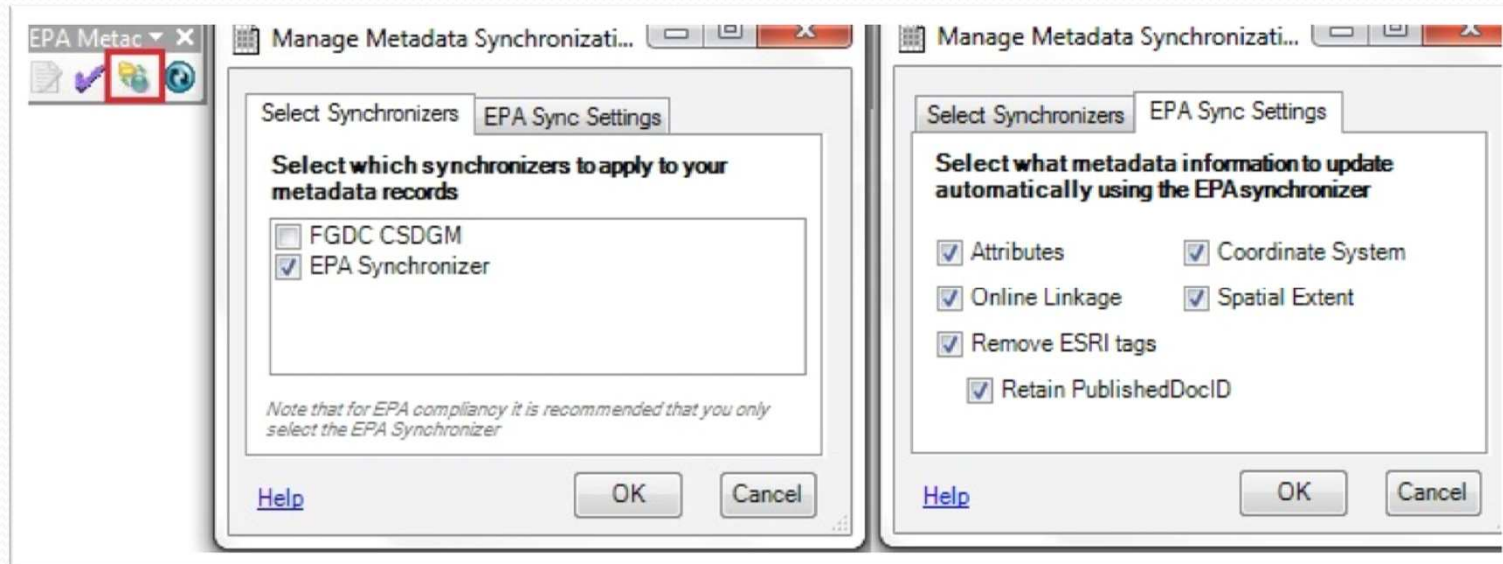
Non-compliant



- Synchronization
 - Automatically insert data properties into metadata
 - Save time and ensures consistency with data
 - Particularly useful for coordinate system and spatial extent

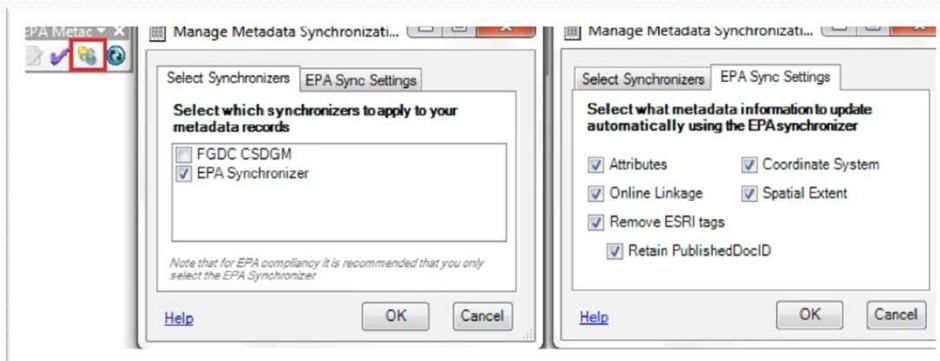
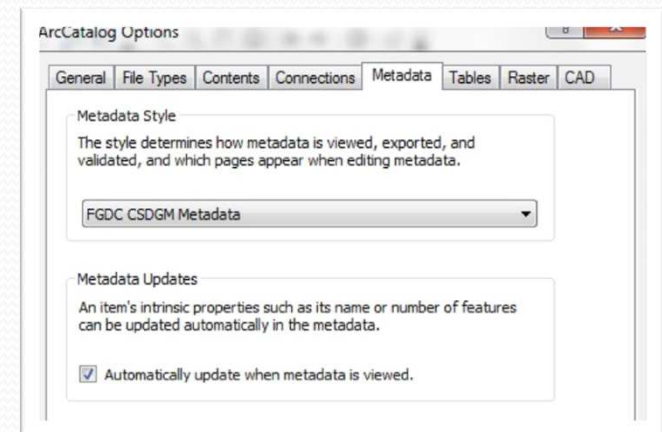
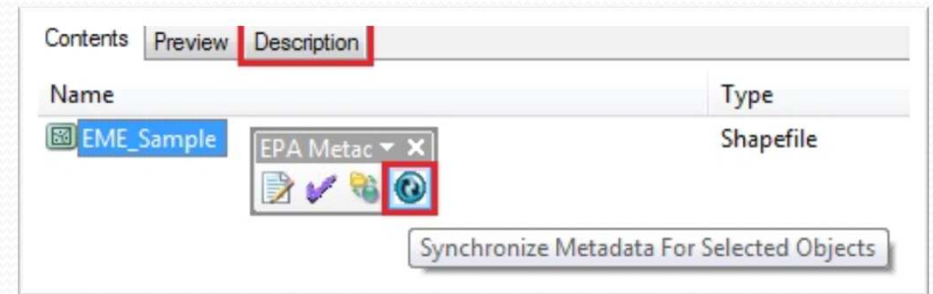
Using the EME

- The EPA Synchronizer
 - Lets users control which data properties are synchronized
 - Retain information for important elements
 - Avoid inserting unnecessary information
 - Access from EME Toolbar



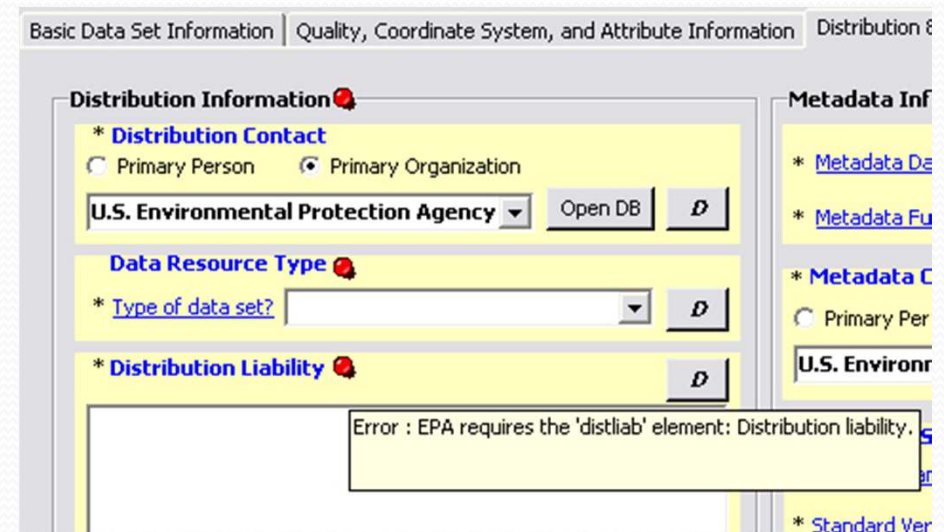
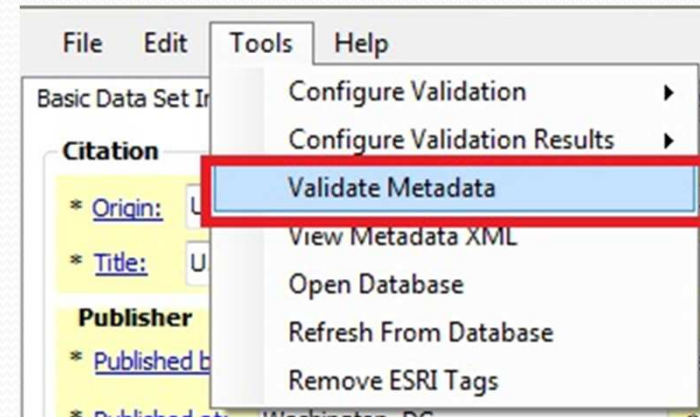
Using the EME

- Set EPA Synchronizer as default
- Select which attributes to synchronize
- Apply synchronization



Using the EME

- The EME Validator
 - Tests metadata records for compliancy with both FGDC and EPA requirements.
- Validate records one at a time or with batch processing
- Results of validation available in:
 - EME user interface
 - Web browser



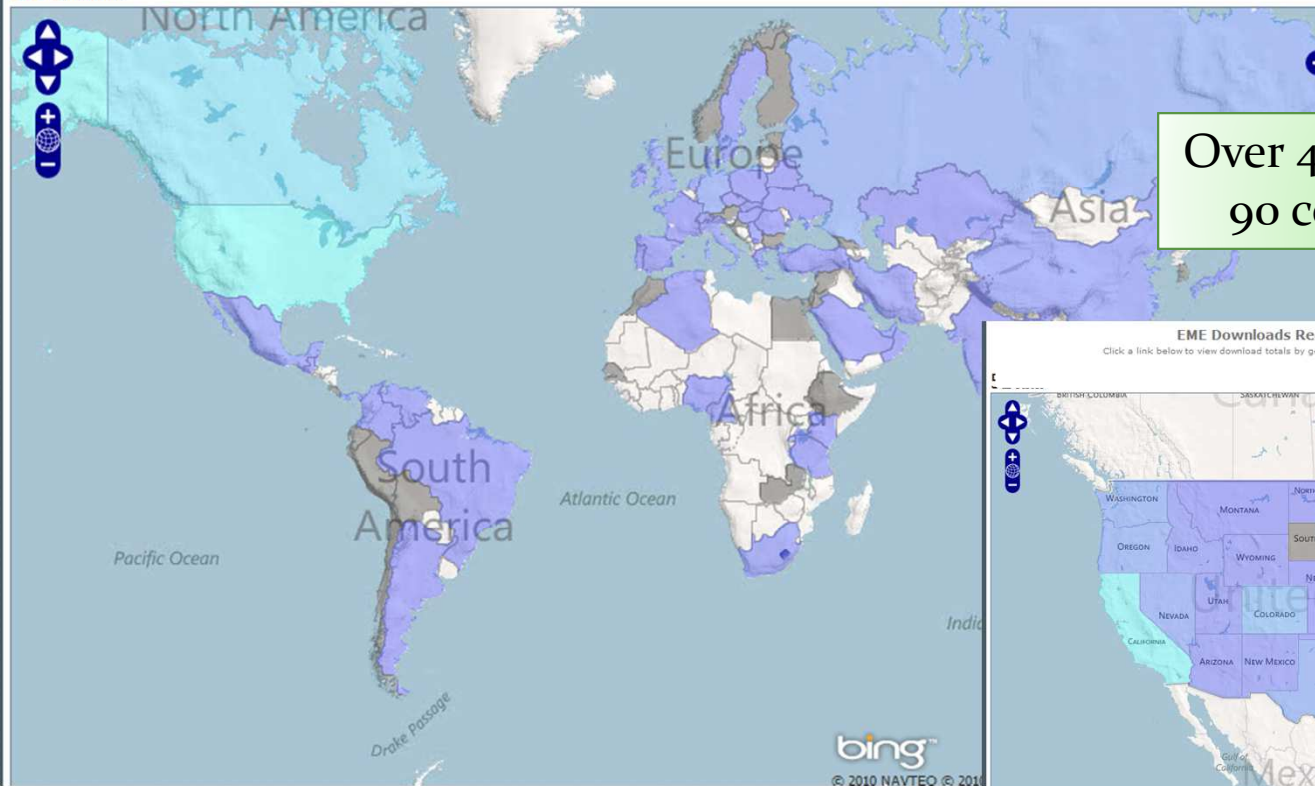
EME Usage

EME Downloads Recorded Since November 2008

Click a link below to view download totals by geography (map), totals by country (table), or downloads over time (chart).

MAP • TABLE • CHART

90 Countries

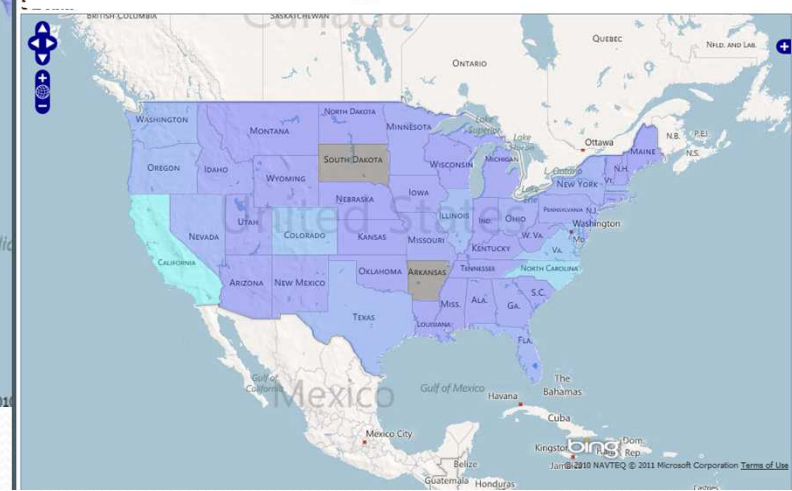


Over 4,000 downloads from 90 countries since 2008

EME Downloads Recorded Since November 2008 in USA

Click a link below to view download totals by geography (map), totals by states (table), or downloads over time (chart).

MAP • TABLE • CHART



<https://edg.epa.gov/EME/Home.htm>

Additional Resources

- EME Website
 - <https://edg.epa.gov/EME/>
- ESRI FGDC Style Patch
 - <http://blogs.esri.com/Dev/blogs/arcgisdesktop/archive/2010/08/25/FGDC-Metadata-Style-Patch.aspx>
- ArcGIS 10 Desktop Metadata Help
 - <http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/00qp0000001p000000.htm>
- ArcGIS Metadata Blog Posts
 - <http://blogs.esri.com/Dev/blogs/arcgisdesktop/archive/2011/01/03/A-new-approach-for-Metadata-with-ArcGIS-10.aspx>
- FGDC Metadata Website
 - <http://www.fgdc.gov/metadata>

Questions?



Contact Us

- Jessica Zichichi
 - jzichichi@innovateteam.com
- Alexandra Walrath
 - awalrath@innovateteam.com



Innovate!
www.InnovateTeam.com