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MOBILE CHECKLIST A: PREPARATION _____

For a successful Mobile implementation, complete all items listed below before beginning Mobile configuration.

DOWNLOAD AND INSTALL ALL AVAILABLE UPDATES FOR THE WEB SERVER _____

- On the **Web Server**, right-click **My Computer** and choose **Properties > Automatic Updates** tab. Click the **Windows Update Web** site link. On the Windows Update site, choose the **Express** option. If any updates are recommended, install them.

INSTALL SOFTWARE _____

ENTERPRISE SERVER:

- Install ZIP.

REPLICATION SERVER:

- Install ArcGIS Engine.
- Install ArcFM Engine Runtime (as a separate install, or as included in ArcFM Viewer for ArcGIS Engine or in ArcFM Desktop).
- Install ArcFM GDB Replication Server (GDBReplicationServer.msi).
- Install any available patches for all software.

WEB SERVER:

- Install IIS (if not already installed) with both BITS options.
- Install ArcFM GDB Replication Web (GDBReplicationWeb.msi), which will not install correctly until BITS is installed).

- Install any available patches for all software.

FIELD UNIT:

For all implementations:

- Install ZIP.
- Install any available patches for all software, including software chosen below.

For ArcFM Viewer (View-Only), Basic Redliner, Advanced Redliner, or Inspector:

- Install ArcGIS Engine Runtime , ArcGIS Engine SDK, or ArcGIS Desktop (ArcMap).
- Install ArcFM Viewer for ArcGIS Engine.

For Mobile ArcFM:

- Install ArcGIS Desktop (ArcMap).
- Install ArcFM.

For Mobile Designer:

- Install ArcGIS Desktop (ArcMap).
- Install Designer.

ENTERPRISE CLIENT:

- Install ArcGIS Desktop (ArcMap and ArcCatalog).
- Install ArcFM (include Designer for Mobile Designer implementations).
- Install any available patches for all software.

INSTALL LICENSES

ENTERPRISE SERVER: NONE NEEDED

REPLICATION SERVER:

- ESRI (choose ONE of the following)
 - Geodatabase Update Extension (ArcGIS Engine Runtime)
 - ArcEditor
 - ArcInfo

- Telvent (choose ONE of the following):
 - ArcFM Viewer for ArcGIS Engine AND ArcFM Engine Editor
 - ArcFM
 - Designer

WEB SERVER: NONE NEEDED

FIELD UNIT:

For ArcFM Viewer View-Only:

- ESRI (choose ONE of the following):
 - ArcView
 - ArcGIS Engine
 - ArcGIS Engine Geodatabase Update Extension
 - ArcEditor
 - ArcInfo

- Telvent (choose ONE of the following):

- ArcFM Viewer for ArcGIS Engine
- ArcFM
- Designer

For Basic Redliner and Advanced Redliner:

ESRI (choose ONE of the following):

- ArcView
- ArcGIS Engine
- ArcGIS Engine Geodatabase Update Extension
- ArcEditor
- ArcInfo

Telvent (choose ONE of the following):

- ArcFM Viewer for ArcGIS Engine WITH Redliner Extension
- ArcFM
- Designer

For Inspector:

ESRI (choose ONE of the following):

- ArcEditor
- ArcInfo
- ArcGIS Engine Geodatabase Update Extension

Telvent (choose ONE of the following):

- ArcFM Viewer for ArcGIS Engine WITH Inspector Extension
- ArcFM
- Designer

For Mobile ArcFM:

- ESRI: ArcEditor or ArcInfo
- Telvent: ArcFM or Designer

For Mobile Designer:

- ESRI: ArcEditor or ArcInfo
- Telvent: Designer

ENTERPRISE CLIENT:

- ESRI: ArcEditor or ArcInfo
- Telvent: Designer for Mobile Designer implementations, ArcFM for all other implementations

CREATE THE BASE PATH ON THE ENTERPRISE SERVER AND SET PERMISSIONS _____

- On the **Enterprise Server**, create a new folder at the top level of a drive (Note: implementation is simpler if the **Field Units** also have an available local drive with this letter). If you will be mapping this folder to a drive on other machines, create an additional subfolder level, e.g.
C:\TheContainer\TheBaseFolder
- Inside this folder, create an InitialExtract subfolder, e.g. **C:\TheContainer\TheBaseFolder\InitialExtract**
- Enable Windows Sharing by right-clicking the top-level folder (e.g. **TheContainer**) and choosing **Properties > Sharing** tab.
- Choose **Share this folder**.
- Click [**Permissions**].
- For **Everyone**, check all available boxes under **Allow**.
- Click [**OK**].



For better security, consider creating a user group for all Mobile users, then allow all permissions for that group instead of all users. Alternately, you could check “Allow” for every Mobile user in the list.

- Display the **Security** tab.
- Select the **Users** user group.
- Check **Allow** for all permissions available (allowing Special Permissions is optional).
- Click [**Advanced**].
- In the Advanced Security Settings, verify that for **Users - Full Control – Not Inherited** and **Administrators - Full Control - Parent Object** the **Apply To** field is set to **This folder, subfolders and files**.
- If either row is not, select the row and click [**Edit**], then from the **Apply onto** field choose **This folder, subfolders and files**.
- Click [**OK**] to all dialogs.
- If desired, on the **Enterprise Client** map a drive (e.g. **Z:**) to the top-level folder (e.g. **\\servername\TheContainer**).

PREPARE THE ENTERPRISE SDE GEODATABASE FOR MOBILE _____

- All enterprise SDE geodatabase data must be incorrupt:
 - Every networked linear feature class must allow connections to Default Network Junctions
 - No corrupt feature geometry (e.g. 0 Length, null Shape)
 - No coincidental network features
- In ArcMap, run both of the following tools on Geometric Network Editing toolbar and resolve any problems they identify:
 - Verify Connectivity
 - Verify Network Feature Geometry
- Run **Create/Update ArcFM Solution System Tables**.



Depending on the version of ArcFM and the permissions granted to user sde, you may need to run *Create/Update ArcFM Solution System Tables and Upgrade ArcFM Solution Database* as user sde, then again as user ArcFM. See the version-specific “What’s New” section of *Configuring the ArcFM Solution* help for details.



Because the ArcGIS Utility Network Analyst extension is not available in ArcGIS Engine, Telvent created its own tracing support extension for use in ArcFM Viewer for ArcGIS Engine. This code relies on these model names. When implementing Mobile ArcFM or Mobile Designer, you do not need to assign the network edge model names because ArcFM and Designer use ArcGIS Desktop (ArcMap) instead of ArcGIS Engine.

- Run **Upgrade ArcFM Solution Database**.
- Add all required model names and any desired optional model names to the appropriate enterprise SDE geodatabase domains.
- On every feature class (or dataset) that will participate in Mobile:
 - o Register as versioned
 - o Run ArcFM Solution Object Converter to convert to ArcFM objects (convert to Designer objects if implementing Mobile Designer)
- Assign the model name **MM ENTERPRISE** to the enterprise SDE geodatabase.

Implementation-Specific Steps
<p>Applies to: All ArcFM Viewer-based implementations View-Only, Basic Redliner, Advanced Redliner, Inspector</p>
<ul style="list-style-type: none"> <input type="checkbox"/> To each electric edge feature class (PriOHElectricLineSegment, Bus Bar, SecondaryUGElectricLineSegment, etc.) assign the ELECTRICNETWORKEDGE model name. <input type="checkbox"/> To each gas edge feature class (DistributionMain, etc.) assign the GASNETWORKEDGE model name. <input type="checkbox"/> To each water edge feature class (WDistributionMain, etc.) assign the WATERNETWORKEDGE model name.

- Optional: Create Graphic Annotation Feature Class (For Adv. Redliner and above only - not for ArcFM Viewer View-Only or Basic Redliner).
 - o In ArcCatalog, create a separate dataset just for ArcFM Annotation feature classes in the enterprise SDE geodatabase
 - o Create one or more ArcFM Annotation feature classes in the new dataset
 - o Assign the **GRAPHICFAVORITENAME** field model name to the text field

- Assign the **PUBLICANNOTATIONTARGET** object model name to each ArcFM Annotation class
- Register each ArcFM Annotation class as versioned
- Set permissions for users to access each ArcFM Annotation class
- ☐ **REQUIRED: Create/Adjust Stored Displays for Mobile**
 - Include only layers that will be in Backdrop
 - As few layers as possible to improve performance
 - But do not exclude any layers field users will need
 - Optional: If implementing Redliner or Inspector, and intending for field users to store redlines (graphics and ink) in Sessions/Designs without needing an ESRI ArcEditor license, determine which Stored Displays might be shown prior to the opening of a new Session/Design. In each of those Stored Displays, include at least one layer from a feature class that meets all three of the following criteria:
 - Is not in a network
 - AND is in a dataset that does not contain a network
 - AND does not have feature-linked annotation.
 - Create as new Stored Displays if necessary
 - Include useful bookmarks
- ☐ **REQUIRED for Inspector Only: Assign the necessary model names:**
 - **INSPECTORSOURCE** to all feature classes
Inspector users will be permitted to edit
 - **INSPECTORDESTINATION** to all objects
Inspector users will be permitted to create or edit
- ☐ **Optional: Assign the OVERVIEWWINDOW model name to desired feature classes in enterprise SDE geodatabase to include them in the ArcFM Viewer**

Layers Overview window (does not apply to Mobile ArcFM or Mobile Designer).

- Optional: To configure an Identify Tool Group, add a model name of your own invention to the enterprise SDE geodatabase Identify Tool Object Class Model Name Domain, then assign it to each feature class whose features should be considered part of this group.
- Optional: Create a GDBEXTRACTION feature class to limit extracted data to particular geographic area(s)
 - In ArcCatalog
 - Create a new polygon feature class in the enterprise SDE geodatabase
 - Optionally, include a text field to store name of each polygon; otherwise, default behavior tracks by ObjectID
 - Assign **GDBEXTRACTION** model name to feature class
 - Assign **GDBEXTRACTION** field model name to text field or OID
 - In ArcMap
 - In the new feature class, create polygons around each area for use in later extractions
 - Note ObjectIDs or set GDBEXTRACTION text field values for use during extract
- Optional: To limit Backdrop database updates to feature classes and objects assigned a particular model name, add a new model name of your own invention to the enterprise SDE geodatabase Domain Independent Object Class Model Name domain, then assign that model name to every feature class and object whose edits should be propagated to all Field Units. Consider using SQL rather than ArcCatalog to assign this model name to many tables.

CREATE A SAFE REPOSITORY _____

The various Mobile databases may undergo multiple revisions during the configuration process. To avoid confusion between multiple versions of

the same database, create a directory on the Enterprise Client (or other convenient location) for storing the most up-to-date database files. Whenever one of the following files is altered, copy the revised file to this safe repository directory:

All Backdrop databases
(e.g. Backdrop.gdb, Landbase.gdb, Facilities.gdb)
Field Session Manager.mdb
Login.mdb

STOP HERE FOR ARCFM VIEWER VIEW-ONLY.

PREPARE THE ENTERPRISE PX (PROCESS FRAMEWORK) DATABASE —

Continue with the following steps only if implementing Redliner, Inspector, Mobile ArcFM or Mobile Designer. Do not follow these steps when implementing ArcFM Viewer View-Only.

- If Client is not already running PX, Design-Develop-Deploy it. Client must decide on lifecycle (states and transitions), users, roles, permissions, etc. **All standard PX behavior must be configured and tested before Mobile configuration of PX begins!**
- Receive from Client
 - o Permission to alter the PX MM_ tables through the PX Admin tool
 - o Password for *process* (PX administrator) account
 - o Complete, customer-specific, functioning PX environment
- Assign Mobile roles (e.g. Session Redline Tech) to each user as appropriate
- You may also be able to create and partially configure the field Session Manager.mdb or Workflow Manager.mdb ahead of time.

CHECKLIST END —————