

Collector for ArcGIS (Android)

Tutorials

- [Prepare your data in ArcGIS for Desktop](#)
- [Create and share a map for data collection](#)
- [Track where collectors went](#)

Additional help

- [FAQs](#)
- [Supported data](#)
- [Configure map capabilities](#)

In this topic

1. [Create your geodatabase](#)
2. [Define geodatabase domains](#)
3. [Define the feature class](#)
4. [Set up the fields](#)
5. [Theme your data](#)
6. [Publish your data](#)

Prepare your data in ArcGIS for Desktop

Viewing: [Android](#) | [iOS](#)

In this tutorial, you'll build a copy of the Damage Assessments feature service. You'll create a geodatabase in ArcMap, create domains, add a feature class, then add the correct field types and configure them to meet the requirements of the data collection form. Once you have configured the information model, you will build a map in ArcMap and publish a feature service to your organization. In the next tutorial in this series, the feature service will be leveraged in a web map and used by your field workforce to collect information in the field.

Create your geodatabase

Geodatabases organize and store data you collect. Ultimately you'll create a feature class to store damage assessment reports, but first you need to create the geodatabase that holds the feature class. Take the following steps to create a file geodatabase by using the Catalog window in ArcMap.

1. Start ArcMap and open the Catalog window.
2. Right-click the file folder in the Catalog tree where you want to create the file geodatabase.
3. Point to New.
4. Click File Geodatabase to create a new file geodatabase in the location you selected. Name your geodatabase *Tutorial*.

Define geodatabase domains

Some fields in your data should be populated from a set of choices. By creating domains in your geodatabase, you provide a list of choices your users can select from when they are collecting data. Later in this tutorial when you set up the fields, you'll use the domain.

1. In the Catalog tree, right-click the geodatabase and click Properties.
2. Click the Domains tab.
3. Click the first empty field under Domain Name and type *ExtentDamage* for the new domain. Press the TAB key or click the new domain's description field, and type a description for the domain.

| Domain Name | Description |
|--------------|--|
| ExtentDamage | The recorded level of inspected damage |

Tip:

4. When creating a new domain, specify a name that describes the parameter it governs. The description is a small sentence describing the purpose of the domain.
5. Click the field next to Domain Type, click the drop-down arrow, then click Coded Values from the list of domain types and choose Text as the Field Type.

Domain Properties:

| | |
|--------------|---------------|
| Field Type | Text |
| Domain Type | Coded Values |
| Split policy | Default Value |
| Merge policy | Default Value |

6. Click the first empty field under Coded values and type *Affected* for the first valid code.

Tip:

When entering coded values, make sure the code field matches the Field Type specified in the Domain Properties.

7. Press the TAB key or click the new coded value's Description field. Type *Affected* as the user-friendly description for this coded value.
8. Repeat steps 5 and 6 until all valid values and their descriptions have been typed. The end product resembles the following image:

Coded Values:

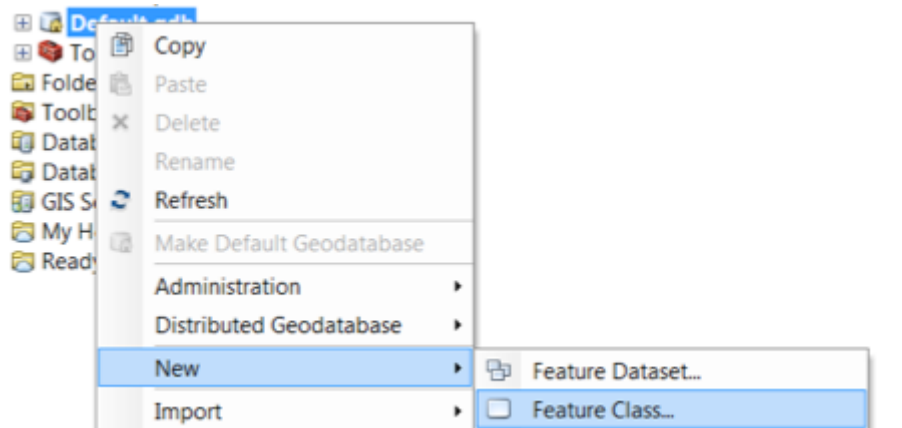
| Code | Description |
|--------------|--------------|
| Affected | Affected |
| Destroyed | Destroyed |
| Inaccessible | Inaccessible |
| Major | Major |
| Minor | Minor |

9. Click OK to create the new domain in the geodatabase and close the dialog box.

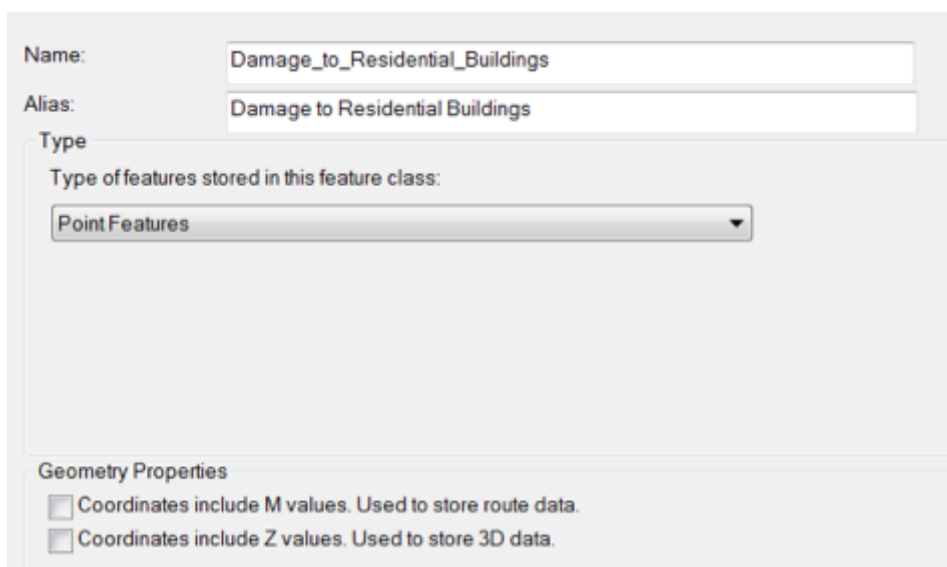
Define the feature class

Next, you'll create the feature class to hold the information collected. Feature classes are essentially containers for information, where the pieces of information share similar characteristics, whether that is their geometry or their attributes.

1. Right-click the geodatabase, point to New, then click Feature Class.

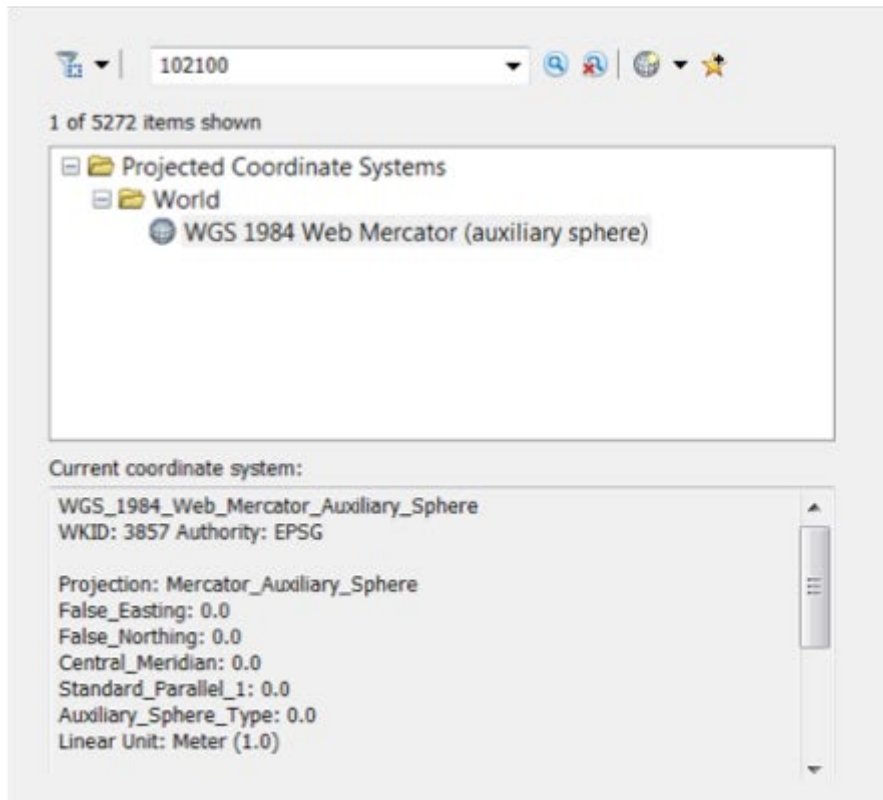


2. **Note:**
3. A feature class is a collection of features that share the same geometry type and information model.
4. The New Feature Class wizard opens. It walks you through the necessary steps to customize the feature class.
5. Type *Damage_to_Residential_Buildings* as the name for the feature class, type *Damage to Residential Buildings* as the alias, then choose Point Features as the feature type. Click Next.

A screenshot of the 'New Feature Class' wizard dialog box. The 'Name' field contains 'Damage_to_Residential_Buildings' and the 'Alias' field contains 'Damage to Residential Buildings'. Under the 'Type' section, the 'Type of features stored in this feature class:' dropdown menu is set to 'Point Features'. At the bottom, under 'Geometry Properties', there are two unchecked checkboxes: 'Coordinates include M values. Used to store route data.' and 'Coordinates include Z values. Used to store 3D data.'

6. When creating this feature class, select a coordinate system. Coordinate systems allow your features to be projected properly and accurately on a map, making the

features appear in the correct locations. For this tutorial, select WGS 1984 Web Mercator (auxiliary sphere). Click Next.



7. Click Next to accept the default XY Tolerance settings.
8. Click Next to accept the default database storage configuration.

Set up the fields

The fields are a key part of your information model. They provide the structure of the information your field workers collect and provide rules for the types of information collected about a feature.

1. The first field you create will be used to record the number of occupants that live in the building being inspected. Click the first empty field and type *NUMOCCUP* for Field Name. Under Data Type, pick Long Integer.
2. Under the Field Properties, click the Alias check box and change the default alias *NUMOCCUP* to Number of Occupants. The alias is what your field workers see on the data collection form so it's important that it makes sense to them.

| Field Name | Data Type |
|------------|--------------|
| OBJECTID | Object ID |
| SHAPE | Geometry |
| NUMOCCUP | Long Integer |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Click any field to see its properties.

| Field Properties | |
|-------------------|---------------------|
| Alias | Number of Occupants |
| Allow NULL values | Yes |
| Default Value | |

- The next field you create takes advantage of the coded domain created earlier in this tutorial. Click the next empty field and type *TYPDAMAGE*. Pick the data type as Text.
- Under the Field Properties, type *Extent of Damage* as the alias for the field.
- Click the empty Domain check box and choose ExtentDamage.

| Field Name | Data Type |
|------------|--------------|
| OBJECTID | Object ID |
| SHAPE | Geometry |
| NUMOCCUP | Long Integer |
| TYPDAMAGE | Text |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Click any field to see its properties.

| Field Properties | |
|-------------------|------------------|
| Alias | Extent of Damage |
| Allow NULL values | Yes |
| Default Value | |
| Domain | ExtentDamage |
| Length | 50 |

- The final field to add is the description field. Name this field *DESCDAMAGE* and make it a text field. Update the alias to *Description of Damage*.

Note:

The full damage assessment template has more features than described in this tutorial. For a complete set of fields, download the [Damage Assessment Template](#)

[map package](#). However, you can continue the Collector tutorials using just the three fields you created.

7. Click Finish to complete the feature class creation.

The feature class you have created is added to the map and appears in the Table of Contents panel in ArcMap.

8. To allow users to take pictures in the field and attach them to their assessment reports, enable attachments on the feature class you just created. To do so, right-click the feature class in the Catalog window, select Manage, then click Create Attachments.

Theme your data

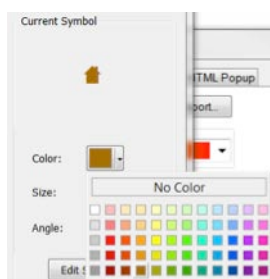
You've now created your information model. In this section, you'll define how those features look on your map.

1. To update how your features look, right-click the layer in the Table of Contents and click Properties.

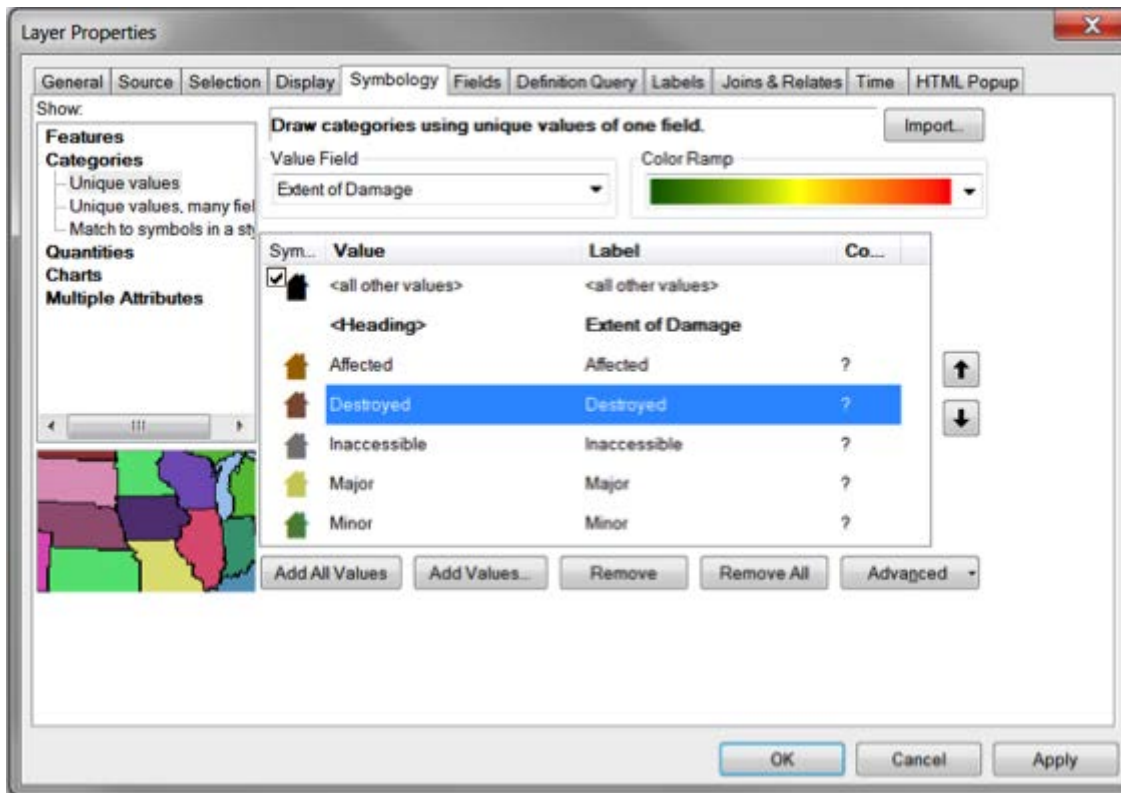
Note:

If your feature class is not yet on the map, drag the feature class from the Catalog window into the Table of Contents panel in ArcMap.

2. Click the Symbology tab.
3. Click the Categories section under the **Symbology** tab and choose **Unique values**.
4. In the Value Field drop-down list, choose the **Extent of Damage** field and click **Add All Values**.
5. Right-click the first value in the list and select **Properties** for All Symbols.
6. In the Symbol Selector, search for House and under the Civic options pick House 1, then click OK.
7. Double-click each house icon and select a different color for each of the house symbols.



8. Click Apply and click OK. The symbols update in the Table of Contents.



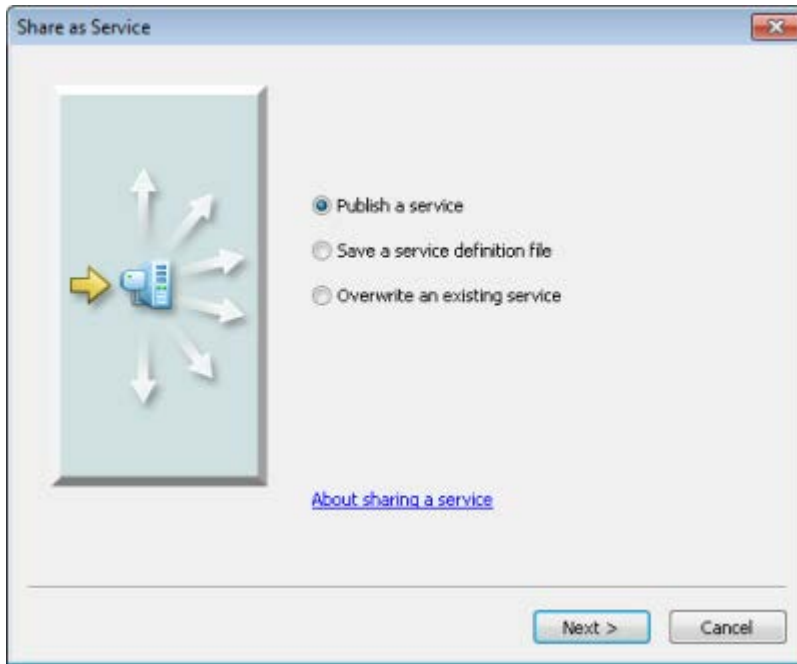
9. Click File and click Save to save your map document. Name your map document *Damage_Assessment.mxd*.

Publish your data

To use your data in your map, it needs to be available online. You can publish the data to your ArcGIS for Server or to your ArcGIS organization.

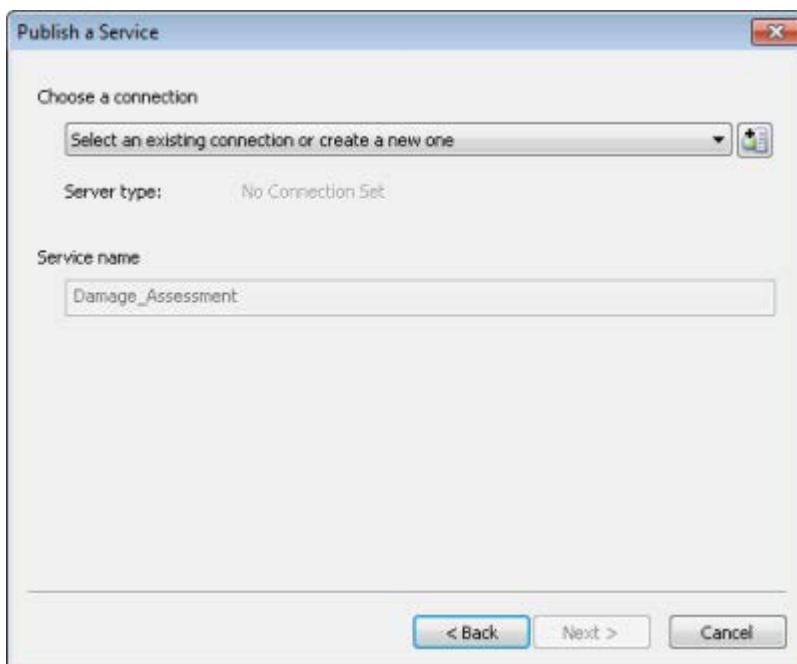
1. **If you're not already signed in to your ArcGIS organization in ArcGIS for Desktop, sign in !!**
2. Click the File menu, choose **Share As**, then click **Service**.

The Share as Service panel opens.

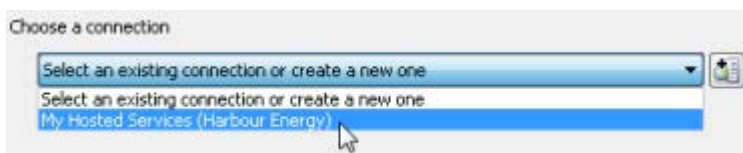


3. On the Share as Service panel, confirm the option **Publish a service** is selected. Click Next.

The Publish a Service panel opens.

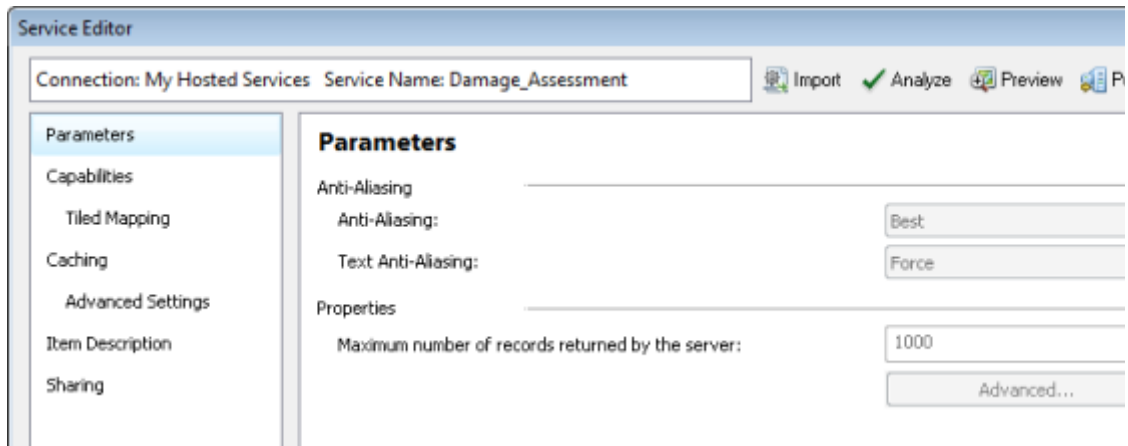


4. On the Publish a Service panel, expand the Choose a connection drop-down list and select **My Hosted Services** (i.e. **your organization name**).

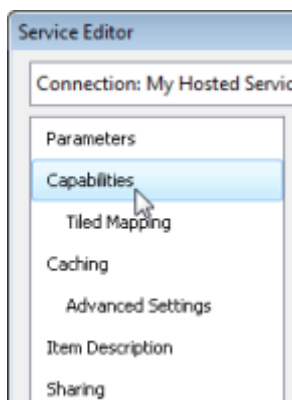


5. Accept the default service name, *Damage_Assessment*, and click Continue.

The Service Editor window opens.



6. In the left pane on the Service Editor window, click Capabilities.



7. In the right pane, check the **Feature Access** check box and uncheck the **Tiled Mapping** check box.

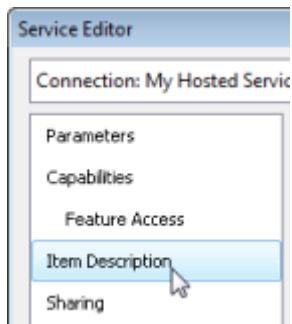
Capabilities

Choose the capabilities you would like enabled for this service:

| | |
|-------------------------------------|----------------|
| <input type="checkbox"/> | Tiled Mapping |
| <input checked="" type="checkbox"/> | Feature Access |

Furthermore check all boxes regarding the enablement of editing etc. (all boxes!)

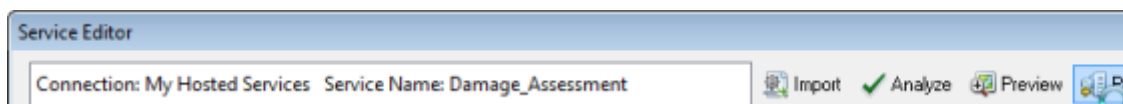
8. This specifies that you'll publish a feature service rather than a tiled map service.
9. In the left-hand pane, click Item Description.



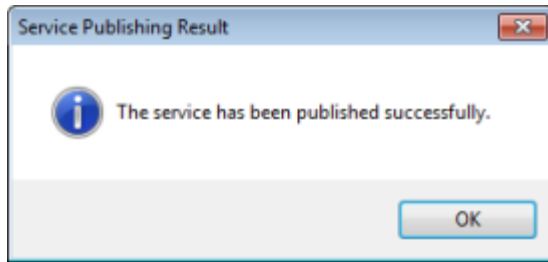
10. Add a tag Data. Type the following for the Summary and Description: *This is for the Collector Create maps tutorial.*

The image shows the 'Item Description' configuration panel. It has a title 'Item Description'. There are four main sections: 1. 'Summary (required):' with a text box containing 'This is for the Collector Create maps tutorial.' 2. 'Tags (required):' with a text box containing 'Data' and a 'Choose Your Tags...' button below it. 3. 'Description:' with a text box containing 'This is for the Collector Create maps tutorial.' 4. 'Access and Use Constraints:' with an empty text box. Below that is 'Credits:' with an empty text box. At the bottom, there is a checked checkbox labeled 'Update missing metadata in document based on item description.'

11. On the Service Editor toolbar, click **Publish**.



12. You'll see various status messages as the service publishes, then you'll see a result message.



13. Click OK on the result message.
14. Minimize ArcMap or exit the ArcMap application. Save your changes if prompted.

Now that you've created your information model, defined a domain to improve data quality in the field, and published your data, you are ready to [create and share a map](#) for your field workforce to use.