

# 1 Integrate for ArcGIS

## Quick Start Guide

Product version: v 1.6

Document version: v 1.2.3

Document date: 13/10/2017



Copyright 2017 1Spatial plc and its affiliates.

All rights reserved. Other trademarks are registered trademarks and the properties of their respective owners.

US Patent Number 9542416 B2 (2017-01-10)

No part of this document or any information appertaining to its content may be used, stored, reproduced or transmitted in any form or by any means, including photocopying, recording, taping, information storage systems, without the prior permission of 1Spatial plc.

1Spatial  
Tennyson House  
Cambridge Business Park  
Cambridge  
CB4 0WZ  
United Kingdom

**Phone:** +44 (0)1223 420414

**Fax:** +44 (0)1223 420044

**Web:** [www.1spatial.com](http://www.1spatial.com)

Every effort has been made to ensure that the information contained in this document is accurate at the time of printing. However, the software described in this document is subject to continuous development and improvement.

1Spatial plc reserves the right to change the specification of the software.

1Spatial plc accepts no liability for any loss or damage arising from use of any information contained in this document.

# Contents

---

- 1 Quick Start Guide ..... 4**
- 2 Free Rulesets ..... 5**
  - Uploading and Publishing a Free Ruleset ..... 5
  - Using a Free Ruleset ..... 7
- 3 Validating and Enhancing Data ..... 8**
  - Using the Web AppBuilder Widget ..... 8
    - Running Rules ..... 9
    - Viewing Validation Results .....10
  - Using the ArcMap Add-in ..... 12
    - Running Rules .....13
    - Viewing Validation Results .....13

# 1 Quick Start Guide

---

This Quick Start Guide will quickly get you validating and enhancing your data in 1Integrate for ArcGIS using some free rulesets.



**Note:** This guide assumes that you have already installed and configured 1Integrate for ArcGIS. If this is not the case, please refer to the *1Integrate for ArcGIS Installation Guide*.

Before proceeding, ensure that you have the following information:

- ▶ The name of the ruleset that your dataset is configured to use (if in doubt, please refer to the *1Integrate for ArcGIS Installation Guide*)
- ▶ Which Add-in or widget you are going to be using to validate and enhance your data

## 2 Free Rulesets

---

A free ruleset is provided as a backup (.rules) file so that you can quickly get started with 1Integrate for ArcGIS.

### Uploading and Publishing a Free Ruleset

In order to use a free ruleset with a data service, it must first be uploaded and then published.

#### Upload a Free Ruleset:

1. Log in to the Rule Author.
2. Right-click on the **contents** folder in the sidebar and click **Upload Ruleset**.

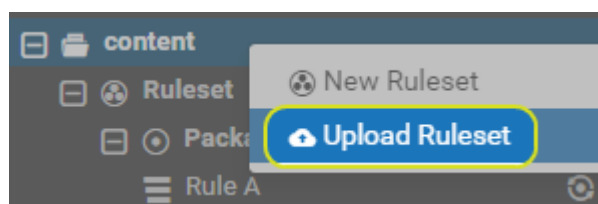


Figure 2-1: *Uploading a ruleset*

3. Enter a name for your ruleset.

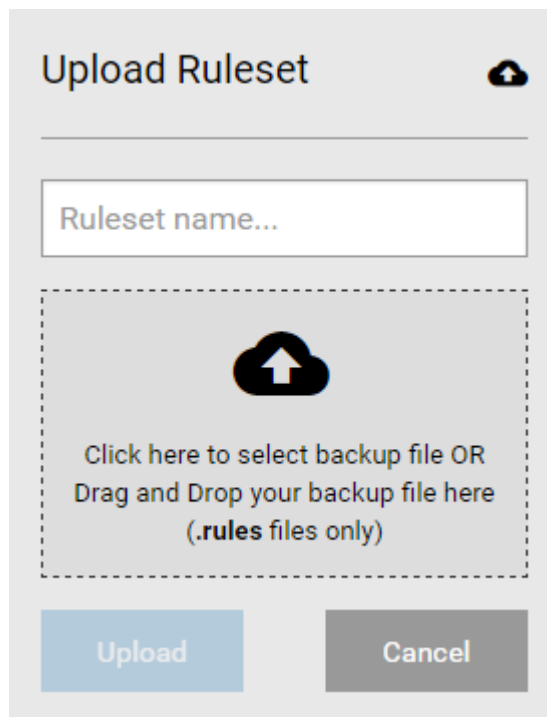


Figure 2-2: Select a ruleset to upload

4. Either drag and drop your **.rules** file onto the **Upload Ruleset** box, or click on the box and navigate to your file.
5. Click **Upload**.

A confirmation message is displayed once the ruleset has been successfully uploaded.



**Note:** An error message may display if the corresponding schema cannot be found. See Managing Schemas for information on how to upload a corresponding schema.

Once uploaded, your ruleset must be published before it can be used in the application Add-ins or the web app widget.


#### Publish a Free Ruleset:


1. Right-click on the required ruleset.
2. Click **Publish**.

A confirmation message is displayed once the ruleset has been successfully published.



Figure 2-3: *Confirmation that ruleset is published*

 **Note:** If the Ruleset fails validation, an error will be displayed.

 **Note:** Ensure that you have configured your data service to use the correct ruleset. See the *1Integrate for ArcGIS Installation Guide*.

## Using a Free Ruleset

Once uploaded and published, your free ruleset will be available within your data service.

Open your data service via your web or desktop application, and open the 1Integrate for ArcGIS Add-in or widget.

Your free ruleset will be visible and can be used immediately (see "Validating and Enhancing Data" on page 8).

# 3 Validating and Enhancing Data

---

Validation and enhancement of data is performed using the 1Spatial Add-ins and widgets.

Each has a slightly different interface, but the basic functionality is the same.

- ▶ For **validation** rules, 1Integrate for ArcGIS will count the number of objects processed, and the number of features that failed your rule ("non-conformances"). These non-conformances are identified with pin icons within your dataset. A traffic light next to each rule will also indicate where large numbers of features failed (red) or where most features passed (green).
- ▶ For **enhancement** rules, 1Integrate for ArcGIS will count the number of objects processed, and any errors encountered. Any rules that encountered errors are indicated by a red traffic light. The corrections are automatically committed to your dataset.

Before proceeding, ensure that your Add-in or widget has been installed, your dataset is properly configured and your rulesets have been published. Then follow the steps according to the Add-in or widget you are using.

## Using the Web AppBuilder Widget

The following steps outline how to use 1Integrate for ArcGIS to run validation and enhancement rules within the Web AppBuilder for ArcGIS.



**Note:** For general information on using the Web AppBuilder, please refer to the ArcGIS documentation.

### Launch the Web AppBuilder widget:

1. Open a web browser.
2. Navigate to the URL of your dataset (e.g. [machine]:[port]/dataset)
3. Open the 1Spatial Widget by clicking on the widget logo.



Figure 3-1: *Widget logo*

## Running Rules

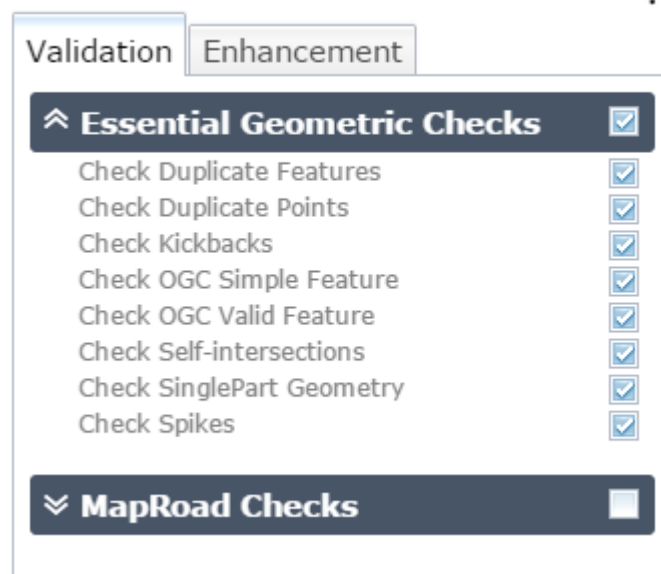
Rules can be run across a specific area of your dataset, or the visible extent.



**Note:** When running rules in the Web AppBuilder Widget, the default extent to be processed is limited to the data visible within your data frame. If you want to process the entire dataset, make sure you are zoomed out so that the full extent is visible.

### Run rules over the visible extent:

1. Select one or more rules by clicking on their checkboxes.  
Packages (groups) of rules can be selected using the group checkbox.

Figure 3-2: *Selecting rules to run*

2. Click **Process Extent** to run the selected rules on the visible extent.



**Note:** If at any time you wish to cancel the current process, press the **Stop** button.

A progress bar will display whilst the rules are being run.

Run rules over a selected region:

1. Select one or more rules by clicking on their checkboxes.  
Packages (groups) of rules can be selected using the group checkbox.
2. Use the **Draw** tool to define an area of your data to be processed (an "extent").

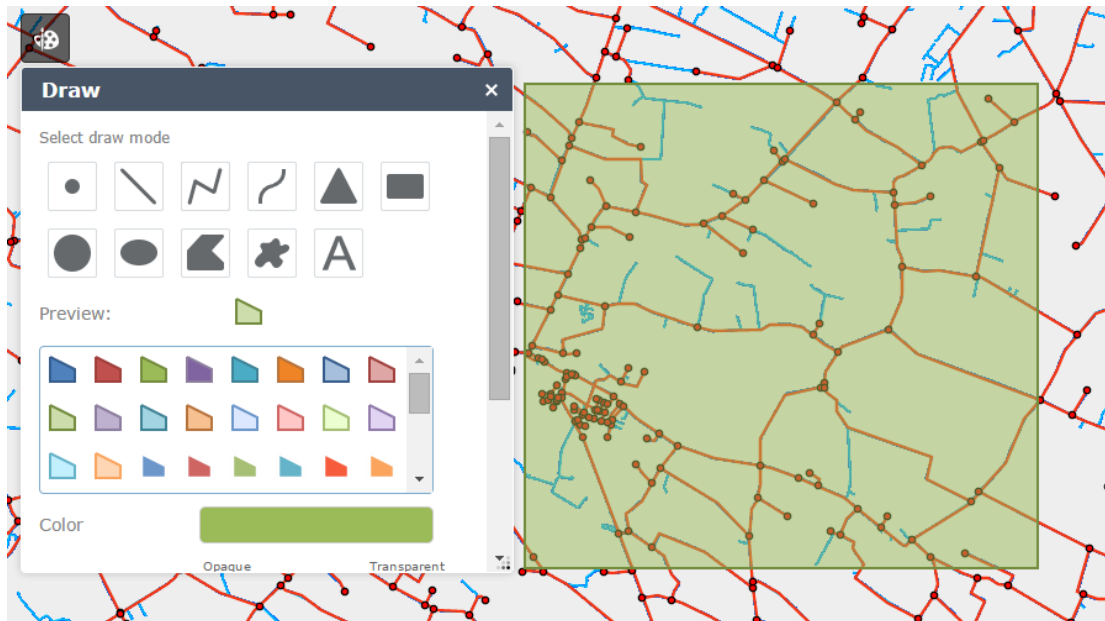


Figure 3-3: Using the Draw tool to define an extent



**Note:** If multiple areas are drawn, only the most *recently* drawn area will be processed.

3. Click **Process Extent** to run the selected rules across the defined area.



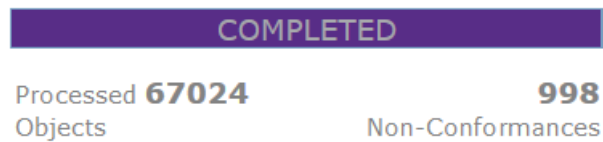
**Note:** If at any time you wish to cancel the current process, press the **Stop** button.

A progress bar will display whilst the rules are being run.

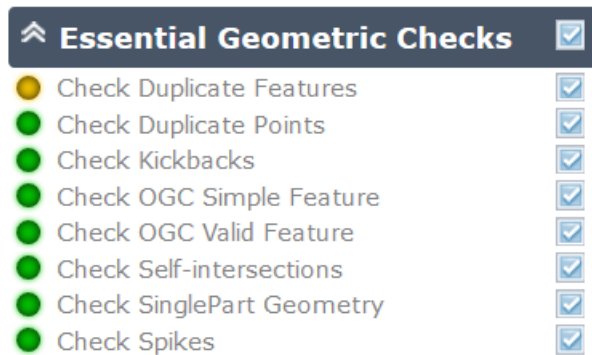
## Viewing Validation Results

Once your rules have finished running, the progress bar will display "COMPLETED" and the results will be displayed.

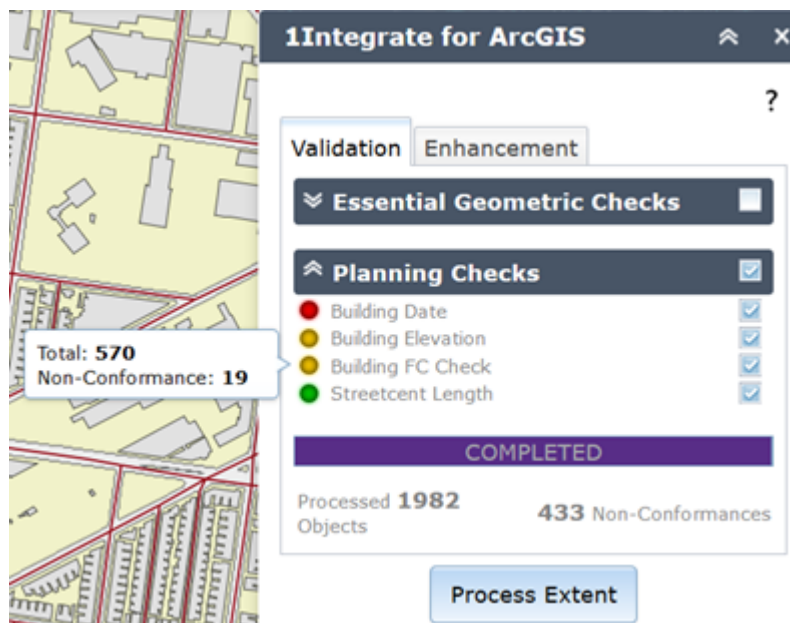
Beneath this progress bar is a count of the number of objects processed, and the number of features that failed the rules ("non-conformances").

Figure 3-4: *Validation results*

A traffic light next to each rule will also indicate where large numbers of features failed (red) or where most features passed (green).

Figure 3-5: *Traffic light rating*

By hovering the mouse over each traffic light icon, a summary for that rule can be displayed.

Figure 3-6: *Traffic light summary for a rule*

## Layers of Pins

All non-conformances are marked in your dataset with a pin.

Clicking on a pin will display details of the non-conformance, such as the associated feature IDs and the name of the rule.

As the pins are displayed as layers within the application, they can be turned on or off just like any other layer.

Within Web AppBuilder, open the layer list.



Figure 3-7: *Layer List icon*

The layer list displays which pin type represents each rule. These individual layers can then be turned on or off.

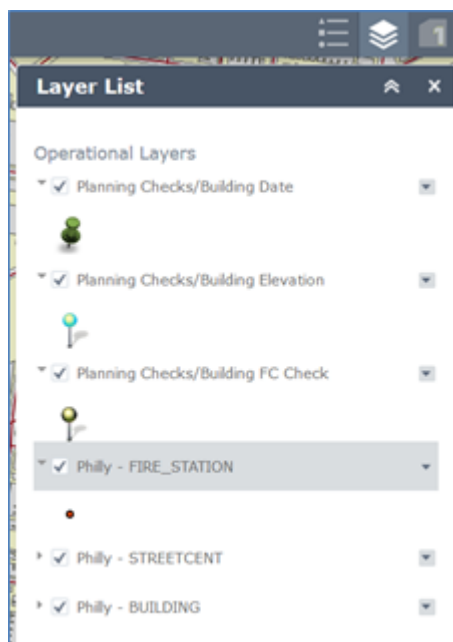


Figure 3-8: *Web AppBuilder Layer List*

## Using the ArcMap Add-in

The following steps outline how to use 1Integrate for ArcGIS to run validation and enhancement rules within ArcMap.

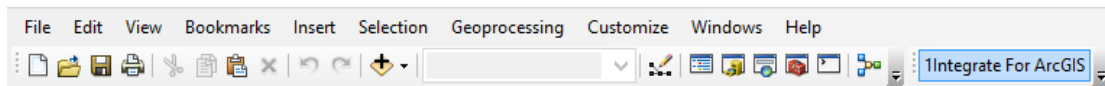


**Note:** For general information on using ArcMap, please refer to the ArcGIS documentation.

### Launch the ArcMap Add-in:

1. Open the ArcMap application.
2. Open your dataset.

3. Open the 1Spatial Add-in via the menu button.

Figure 3-9: *ArcMap menu*

4. Click **Fetch Rules** to display the rulesets that have been published for your dataset.

## Running Rules

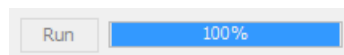
Validation and enhancement rules are run in the same way within ArcMap.



**Note:** When running rules in ArcMap, the extent to be processed is limited to the data visible within your data frame. If you want to process the entire dataset, make sure you are zoomed out so that the full extent is visible.

### Run rules over the visible extent:

1. Click **Fetch Rules** to display the rulesets that have been published for the current dataset.
2. Select one or more rules by clicking on their checkboxes.  
Packages (groups) of rules can be selected using the group checkbox.
3. Click **Run** to run the selected rules on the visible extent.  
A progress bar will display whilst the rules are being run.

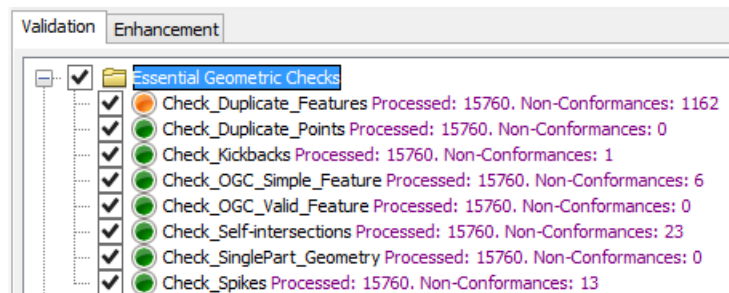
Figure 3-10: *ArcMap rules progress bar*

## Viewing Validation Results

Once your rules have finished running, the progress bar will display 100% and the results will be displayed.

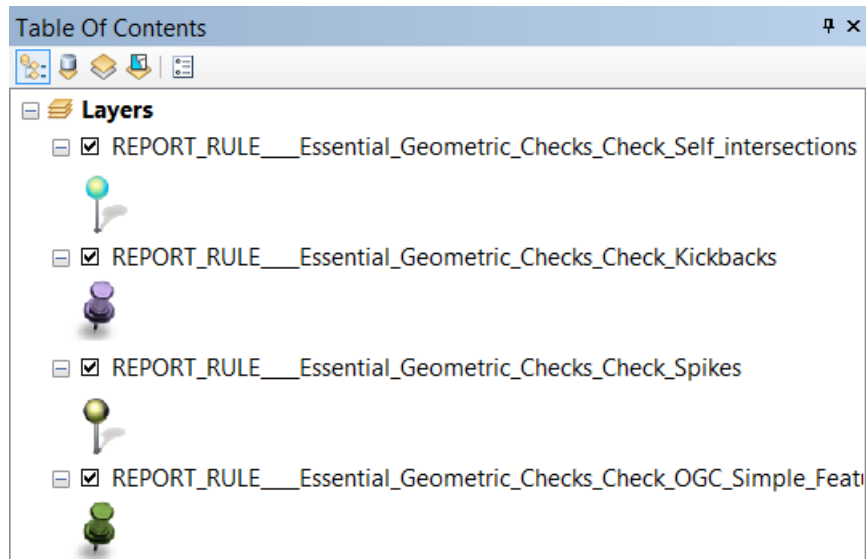
Displayed next to each rule is a count of the number of objects processed, and the number of features that failed the rule ("non-conformances").

A traffic light next to each rule will also indicate where large numbers of features failed (red) or where most features passed (green).

Figure 3-11: *Validation results*

All non-conformances are marked in your dataset with a pin.

The non-conformances for each rule are grouped with a similar pin style. These groups are displayed as **Layers** within the **Table of Contents** window, and can be hidden or displayed as required.

Figure 3-12: *Validation layers*