



1Data Gateway

Quickstart Guide

Product Version: v 2.14

Document Version: v 3.6

Document Date: 08/07/2024

Copyright 2024 1Spatial plc and its affiliates.

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

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

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 Introduction	1
1Data Gateway	1
Key Terms	1
Access Groups	2
2 Submissions	4
Creating a new Submission	4
Uploading Data	6
Configure Mapping	7
Process Submission	8
Submission Results	10
3 Lifecycle of a Submission	12
Submission Lifecycle	13
List of Submission Actions, Concepts, and Stages	14
4 Glossary	17

1 Introduction

This guide explains how to get started when submitting work to 1Data Gateway.

The procedures contained within this document apply to both Windows and Linux environments, unless specifically indicated.

For more information about new features and changes in this release, and hardware and software requirements, refer to the *1Data Gateway Release Notes*.

1Data Gateway

1Data Gateway is a self-service web portal that uses 1Integrate's rules engine for validation and enhancement processes between internal and external users.

Data uploaded to 1Data Gateway goes through a series of data validation rules. If any issues are found, you can download those results, giving you the opportunity to address any issues.

If necessary, you can resubmit the cleaned data to 1Data Gateway.

If the quality meets conformance standards for the validation rules, 1Data Gateway can be configured to deliver clean data automatically to the server, essentially automating the data supply chain.

Key Terms

The following terms will be important for users of 1Data Gateway. For a full list of terms please check the ["Glossary" on page 17](#).

Assignment: Assignments are a package of work that a supplier has been assigned to.

Specification: A specification defines the data to be uploaded or downloaded and the workflow for the data.

Submission: Submissions are work uploaded as part of an assignment that a user has been allocated to.

Supplier: A group of users that upload data into 1Data Gateway.

Access Groups

Access Groups are a grouping of one or more Roles that grant permissions to features in 1Data Gateway. Users with a specific Role will be referred to by the Role, even if they might be referred to differently within your organisation.

All Users have access to the following Permissions by default:

- See Assignments
- Start Submissions
- See personal Dashboard
- Edit own profile
- Generate Personal API Keys

The additional Roles are **Data Viewer**, **Project Manager**, **User Manager**, **System Manager**, and **ArcGIS Pro Add-in**.

A **User Manager** or **System Manager** can assign one or more of these Access Groups to Users in the [Permissions](#) or [Users](#) tabs.

Permission	Data Viewer	Project Manager	User Manager	System Manager	ArcGIS Pro Add-In
Interact with 1DG via 1DG for ArcGIS Pro					✓
View all Submissions and Download Data	✓				
See global dashboard	✓				
Manage Access Groups			✓	✓	
Manage Projects and Specifications		✓			

Permission	Data Viewer	Project Manager	User Manager	System Manager	ArcGIS Pro Add-In
Export/Import projects		✓			
Manage users			✓		
Manage suppliers			✓		
Manage user permissions*			✓		
Generate API Keys for other users			✓		
Generate Activation and Password reset links			✓		
User import				✓	
System configuration				✓	
Help and support				✓	

* Except for the **System Manager** Role

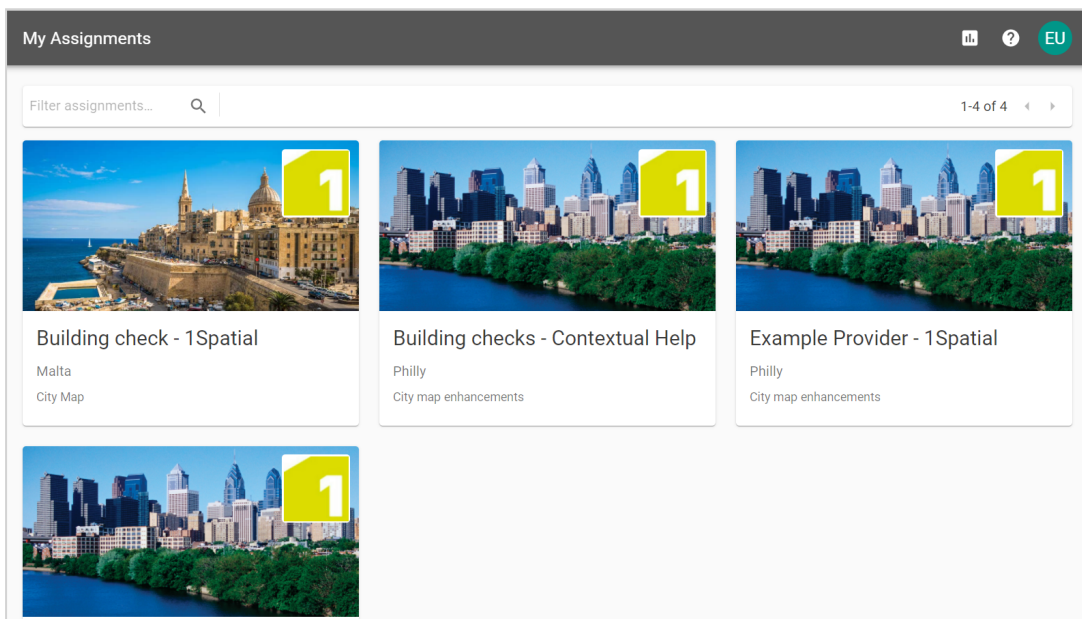
2 Submissions

Submissions are work uploaded as part of an Assignment that a User has been allocated to.

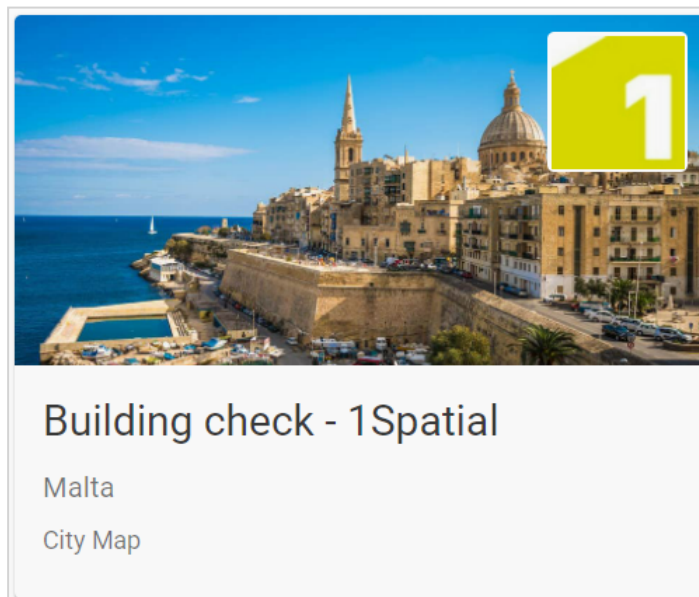
Check out the Lifecycle of a Submission for a more detailed overview.

Creating a new Submission

1. Open the **My Assignments** tab.

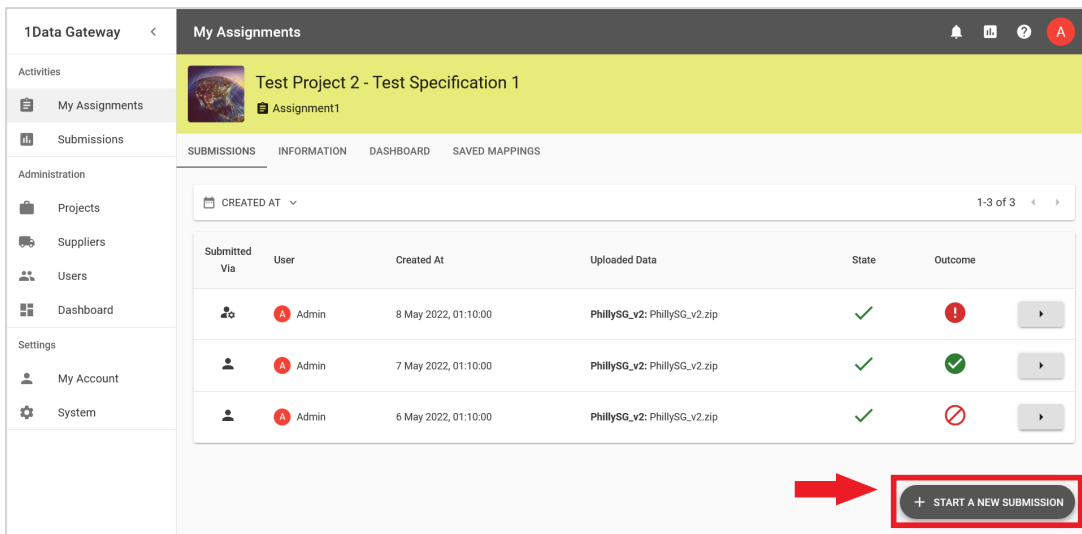


2. Pick the **Assignment** you want to create a submission for.



2 Submissions

3. Click the **Start a new Submission** button.

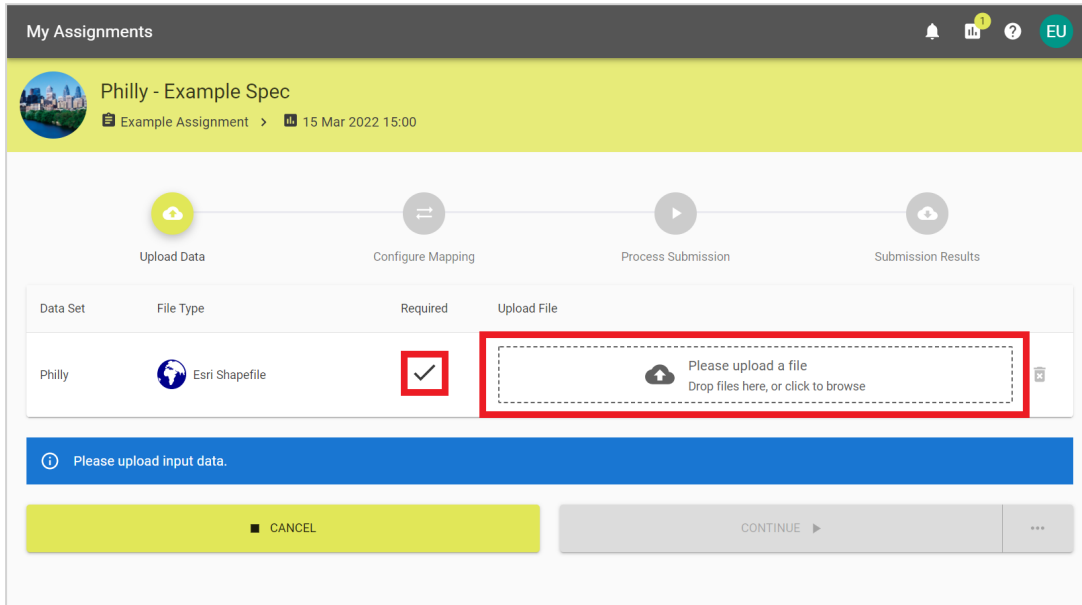


The screenshot shows the 'My Assignments' interface. The left sidebar contains navigation options: 1Data Gateway, My Assignments, Submissions, Administration (Projects, Suppliers, Users, Dashboard), and Settings (My Account, System). The main content area is titled 'Test Project 2 - Test Specification 1' and includes a sub-tab 'Assignment1'. Below this, there are tabs for 'SUBMISSIONS', 'INFORMATION', 'DASHBOARD', and 'SAVED MAPPINGS'. A table displays submission records with columns for Submitted Via, User, Created At, Uploaded Data, State, and Outcome. The table contains three rows of data. At the bottom right, a button labeled '+ START A NEW SUBMISSION' is highlighted with a red box, and a red arrow points to it from the left.

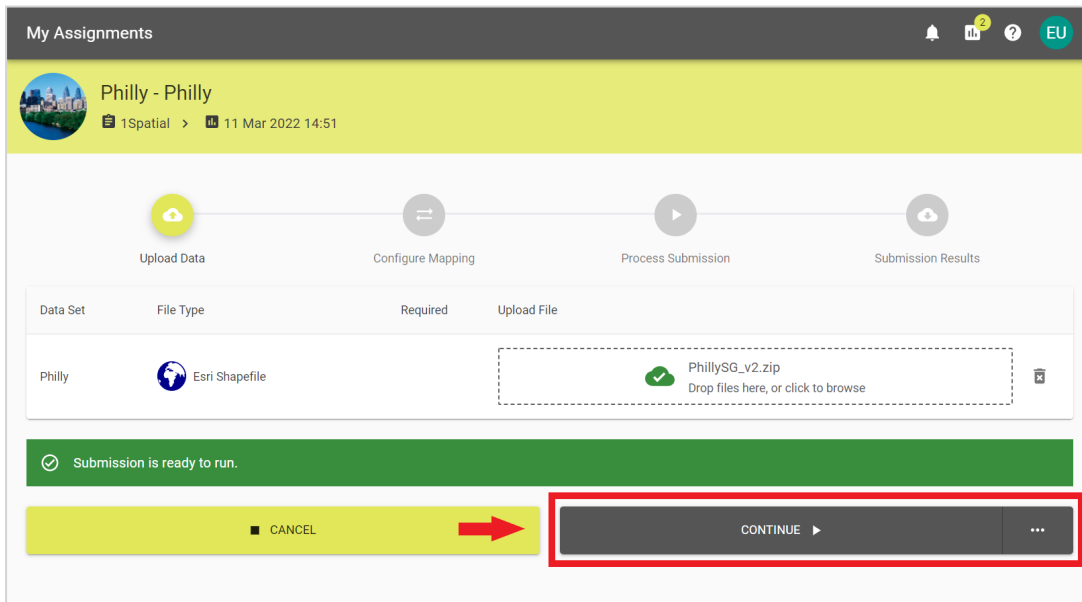
Submitted Via	User	Created At	Uploaded Data	State	Outcome	
	Admin	8 May 2022, 01:10:00	PhillySG_v2: PhillySG_v2.zip	✓	!	▶
	Admin	7 May 2022, 01:10:00	PhillySG_v2: PhillySG_v2.zip	✓	✓	▶
	Admin	6 May 2022, 01:10:00	PhillySG_v2: PhillySG_v2.zip	✓	✗	▶


Uploading Data

1. Drag and drop your desired files to the upload box, or click to open the file system browser. If the assignment doesn't require data, move on to the next step. If multiple Data Sets are available, any that are Required will need to be uploaded before you can proceed.



2. Select **Continue** to begin the Submission process. Alternatively, select the ellipsis next to **Continue** for **Automation** options.

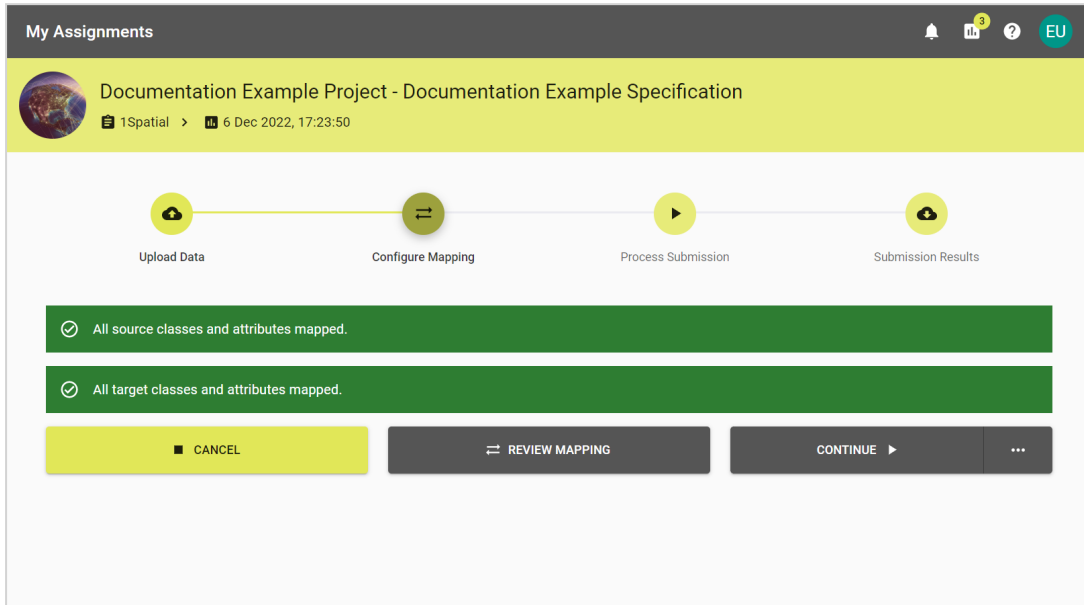


 **Note:** If the virus scanner is enabled then you will only be able to continue if the scan is complete and no threats were found.

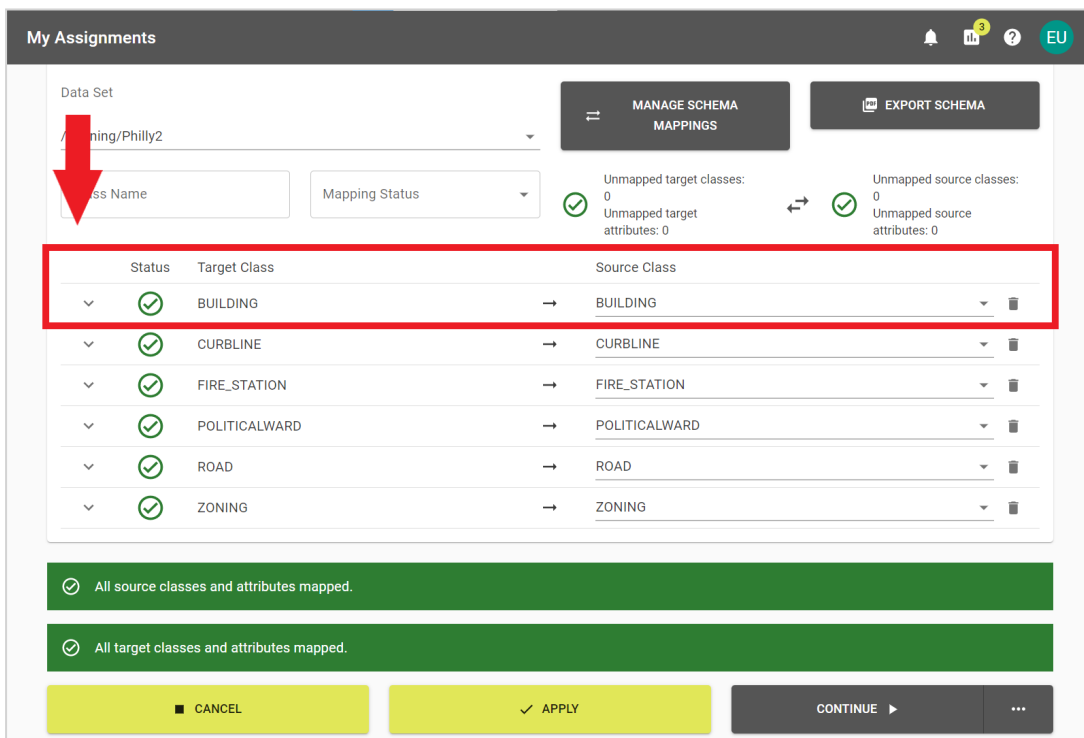
3. If you selected an **Automation** option, skip to the relevant stage.

Configure Mapping

- 1Data Gateway will attempt to map each field with values in the source data. If it succeeds, you will see something like this:



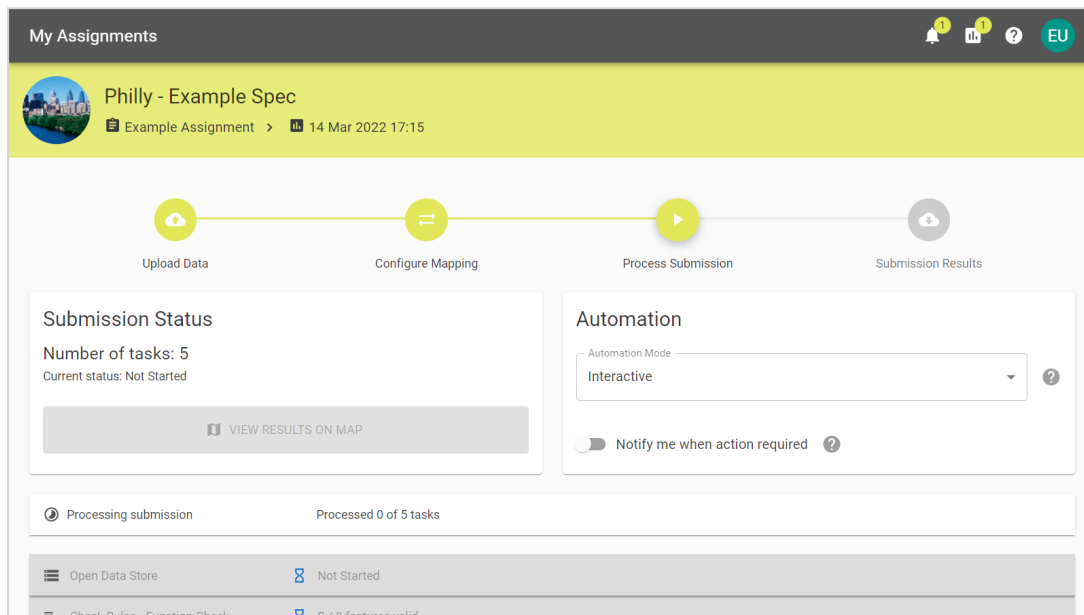
2. You can review the mappings and change as them as appropriate.



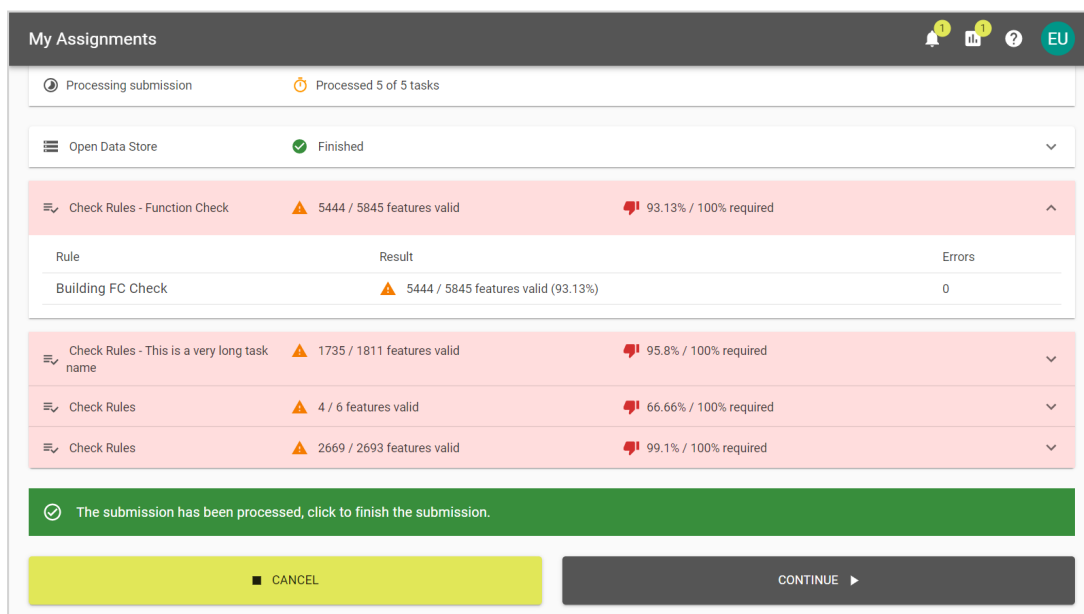
3. Once you're happy with the mapping you can choose an Automation method or click **Continue** to process the submission.

Process Submission

1. The Submission will work through the tasks and update as it completes them.




2. If there are Pause tasks within the submission, you will need to click **Resume** to continue processing the submission.
3. You can select tasks to expand and see a more detailed summary of what has been completed.



An expanded task

4. For spatial data, you can view the results on a map.

5. Select **Cancel** to exit or **Continue** to complete the submission.

 **Note:** If there is a problem during your submission, consult the online documentation.

Submission Results

1. You may now review the results of the Submission.

My Assignments

Upload Data Configure Mapping Process Submission Submission Results

Submission successful

Example User
sean.prideaux@1spatial.com

1Spatial

24 Mar 2023, 13:56:27

6ee0f923-d27d-4791-846d-0d3eb13327a6

Submission Data

Philly2
PhillySG_v2.zip

DOWNLOAD FILES

REMOVE MEDIA DOWNLOAD LOG REPORTS

Processing time: 00:00:13 Processed 7 of 7 tasks

Open Data Finished

Building FC Check	5444 / 5845 features valid	93.13% / 90% required
Curblin Check	1735 / 1811 features valid	95.8% / 90% required
Firestation Department Check	4 / 6 features valid	66.66% / 60% required
Zoning Check	2669 / 2693 features valid	99.1% / 90% required

The Submission summary screen

2. You can download the **Input Data**, **Modified Input Data**, **Output Data**, or **Log**.
3. By clicking **Reports** you can also download a PDF Submission Report or a CSV of the Schema Mapping.

Confidential Information

Submission successful

[Redacted]

1Spatial

1 Apr 2022 14:33

Philly

Test

1Spatial

Submission Data

Data Set	Uploaded File

Open Data Store Finished

Class	Features	Errors
BUILDING	5845 features processed	0
CURBLINE	1811 features processed	0
FIRE_STATION	6 features processed	0
POLITICALWARD	11 features processed	0
ROAD	3883 features processed	0
ZONING	2693 features processed	0

Check Rules - Function... ⚠ 5444 / 5845 features valid 🚫 93.13% / 95% required

Rule	Result	Errors
Building FC Check	5444 / 5845 features valid (93.13%)	0

Check Rules - This is a very... ⚠ 1735 / 1811 features valid 👍 95.8% / 95% required

Rule	Result	Errors
Curblineline 1.0	1735 / 1811 features valid (95.80%)	0

Check Rules ⚠ 4 / 6 features valid 🚫 66.66% / 95% required

Rule	Result	Errors
Firestation Department Check	4 / 6 features valid (66.66%)	0

1 / 2

1 Apr 2022 14:34

An example results PDF

4. You may want to click **Remove Media** when finished if you no longer need it.
5. It's important to close Submissions once you are finished with them.
6. Once you have submitted an assignment and left the summary page, it is possible to view it or another summary from the **My Assignments** tab.

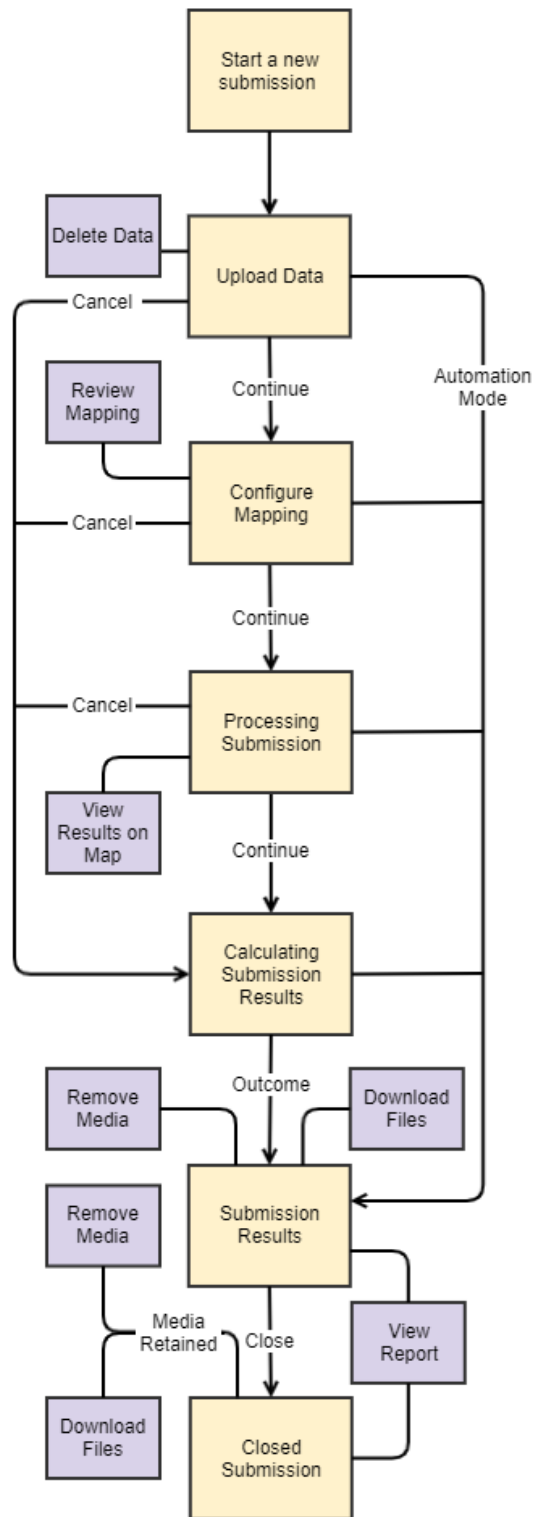
3 Lifecycle of a Submission

Submissions in 1Data Gateway follow a fixed lifecycle that requires user input to progress through the phases. The actions and stages of the Submission lifecycle fall under one of four broad phases:

- Upload Data
- Configure Mapping
- Process Submission
- Submission Results

The List of Submission Actions, Concepts, and Stages below contains more details on particular Actions and Stages.


Submission Lifecycle



List of Submission Actions, Concepts, and Stages

Actions, Concepts, and Stages	Description	Required
Automation Mode	The Submission can be set to run using default conditions, only requiring manual input at a selected stage. For more, see Automation on the Upload Data page.	No
Calculating Submission Results	This process is automatic and occurs immediately before the submission progresses to the Submission Results stage.	Yes
Cancel	At several points during the lifecycle a user can cancel the Submission, halting any progress made and immediately progressing to the Submission Results.	No
Close Submission	This is the final action that can be taken by a user but Submissions will be closed automatically based on the auto-close period configured by Users with the Project Manager Role.	Yes
Configure Mapping	<p>After the Upload Data stage, a user can choose to either use the default mappings and continue to the Process Submission phase or review and/or edit the Schema Mapping before continuing.</p> <p>A user will only be able to continue if all required classes and attributes are mapped, unless the project Specification settings are configured to allow unmapped source or target data.</p>	No
Continue	During multiple phases a user can progress from the current stage to the next by clicking the continue button. Once a phase has been passed it isn't possible to return.	No
Delete Data	When a user chooses to a file to upload for a data set, they can then remove it by clicking the bin icon. Once clicked a prompt will appear to confirm or cancel the removal.	No
Download - Input, Output, Log	There are three types of download available in the Submission Results	No

Actions, Concepts, and Stages	Description	Required
	<p>phase:</p> <ul style="list-style-type: none"> • Input data is the original data file(s) uploaded by the user. • Output data is the result of processed Input data. • The Log is a text file with a log of all tasks that were run during the Submission. 	
Outcome	<p>Outcomes can be found under a user's assignments and in the report generated by a completed submission. There are four outcomes:</p> <ul style="list-style-type: none"> • Submission Finished Successfully • Submission Finished with Errors • Submission was Cancelled • Submission Rejected <p>Submission Rejected is followed by the cause in brackets:</p> <ul style="list-style-type: none"> • Timeout • Invalid schema • Rule validation 	Yes
Process Submission	<p>The stage where the results are generated and the user is able to view these in the map viewer. Continuing to the Submission Results will release the resources used in generating them, meaning the map will no longer be available.</p>	Yes
Review Mapping	<p>By clicking this button a user can see the mappings for a data set, manage schema mappings, and edit the mappings. If any mappings are changed it will require all source attributes to be linked to a target attribute before the Submission can continue to the next phase.</p>	No
Remove Media	<p>Once a user clicks the Remove Media button and confirms it, all Input data, Output data, and Logs are removed from the Submission. This cannot be undone and automatic media removal may be enforced by media retention settings configured by Users with the Project Manager Role.</p>	No

Actions, Concepts, and Stages	Description	Required
	<div style="border: 1px solid #4a4a8a; border-radius: 10px; padding: 10px;"> <p> Note: The generated reports are not removed with other media and are accessible even after a submission has been closed regardless of the media retention policy.</p> </div>	
Start a New Submission	A user can click Start a New Submission in an assignment to create a new Submission.	Yes
Upload Data	The first of four phases in the Submission lifecycle. This is where a user uploads the required files. The file type needed is displayed for each data set.	Yes
View Report	A summary report of the results is always generated as part of the Submission process and it can be viewed after reaching the Submission Results phase. This is not removed from a Submission when the media is removed and is viewable even when a Submission has been rejected, cancelled, or closed.	No
View Results on Map	This allows a user to view the results on in the map viewer. This is only accessible during the Process Submission phase.	No

4 Glossary

A

Access Group

A group of permissions that can be assigned to a user to allow access to specific features.

Assignments

Assignments are a package of work that a supplier has been assigned to.

Auto Close Period

How long before a finished submission closes automatically.

Automation

Submissions with automation set up will run to the requested stage without further interaction.

Avatar

An avatar is the image or icon others will see when viewing a user's or supplier's profile.

C

Collection

A grouping of spatial data files and any metadata files, "zipped" into a single file.

Configure Mapping

The stage where target and source data schemas are mapped.

I

Instance

This refers to an instance of 1Data Gateway running either locally, or in the cloud.

L

LDAP

Lightweight Directory Access Protocol

M

Media Retention Period

How long media is retained for if the Media Retention Policy is set to Retain for period.

O

Outcome

The final outcome of a submission that has reached the finished state.

P

Process Delivery

The stage in which data uploaded to 1Data Gateway is being processed, checking for non-conformances or any other actions that have been applied.

Process Submission

The stage where results are generated and the user is able to view spatial data in the map viewer.

Profile

A profile contains all of your user information and from here you can edit user details, such as your display name.

Project

Projects are defined by a receiver user and represent all assignments / specifications that belong to a single real world project.

R

Receiver

A receiver will be able to view, download and configure projects and specifications.

S

Schema Mapping

A configured set of classes and attributes for target and source data.

Site Administrator

The site administrator role has access to all administrative capabilities.

Specification

A specification defines the data to be uploaded or downloaded and the workflow for the data.

State

The current status of a submission.

Submission

Submissions are work uploaded as part of an assignment that a user has been allocated to.

Submission Results

The stage where the details of the finished submission can be viewed and/or downloaded.

Supplier

A group of users that upload data into 1Data Gateway.

Supplier Supervisor

A supplier supervisor has the capability of viewing submissions made by other users in their organisation and can see their statistics.

Supplier User

A supplier user is a standard user of 1Data Gateway. A supplier can only see packages of work they have been assigned to and can only view statistics for their own submissions.

U

Upload Data

The stage where data sets are uploaded if they are optional/required.