

StoryScapes101: Introduction to the StoryScapes platform

Module 3 - Collecting StoryLayer Data

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Also, credit to GeoAcademy for inspiring this open course format.

Introduction

In this module, students will learn to import data to make point, line and polygon StoryLayers and to create StoryLayers from scratch when there is no data to import. A StoryLayer is a data file that is used to display geographic information with temporal attribute(s) on StoryScapes.

This module includes the following lessons:

- Lesson 1 – Importing point StoryLayers
- Lesson 2 – Importing polygon StoryLayers
- Lesson 3 – Creating StoryLayers from scratch

Each lesson is planned to take about 30 minutes to complete. Combined, this module should take two hours to complete (assuming ten minute breaks between each Lesson).

Lesson 1: Importing point StoryLayers

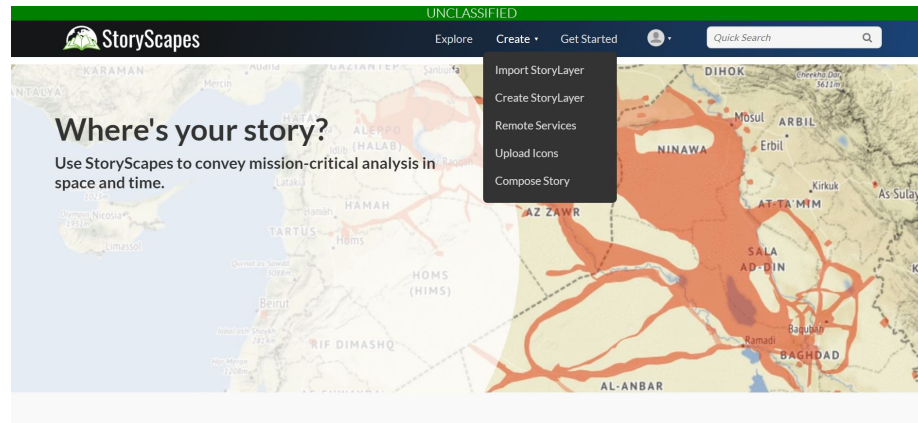
Objective

In this lesson students will learn to import a .CSV file with point features and write high-quality metadata.

Lecture

Get your data “StoryScapes Ready”

To import data, you'll use the import modal, which is accessible from your profile, from the header, or from the StoryScapes homepage.



To successfully import your data into StoryScapes, you'll need to make sure your data conforms to the required *file*, *projection*, and *time* formatting types.

Required file types

- StoryScapes supports data imports in the **.csv** format (for points) and the **.shp** format (for points, lines or polygons)

Required projections

- StoryScapes requires all data to be projected using the 4326 projection.

Required formatting

- StoryScapes requires that all data imported have time attributes, as well as location/geometry information (Lat, Lon).
- Time attributes should be presented in **ISO 8601** or one of the following formats:
 - yyyy
 - Jun 2012—MMM-y
 - May/15/2012—MMM/d/yyyy
 - 11/1/2012—M/d/y
 - yyyy-MM-dd'T'HH:mm:ss.SSS'Z'
 - yyyy-MM-dd'T'HH:mm:sss'Z'
 - yyyy-MM-dd'T'HH:mm:ss'Z'
 - yyyy-MM-dd'T'HH:mm'Z'
 - yyyy-MM-dd'T'HH'Z'
 - yyyy-MM-dd
 - yyyy-MM

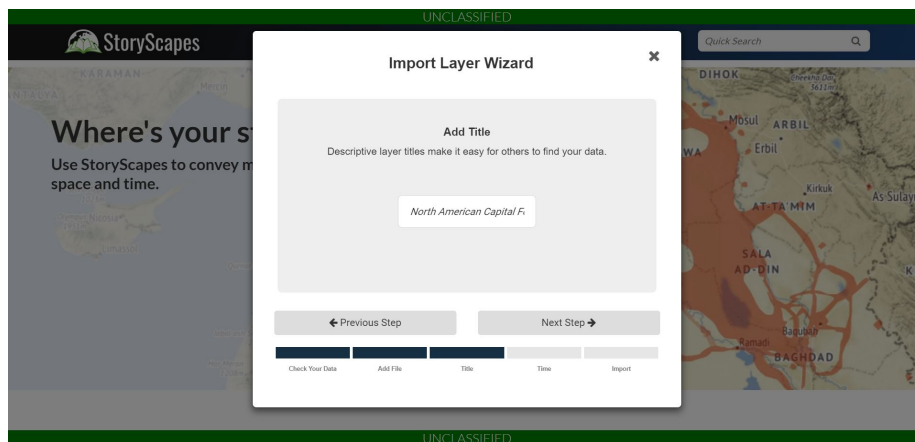
Here is an example of a dataset that is ready for import into StoryScapes. See: `module-3-csv-points.csv`

	A	B	C	D	E	F
1	NAME	COUNTRY	POP	EST_DATE	LAT	LONG
2	Mexico City DF	MX	8,918,653	1842-11-18	19.43333	-99.1333
3	Ottawa	CA	964,743	1855-01-01	45.42472	-75.695
4	Washington DC	US	702,445	1790-07-16	38.90472	-77.0164
5						
6						

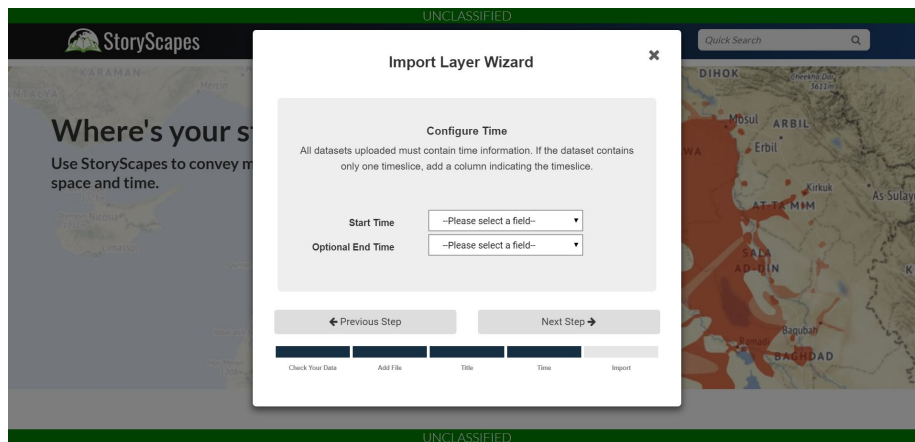
Importer Modal

Once you have your data prepared, the Importer modal will walk you through the following steps:

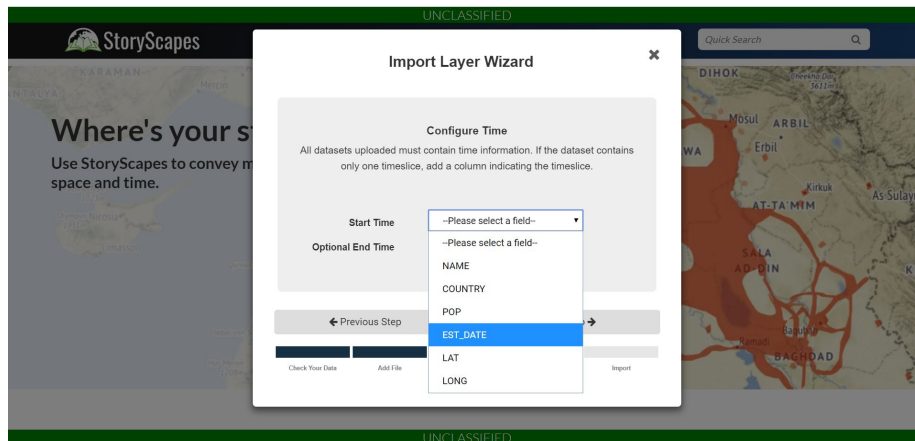
1. Name your StoryLayer.



2. Confirm that the storylayer has time attributes.



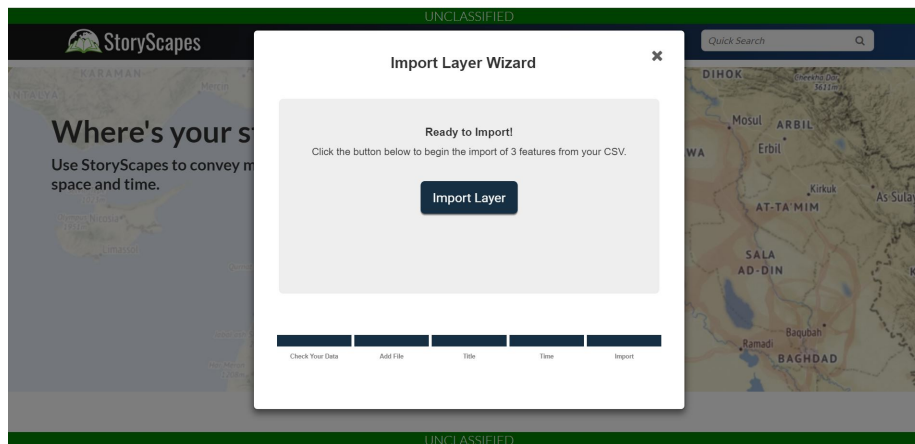
3. Configure time information.



4. ~~Enable versioned editing.~~

~SCREENSHOT~

5. Finalize upload.



Write High-Quality Metadata

TODO: Metadata Modal Walkthrough

Once your StoryLayer is successfully created, you will be taken to the Metadata Modal to complete your metadata.

SCREENSHOT

Completing high-quality metadata (or “data about the data”) for StoryLayers is

absolutely vital when using StoryScapes. Without metadata, other users have no way to adjudicate the quality and reliability of content shared. StoryScapes requires the following Metadata fields for all StoryLayers:

- **Title:** The title should make it clear what the StoryScape is about. It is also appropriate to include the start and end dates for the StoryScape in the Title. Here's an example Title: "Patterns of US Population Growth (1790-Present)".
- **Summary:** The Summary is where you provide a brief description of your StoryScape, so that the reader will quickly understand what your StoryScape is about.
- **Language:** Language of Source Data
- **Data Source(s):** Write where you got your data here. Include hyperlinks to the original data source if available. Here is an example of a data source statement, which was used for a StoryLayer on global border changes: *The Humanitarian Information Unit in the Department of State provided Simplified World Polygons at <https://hiu.state.gov/data/data.aspx>.*
- **Data Quality Statement:** The Data Quality Statement is a general explanation of the data producer's knowledge about the lineage of a dataset. This is your opportunity to admit the limits in your data and areas where it could be improved by others.
- **Purpose:** Under purpose, write about why you created this StoryLayer. This information will help others learn whether they should use your StoryLayer in their StoryScape. For example, a StoryLayer depicting country border changes by decade would not be a good StoryLayer to use in a StoryScape about the changing territorial control of the Syrian Government by month during the Syrian Civil War.

The Metadata Modal also allows the StoryLayer owner to determine if the StoryLayer should be published and therefore viewable by anyone, or private and only viewable by the StoryLayer owner. If you own the StoryLayer, you can return to the Metadata Modal and update the metadata at any time.

Demonstration

Now that you've learned how to import StoryLayer data, let's watch someone go through the complete process of preparing data, importing it, and completing high-quality metadata:

Watch this video. VIDEO.

Tasks

Now it's your turn! Try importing a point-based StoryLayer of your own. Try finding a dataset by searching publicly available repositories like the ones linked to below, or maybe you have access to some data of your own.

LINKS TO DATA XXXXXXXX

Lesson 2: Importing Polygon StoryLayers

Objective

In this lesson, students will learn how to import a Shapefile with polygon or line features and write high-quality metadata.

Lecture

Get your data “StoryScapes Ready”

To import a polygon StoryLayer, you will likely use a Shapefile. Currently, our importer accepts **zipped** shapefiles for points, lines and polygons. If you have experience with common GIS workflows, this will be familiar to you. If not, it is a good idea to consult more comprehensive lessons on how to work with GIS data.

LINKS XXX.







In this Lesson we will describe how your Shapefile needs to be formatted using Boundless Desktop, a supported version of the open-source QGIS platform.

Importer Modal

Importing a polygon layer with a Shapefile is very similar to importing a point layer with a .CSV file.

A key difference is that you must first zip the constituent files into a single zipped files.

for example, if you export your shapefile you will have several files that are siblings of each other

<input type="checkbox"/>	Name ^	Date modified	Type	Size
	Russian AirStrikes.cpg	1/21/2019 2:03 PM	CPG File	1 KB
	Russian AirStrikes.dbf	1/21/2019 2:03 PM	OpenOffice.org 1....	1,273 KB
	Russian AirStrikes.prj	1/21/2019 2:03 PM	PRJ File	1 KB
	Russian AirStrikes.qpj	1/21/2019 2:03 PM	QPJ File	1 KB
	Russian AirStrikes.shp	1/21/2019 2:03 PM	SHP File	23 KB
	Russian AirStrikes.shx	1/21/2019 2:03 PM	SHX File	7 KB

When you zip these files, make sure to include *only* the SHP, SHX, DBF, and PRJ files.

<input type="checkbox"/>	Name	Date modified	Type	Size
<input type="checkbox"/>	Russian AirStrikes.cpg	1/21/2019 2:03 PM	CPG File	1 KB
<input checked="" type="checkbox"/>	Russian AirStrikes.dbf	1/21/2019 2:03 PM	OpenOffice.org 1....	1,273 KB
<input checked="" type="checkbox"/>	Russian AirStrikes.prj	1/21/2019 2:03 PM	PRJ File	1 KB
<input type="checkbox"/>	Russian AirStrikes.qpj	1/21/2019 2:03 PM	QPJ File	1 KB
<input checked="" type="checkbox"/>	Russian AirStrikes.shp	1/21/2019 2:03 PM	SHP File	23 KB
<input checked="" type="checkbox"/>	Russian AirStrikes.shx	1/21/2019 2:03 PM	SHX File	7 KB

A Note on Temporal Data Format

StoryScapes reads a temporal attribute (or two temporal attributes) to iterate over time. Therefore, each feature must have a *geometry* and *time* attribute. If you're data is arranged so that each temporal value is an attribute you will have to "stack" them.

So Data like the following:

	A	B	C	D	E
1	FID	Country	2001	2002	2003
2	1	USA	5.2	6.3	7.4
3	2	CAN	8.5	7	6.4
4	3	MEX	6.5	9.4	7.2

Would become something like this:

	A	B	C	D
1	FID	Country	Year	Attribute
2	1	USA	2001	5.2
3	2	USA	2002	6.3
4	3	USA	2003	7.4
5	4	CAN	2001	8.5
6	5	CAN	2002	7
7	6	CAN	2003	6.4
8	7	MEX	2001	6.5
9	8	MEX	2002	9.4
10	9	MEX	2003	7.2

For more about spatio-temporal data management see [LINK TO COURSE](#)

Demonstration

Now that you've learned how to import StoryLayer data, let's watch someone go through the complete process of preparing data, importing it, and completing

high-quality metadata:

Watch this video. VIDEO.

Tasks

Now it's your turn! Try importing a Shapefile of your own. Try finding a dataset by searching publicly available repositories like the ones linked to below, or maybe you have access to some data of your own.

LINKS TO DATA XXXXXXXX

Lesson 3: Creating StoryLayers from scratch.

Objective

In this lesson students will learn how to create a new StoryLayer even if they don't have any data to import and write high-quality metadata for the empty StoryLayer.

Lecture

Defining a Schema

If you don't currently have a pre-existing dataset, you can create a new schema for a StoryLayer on the website.

When designing a dataset, there are a few aspect to keep in mind. Once the schema is set, it cannot be changed, so taking time to plan out each attribute is important

furthermore, you will have to determine the geometry type (point, line, polygon) and define at least one temporal field and perhaps two for start and end. Its also important to determine which fields will be *required* and which ones are optional. The temporal fields will always be required.

Using the Create Layer Wizard

to create a schema use the import wizard:

1. Go to the Create tab at the top of the site and select create layer.
2. TODO

Demonstration

Now that you've learned how to create an empty StoryLayer from scratch, let's watch someone go through the complete process of creating an empty StoryLayer and completing high-quality metadata:

Watch this video. [VIDEO](#).

Tasks

Now it's your turn! Try creating a new empty StoryLayer in StoryScapes. Share the link to the empty StoryLayer with a colleague. In a future Module we will learn to use the StoryScapes Editor to add, modify, and delete features in your empty StoryLayer so that it begins to represent the topic reflected in the title!

Conclusion

Over the course of this module, you've learned how to get data from files and schema uploaded and imported into the platform. You've also seen how to update and maintain good metadata which is important for data validity and usability.

This creates the foundation for developing rich and meaningful storyscapes.

Discussion Questions