

StoryScapes101: Introduction to the StoryScapes platform

Module 2 - Composing StoryScapes 1.0

Document Version: 01/01/2019

This work is licensed under the Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/3.0/> or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

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

Introduction

In this Module, students will learn the basics of using the StoryScapes **Composer**. By the end of the Module students will have published a simple StoryScape using StoryLayers imported by others.

This module includes the following lessons:

- Lesson 1 – Setting Up a StoryScape
- Lesson 2 – Adding and Styling StoryLayers
- Lesson 3 – Adding simple StoryPins and StoryFrames

Lesson 1: Setting Up a StoryScape

Objective

In this Lesson students will learn how to plan for and begin composing a StoryScape.

Lecture

The Principles of a StoryScape

A “StoryScape” is a specific type of story that seeks to explain phenomena as they occur over space and time.

Thus, like all forms of storytelling, a StoryScape includes the following four elements: place, plot, performers and a point. Whenever you are viewing or composing a StoryScape, you should ask yourself four questions:

- What *places* are involved in this StoryScape?
- What is the *plot* of this StoryScape?
- Who or what are the *performers* in this StoryScape?
- What is the *point* of this StoryScape?

Let's look a bit closer and what we mean by place, plot, performer and point:

- **Place:** Traditional story definitions will refer instead of place to “setting”, since a story obviously doesn't have to occur in geographic context. We spend most of our time in James Joyce's *Ulysses* exploring consciousness, for example. For a StoryScape, however, setting always refers to place in a literal sense. StoryScapes always occur *somewhere*.
- **Plot:** Plot refers to what happens in a story, and in what order. StoryScapes should always have a plot. StoryScapes are not simply a graph or chart that present data. They unfold over time in a sequence specifically designed to convey a particular perspective.
- **Performers:** For events to occur, there must be action. And for action to occur, there must be performers. In a StoryScape, performers could be humans or animals, or even plant life like an invasive species, or an environmental force like a hurricane.
- **Point** Every StoryScape has a point, or main theme. Sometimes the StoryTeller makes this point very explicit. Othertimes, the StoryTeller may leave it to viewers to infer the main point implicitly conveyed in the StoryScape.

The Components of a StoryScape

Text-based stories are made up of small components, like words and sentences, that combine into a coherent whole text. For a StoryScape, the components are StoryLayers, StoryPins, and StoryFrames. Below we provide a brief definition of each of these components. Later we will gain a better understanding of these components by *putting them to use*.

- **StoryLayer:** A StoryLayer is a data file that is used to display geographic information with temporal attribute(s)
- **StoryPin:** A StoryPin is a single geographic feature that is added to a StoryScape to convey qualitative information at a specific point in time in a StoryScape.
- **StoryFrame:** A StoryFrame defines the geographic bounds and zoom level of the map canvas during a defined period of time in the StoryScape.

Also, every StoryScape has various types of description, such as a summary and individual chapter descriptions. Additionally, every StoryScape has various types of metadata, such as a Title, Category, and Tags.

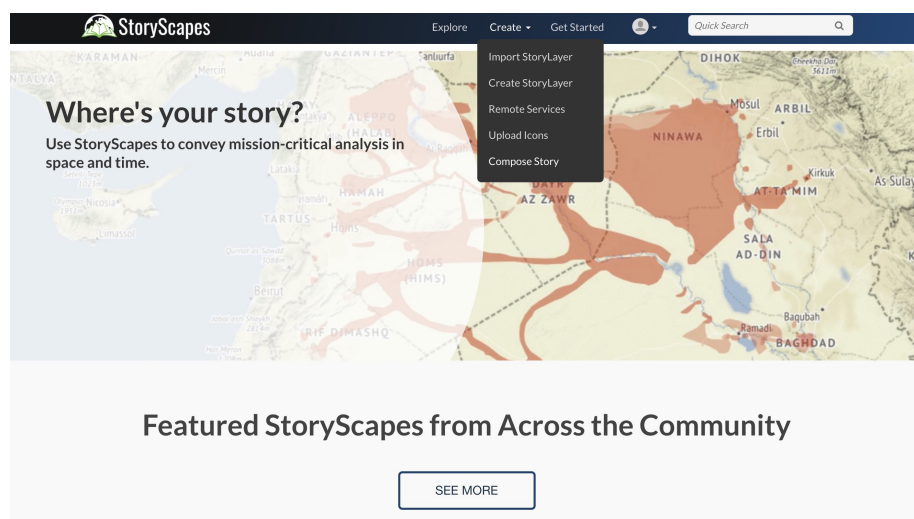
Outlining Your StoryScape

Just like any piece of writing, it is a good idea to outline your StoryScape before proceeding too far. To outline your StoryScape consider the following:

- Has someone already published a StoryScape similar to the one you envision? If so, think about how your StoryScape will make a unique contribution.
- How many chapters will your StoryScape have? For example, a StoryScape about the American Civil War might have a chapters for each major battle - i.e. Bull Run, Gettysburg, Antietam.
- Each chapter will need a Description of its own. This should be a paragraph or two that describes the chapter and its significance.
- What StoryLayers will you use in each chapter? You'll need to search for StoryLayers to make sure they exist on the platform to use in your StoryScape. For example, a StoryScape about the American Civil War with chapters for different battles will need StoryLayers that depict aspects of these battles, such as the location of troop movements. If the StoryLayers you want for your StoryScape aren't already available, you'll need to import them yourself. We'll cover importing StoryLayers in Module 3.

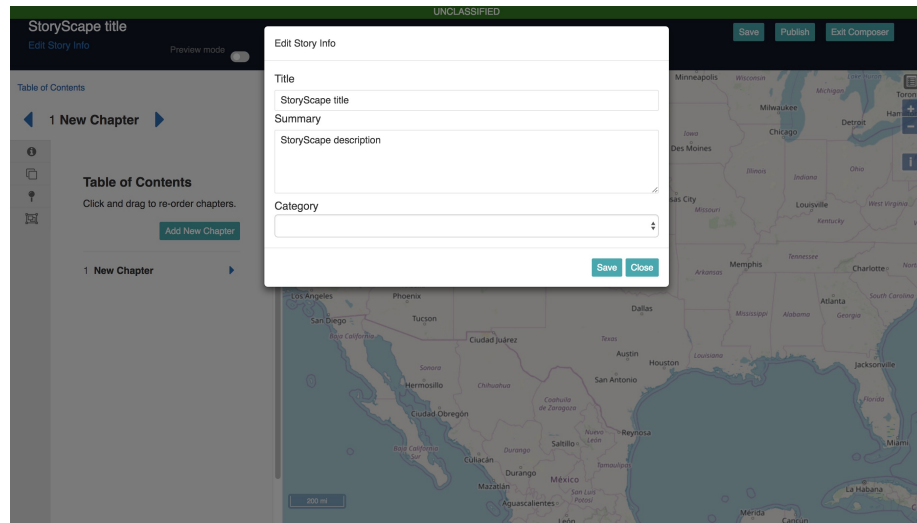
Activity

1. To get started making your own StoryScape, first launch the StoryScapes composer by opening the **Create** dropdown from the top of your screen and clicking **Compose StoryScape**.



You can also launch the StoryScape composer by going directly to a StoryLayer page and clicking “compose StoryScape”. Using this link will launch the composer with that particular StoryLayer included in Chapter 1.

2. Once you enter the StoryScape composer, your first step is to give your StoryScape a title. A good StoryScape title is similar to a good book title. It should indicate what the StoryScape is about.



3. In addition to a Title, give your StoryScape a Summary. The Summary serves a similar purpose as article abstract. It describes what the StoryScape is about and why it is significant.
4. Finally, assign your StoryScape to one of the fixed Categories that most applies.

Don't worry - you can change the Title, Summary and Category later.

5. At the top-right of the StoryScape composer there is an option to take a Tour. Click this and walk through the Tour steps to learn more about the composer.
6. Make sure to save your StoryScape frequently.

Lesson 2: Adding and Styling StoryLayers

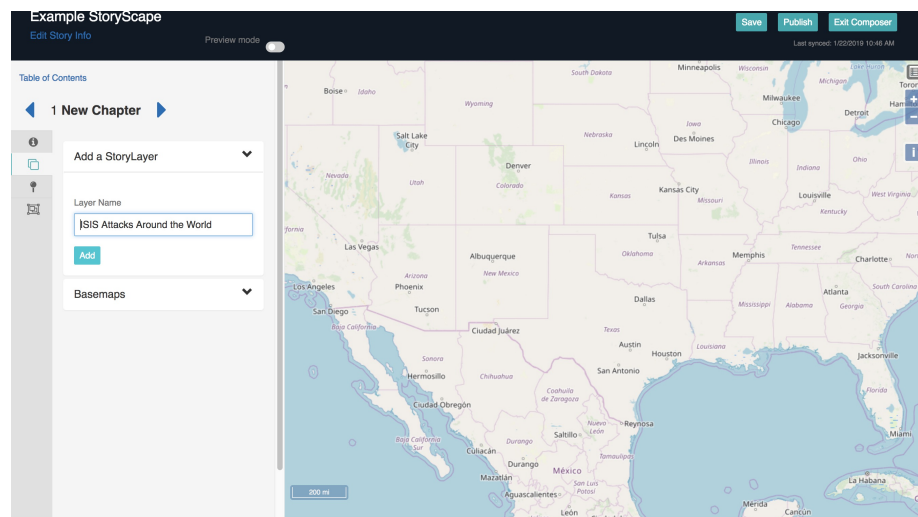
Objective

In this lesson students will learn how to add StoryLayers to a StoryScape, and to apply Simple and Unique styles to StoryLayers.

Lecture

Adding StoryLayers to a chapter

StoryLayers form the foundation of your Chapters. If a StoryScape is like a pizza, then the StoryLayers are like the crust. Everything else in a StoryScape (i.e. StoryPins and StoryFrames) sits on top of the StoryLayers. To add StoryLayers to your Chapter, click **Add StoryLayers**. A window will pop up where you can input StoryLayer titles. Click **use** to add the StoryLayer to your chapter.



You can add multiple StoryLayers to each chapter. Once added, you can click and drag the StoryLayers to change the order of which one is sent to back or front.

Once a StoryLayer is added, you can control its visual appearance with styling. A Style refers to the color, hue and size associated with features in a StoryLayer. Each StoryLayer in StoryScapes has a default style applied to it to start. Once you create and save your own style, that style will appear on your StoryScape when it is published.

StoryScapes supports four types of styling: - **Simple**: With a Simple style, all aspects (color, hue and size) are uniform on all features of the StoryLayer. This style is often used if features don't need to be differentiated from one another. - **Unique**: A Unique style allows you to represent features with a different color based on a category that the feature falls into. For example, perhaps your StoryLayer depicts trees that were cut down in a particular place at a particular point in time. Perhaps your StoryLayer data has an attribute for "Tree Type". With Unique styling, you could present each Tree Type with its own color. - **Choropleth**: Choropleth styling assigns color *hue* to a feature based on its level on a particular numerical attribute. - **Graduated**: Graduated style uses the size of the feature to express the magnitude of a particular attribute.

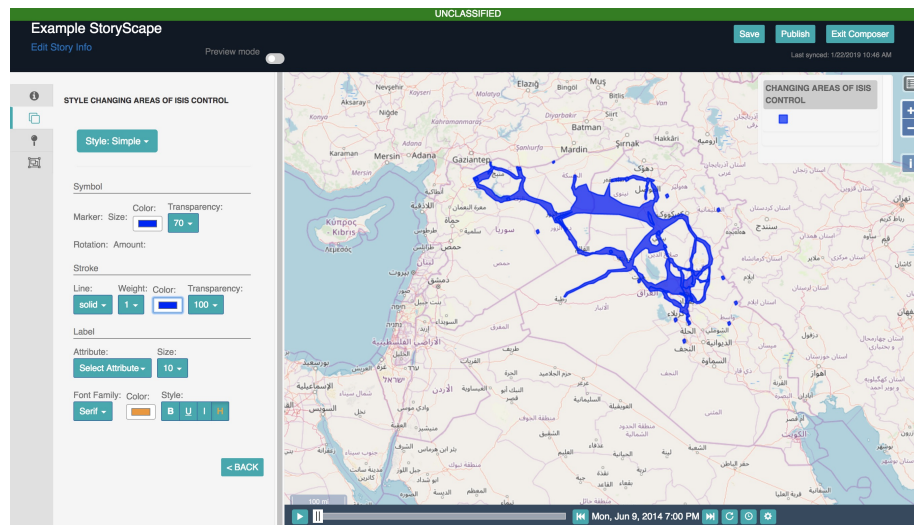
In this Module we will cover Simple and Unique styling only since they are the easiest to use. In Module 5 we will cover Choropleth and Graduated styling.

Activity

This Activity is written using the StoryLayer that depicts the changing areas of ISIS control. If this StoryLayer is not already available in the StoryScapes platform build you are using for your training, you can upload the dataset. Access the data at `data/changing_areas_of_isis_control.zip`. You will likely need to complete Module 3 to learn how to use the data importer first, and return to this lesson once that is complete.

Ideally you will be able to complete this activity with a StoryLayer that is already uploaded into StoryScapes. Part of the point of this Module is to show you that you can compose a StoryScape using StoryLayers *already made available by others*.

1. First, launch a new StoryScape, as you learned to do in the previous Lesson. To review, you should:
 - Click **Create** and **Compose StoryScape** at the top of your screen.
 - Give your new StoryScape a Title, a Summary and a Category.
 - Begin working on Chapter 1. Give Chapter 1 a name and enter a brief description.
2. Next, add a StoryLayer to Chapter 1. Click **Add a StoryLayer** and begin typing to trigger the auto-complete box for StoryLayer names. When the StoryLayer you're looking for appears (i.e. Changing Areas of ISIS Control), select it and click **Add**.
3. Now, in the left-hand sidebar of the composer, we see the name of the StoryLayer and green buttons where we can **Style** the StoryLayer, toggle its **Visibility** and **Delete** it from the StoryScape. Click **Style** to open up the style editor. We want to select the **Simple** styling option. This will customize the set of tools in the style editor that are appropriate for a Simple style.



For Simple styling, we see three sections in the style editor, for **Symbol**, **Stroke** and **Label**

4. Under the **Symbol** header, select the color you want. In this example we've given the areas controlled by ISIS a blue color. Note, if your StoryLayer is made of points, you can also select a size for the points. For polygon StoryLayers, there is no option to change the size.
5. Select the Transparency level you want. This allows you to make the color more or less transparent. 100% gives the feature full color. A lower percent of transparency makes it easier to see through the feature.
 - Finally, for StoryLayers with points, you have the option to rotate the feature. This might be useful if your point symbol indicates direction somehow. In this example we are using a polygon StoryLayer, so rotation is not relevant.
6. Under the **Stroke** header, select the way you want the line surrounding your features (the **Stroke**) to be depicted. StoryScapes supports strokes that are **Solid**, **Dashed**, or **Dotted**. In the example solid is selected.
7. Select the thickness (or **Weight**) for the stroke. In the example a stroke weight of 1 is selected.
8. Select the **Color** for stroke. Here Blue is selected.
9. Select the **Transparency** for the stroke. Here the transparency is 100.
10. Now try applying a **Unique** style. First, since we were already in the style editor of the composer, with the ISIS territorial control StoryLayer added to chapter 1, switch from the **Simple** style option to the **Unique** styling

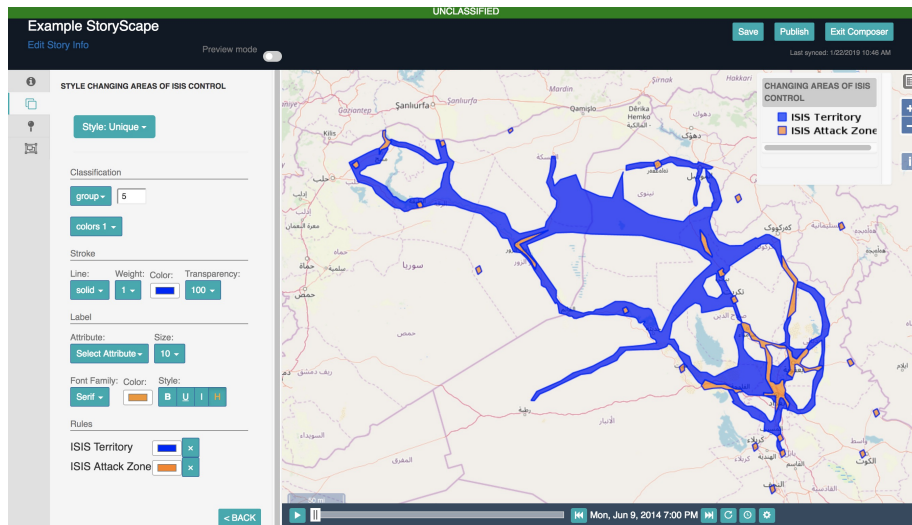
option. This will customize the set of tools in the style editor that are appropriate for a Unique style.

The options for Unique are very similar to Simple, with a few differences. You will see sections for **Stroke** and **Label** that work the same as they do for Simple styling.

But, in Unique, you will see a new section called **Classification** that replaces the **Symbol** section we saw in Simple styling. The Classification section essentially wants to know which attribute in the StoryLayer you are going to use to break up the styling into unique color groups.

11. In this example we use Unique styling to differentiate between two groups: 1) areas that ISIS counts as territory (blue) versus 2) areas under attack by ISIS (orange). In the StoryLayer data, the attribute that defines these different areas is called “Group”. So, in the Classification section, select “Group” from the drop-down.
12. Select a color ramp. This example uses the first color ramp. And make sure the classification number is more than the number of unique groups we want to make. Increase it to six just to be safe, but there are only two groups.

Once we’ve completed the Classification section, we see our unique groups listed under a new section called **Rules** at the bottom of the style editor. Default colors are applied to our groups which we can customize if we want.



Lesson 3: Adding StoryPins and StoryFrames

Objective

In this lesson students will learn how to add basic Storypins and StoryFrames to their StoryScape in order to deepen their narrative.

Lecture

StoryPins and StoryFrames are tools to help your StoryScape more clearly convey its plot and point. If a StoryScape is like a pizza, and StoryLayers are like the crust, we might say that StoryPins and StoryFrames are like the sauce and toppings.

StoryFrames and StoryPins are the key ingredients for adding narrative richness to styled StoryLayers so that a real *story* emerges. For example, in the previous Lesson we added a Unique style to a StoryLayer showing areas of ISIS control and attack. But this alone tells us little about *how* or *why* ISIS controls and/or attacks various territories. With StoryPins, we can highlight specific people and events that have made a difference. And with StoryFrames we can make sure to zoom into to key places where these events are happening, just like a filmmaker might zoom in during a scene to focus our attention.

Adding simple Storypins

StoryPins let you add more qualitative information that doesn't quite make sense as part of the StoryLayer data. For example, perhaps you want a StoryPin with a newspaper article that was important, or you want to StoryPin a video that helps explain what the viewer is seeing in your StoryScape. Or, maybe you just want to add some clarifying text that helps a viewer understand more about something at a specific moment in time.

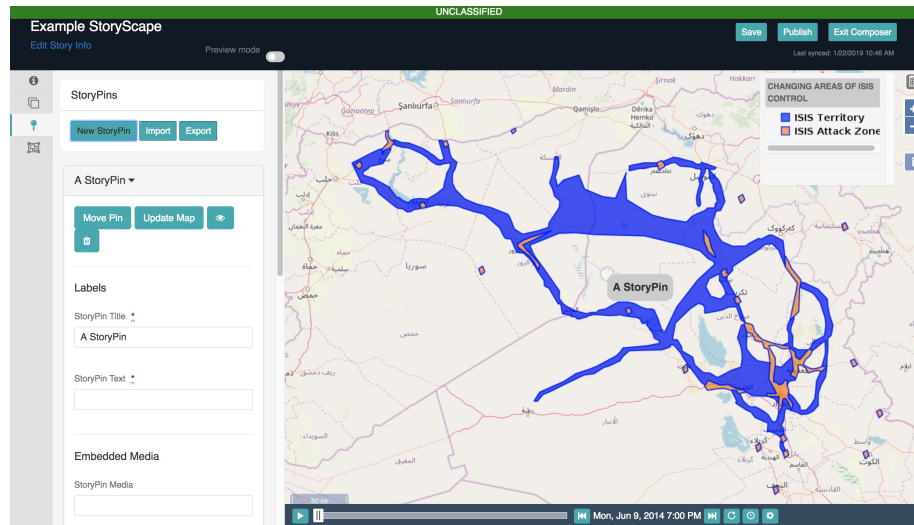
In this lesson we will build StoryPins that only have text. In Module 5 we will build StoryPins with embedded media, like images and videos.

Adding StoryFrames

StoryFrames give you an ability to control the geographic extent and zoom level on the map at various points in time in a chapter. For example, at the start of your chapter you may want a zoom level that shows the whole world. But part way through your chapter you may want the map to zoom in closer to a specific country, town or even an individual block. Every chapter can have as many StoryFrames as you want, although remember that too much zooming around on the map might make it hard for the viewer of your StoryScape to make sense of your StoryScape!

Activity

1. To create a StoryPin, navigate to the StoryPins tab in composer. This will open up a form for creating your StoryPins.



There are two ways to create StoryPins: 1. one at a time 2. uploading several all at once with “bulk upload”

2. To add StoryPins one at a time, click **New Storypin**. Click **Move Pin** and then click and drag the pin on the map to its desired location. You can also manually enter Latitude and Longitude coordinates into the form if you know them.
3. Give your StoryPin a title and description. Then, define the start time that you want your StoryPin to appear at, and the end time that you want it to dissappear at. In the example below, we’ve created a StoryPin to highlight the time and place where ISIS formally declared its Caliphate. Here are the details you need to recreate this StoryPin yourself:

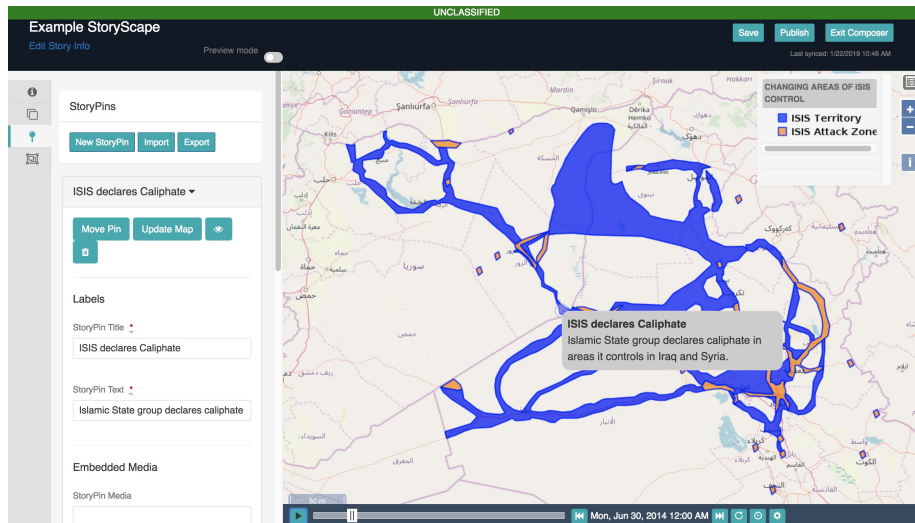
Title: ISIS declares Caliphate

Start Date: 6/30/14

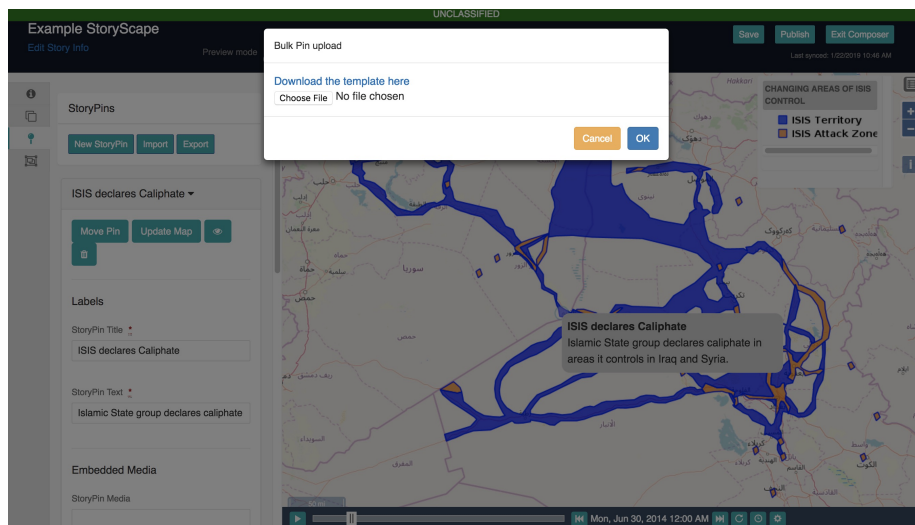
End Date: 7/30/14

Text: Islamic State group declares caliphate in areas it controls in Iraq and Syria.

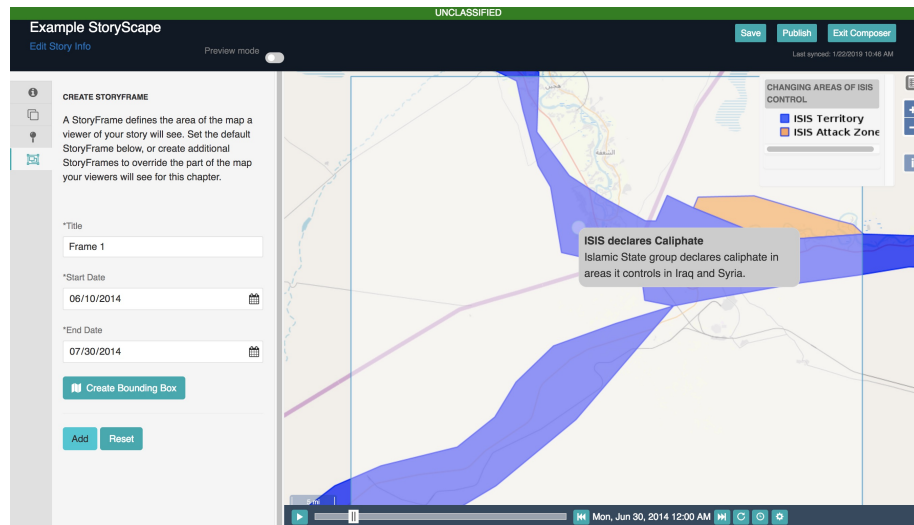
Location(Lat, Long): 34.4526, 40.8812



Note: You can also import lots of StoryPins at once To do so, instead of clicking **New StoryPins, you will click **Import** to download a blank .CSV file with pre-set column headers for the information you need to have for each StoryPin. Once you've populated the CSV with your StoryPin information, you'd return to the composer and click **Import** and upload your StoryPins . All of your StoryPins will then appear individually in the StoryPin sidebar so that you can further customize them individually. This action isn't part of this activity, but you should be aware of the ability. Also, Next to **Import** is an **Export** option where you can download StoryPin information into a .csv file.*



4. Now try creating a StoryFrame. Open up the StoryFrame form. Give your StoryFrame a brief title and description, just to help you remember your purpose for creating StoryFrame. StoryFrame titles and descriptions don't show up anywhere on your published StoryScape. In the example, we created a StoryFrame that better focuses on a location where ISIS declared a Caliphate, a point also highlighted with a StoryPin. We call the StoryFrame simply 'Frame 1'



5. Next, give your StoryFrame a start and end date. In the example, the Start Date is 6/10/2014 and the End Date is 7/30/2014.
6. Next, click **Create Bounding Box**. This will give you the directive to hold **Shift** while clicking and dragging a square frame on the map canvas at your desired geography and zoom level. When you are done, click **Add**. If you'd like to try drawing the frame again, click **Reset**.

Conclusion

In this Module you have learned to how to set up a new StoryScape, add and style StoryLayers with Simple and Unique styling, and add simple text based StoryPins and StoryFrames.

With these skills, you can quickly and easily compose and publish a StoryScape that utilizes StoryLayers already imported to the StoryScapes platform. And, using the skills you built in Module 1, you can share your published StoryScape with colleagues and use it to strengthen your briefings and presentations.

In future Modules we will cover more advanced features in the StoryScapes composer, such as using complex styles on StoryLayers and adding media to

StoryPins.

Discussion Questions

Before moving on to the next Module, reflect independently or in a group on the following questions:

1. In this Module you started building a StoryScape of your own. Why did you pick the topic you did to practice with?
2. Now that you have a better understanding of how the StoryScapes composer works, what is a StoryScape you'd like to try and work on in the future?
3. Can you think of other types of features that StoryScapes should work to incorporate that would help you compose the StoryScape you envision?
4. Can you think of topics that cannot be explained within a spatio-temporal framework like StoryScapes? If so, what other types of methods might you use to convey those topics?
5. What other comments, questions or concerns do you have about this Module?