OK. I think I'm going to go ahead and get started. Hello, everyone. Welcome to this webinar on navigating the Arches version 5 demo site. My name is Annabel Lee Enriquez, and I'll be your main guide to the demo site, which we released just over a month ago. Also, I wanted to let you know that during the Q&A I will be joined by my colleagues David Myers and Lindsey Gant as we try to answer your questions.

We're based in Los Angeles, and as we are under the stay-at-home order here, we are conducting this webinar from our respective homes. So it is possible that we might experience some technical glitches in the presentation. If that does happen, please bear with us. Also, just in case, I did want to let you know that I'll be speaking to some prerecorded videos. And we did that in the event that my internet service slows down or some other technical glitch happens.

OK. Now, before I begin the main content of this webinar, a little housekeeping. For those of you who have attended or viewed the first two parts of the four-part intro to the Arches platform webinar series, don't worry. We will let you know when we resume that series. And that is definitely coming back. And there are some great introductory webinars on Arches that you might want to view there.

Also, a note of thanks to those of you who took part in the Arches Community Survey several months ago. One of the results of that survey indicated that it would be helpful to have more tools to help community members, such as yourselves, evaluate Arches. And that's one of the reasons why we decided to present this particular webinar now, as we realized that having a demo site with the latest version of Arches is helpful in the evaluation process.

The format of this webinar is a presentation and Q&A. The presentation portion will take about 30 minutes, with-- or 30, 35 minutes, with 30 minutes to answer any questions at the end. You can ask questions at anytime during the presentation using the Q&A panel. As a note, this is different from the chat panel, which should be used for general comments.

A point of difference from previous webinar Q&As is that we will not be able to go into the same technical depth since we don't have one of our developers on the line for this. We will
address as many questions as we can, though, and will encourage posting on the Arches forum for any questions we cannot fully answer.

Now, this webinar is being recorded, and the recording will be available in a few weeks with the transcript of the Q&A. And you can find all of our recorded webinars on archesproject.org/videos. So if you missed any of our webinars or want to re-watch them, you can view them here, as well as flip through the slide decks and read the Q&A transcripts.

So here's what I'm going to be talking about today-- some background on the demo itself, how to register for demo access, some of the key features that you can explore using the demo site, and information on updates, and then, of course, the Q&A.

So some quick information about the demo site-- I mentioned the community survey results earlier, which pointed to the need for evaluation tools. And essentially, the demo site is a tool which you can use to evaluate Arches. Because Arches is an enterprise-level system and requires installation and configuration on a server before it can be deployed to end users via web browsers, it might be difficult-- it might be difficult to evaluate whether Arches has the right feature set and functionality for your particular-- for your use case, so for your organization and your project.

This demo site gives you the ability to view and use the basic end user features of a sample deployment of Arches. Now, one thing to note is that because every organization has somewhat unique requirements, standards, and terminology, you may see things in the demo data and interface that might not line up with how your organization works.

For example, for this demo site, we took sample data from HistoricPlacesLA and as well as the GCI's conservation project at the Valley of the Queens. We plan on adding other sample data as we update the site. But still, it is very possible that your data and requirements are quite different, and you might need a different data configuration and interface, which you can do with your own instance, using features like the Arches Designer.

Which leads me to talk about what features are not available in this demo. First of all, the Arches Designer, which I just mentioned, is not available. So the Arches Designer gives administrators the ability to change the interface by changing the structure of the database along with controlling who gets to see what data through really the very extensive permissions control.

Second thing, the systems administration and configuration controls-- so both of these features are not on-- you're not able to access via this demo site since it would control what other users actually see. Now, the next thing that is not on this demo site are Arches Workflows. So this is a feature that is currently available in the latest Arches Version 5 release.

It represents a different way of interacting with Arches than what you will actually see in this demo in that some workflows present users with an easy to follow step-by-step interface to enter data or complete other processes. Later in the demo, I'll briefly touch upon how workflows might alter the standard data entry process.
The last thing that's not in-- or the last major thing that is not in this demo is the real-time Arches and Esri integration. So this is a feature that's coming soon. And in regards to it, generally we believe Arches has the essential features to create and manage geospatial data for most purposes. However, we recognize that many organizations already manage spatial data via Esri software.

So coming soon to Arches, but not this demo site, is a synchronous connection between your Arches instance and ArcGIS Pro. For those of you who use ArcGIS already, this is going to be a game changer in how you can use both ArcGIS and Arches to serve your organizational needs. And if you would like more information on that or workflows, you can visit our roadmap on archesproject.org/roadmap. And that will list all of the capabilities in more depth.

Now one demo site feature that will be available soon is the ability to use the site to test Arches Collector, which is the mobile companion app to Arches. It's an iOS/Android app that connects to an individual Arches instance to collect data expressly for that instance. So even though you can download the app now for your phone or your tablet, you need an Arches instance available to download a mobile data collection or survey project.

The latest version of the app is coming soon, so once that releases, we'll be updating the demo site so that you can test Arches Collector using the data entry protocols specified in the demo site. For more information on Arches Collector, you can view the-- actually, the first webinar we presented. Or you can visit the web page on archesproject.org/collector.

Moving along, let's talk about registering for access to the demo site. I wanted to first point out that you do not need to register for the demo if you are happy with just accessing the map, search, and search export functions. These features are available to browse without registration.

However, if you want to add or edit any resource data, use the Reference Data Manager to add new items to the drop downs, or in the future use the demo site to test the Arches Collector mobile app, you will need to register. And once you register, please note the following about your Arches demo account.

The site will be refreshed on a monthly basis, according to the schedule on archesproject.org/demo. All user-entered data, including user accounts, will be deleted, though you can register as many times as you like after the schedule refresh. So after every refresh, you can reregister.

Now, the reason we've done this is to keep the site as clean and tidy as possible for new users. And it will also give us an opportunity to update the site when needed, such as when a new Arches release launches, or our new data becomes available. So here's the demo information page on the Arches Project website. You'll see that you can access the demo via the red button.

And much of the information I've covered already is also on this page, including the data and other information. For instructions on how to register for the demo site, you can maximize this section for step-by-step instructions. Now, I mentioned that there is a refresh schedule. And you'll see that here towards the end-- the bottom of this page.
And you can see that the next refresh is scheduled to happen at some point during August 19 through the 21st. If you have an account at that time, we will send you an email letting you know that the site has been updated, and that if you still want access to the demo site, you will have to reregister. So let's go ahead and click this red button, though, and go to the demo site itself.

Now, if you have any further questions about the registration process, be sure to ask them in the Q&A. I'm going to continue and show as many of the Arches features that you can explore-- use as possible, using the demo site. And these features fall into four main categories-- mapping, search and export, data entry, and using the Reference Data Manager. So back to the Arches homepage, take note-- I want you to take note of the menu items on the top left menu.

The first one is about Arches, which takes you to the Arches product website. The second is-- takes you to that demo page we just saw. And the third is search data, which takes you to the search interface.

So now you're looking at the main Arches search interface. There are various elements in this search interface, but I'm going to focus on navigating the map. First I'm going to maximize the map using the map fullscreen button to the left. So now we're looking only at the map and the map filters. The search box on the right-hand side is linked to a geocoding service and it's not accessing the database at all.

So if I want to search for the address 3636 Oakfield Drive, the geocoder will drop a bluish marker on the approximate location of that address. And as a note, this address is close to one of the platform houses designed by Richard Neutra in Sherman Oaks in Southern California. The map controls in the top left corner include the Zoom In and Zoom Out controls, as well as you can also use your mouse to zoom in and zoom out and navigate through the map.

Now, the satellite view probably isn't the best one to see these markers. So let's switch to Open Street Map. Now, these red markers represent all of the heritage resources in the database that have spatial data. And we can see this in the overlays tab. We can change the opacity of the markers, which can come in handy if you have a lot of layers.

And we can even turn it off. We can also turn on other overlays or layers. Let's turn on the one for Heritage Resource Group. You can see that these Heritage resources are part of the Heritage Resource Group, which is the Platform House Historic District. So let's take a journey to our other data set and go to Egypt by typing Egypt in that geocoding box. And I'll select Egypt.

So now you'll see that it drops that marker in the center of Egypt since that's what we searched for. And since I know where my data set is, I'm just going to zoom into the Valley of the Queens area. Now that I'm in the general area that I want to be, I'm going to adjust my view. Turn off that Heritage Resource Group flair. Change the base map to satellite so that I can see the topographic features in the valley.

And also the next thing I'm going to do-- let me turn off the base maps here. And then I'm also going to minimize the map so that I can-- so I can see the search results panel to the left. Now
we're going to use the map search filter to search the database to answer the following question—how many resources are within 25 meters of QV66, or the tomb of Nefertari?

Now, you'll see that I have several choices for this filter, including buffer size and whether I want to search via marker, line, polygon, or what's visible in the map window. Let's search by map extent. Now, before I draw a marker, I'm going to make sure I know where I'm going to drop it. So let's find QV66. Obviously, I know where this is, so I'm going to navigate so that that is a little bit clearer for me.

Zooming in. And that is the tomb right there, QV66. Let me click on this marker. There it is. QV66, or the tomb of Nefertari. And now I'm going to select draw a marker. And to drop the marker, I'm just going to point and click. All right. So that gives me two results. And that is because my buffer is at 10 meters. So let's change that to 25 meters. All right. Now I have five search results.

Now, the next question I want to ask is, how many resources are north of this access road that you can see on the map? Now, I only want to know which ones are visible in this map view that are north of this-- north of that access road. So the first thing I'm going to do is clear the spatial-- the previous spatial filter by clicking this clear spatial filter.

Because I'm going to be filtering by polygon, I'm going to change the buffer to 0 meters, and then I'm going to select draw a polygon. To draw the polygon, I just need to point and click each of the vertices and then double click when I'm done. So that filter gives us 43 resources.

Now, you may have noticed that in the search box, because we've been conducting map filter searches, that that search criteria-- map filter enabled-- appears. Now, the implication here is that we can use the search box to build a query by combining various search tools. And that's what we're going to do. So let's answer the question, how many chamber tombs are north of the road in this area?

So we already selected how many resources total are north of this road in the area. So we're going to filter by chamber tomb. And to do that, we're going to type chamber tomb in the search box in the left-- on the left-hand side. And as we're typing it, you'll see that there are two buttons right underneath. One is term matches and the other is concepts.

A term match essentially looks for any appearance of the string-- chamber tomb-- or any reasonable match within the database. So this would be similar to how Google Search works. But if you want to be more specific and make sure that the search returns only the resources that had been classified with the concept chamber tomb, you would select concepts to see what terms match.

So when I select chamber tomb here, it returns the chamber tombs now-- only the chamber tombs-- that are north of that road as I've combined that with the map filter. Now, you can also click any of the terms in that search box to find the inverse search. So if I click on chamber
tombs, that changes now to-- my results to the resources in the search that are not chamber tombs. If I can click it again, because I want those 13 chamber tombs.

Let's say that we want to be even more specific. I want to know how many of these chamber tombs originated in the 13th century BCE. Now, for that, we're going to add a time filter by clicking the calendar icon in the left-hand corner. Let's click out that. The calendar icon, right over here. Let's click on that.

You'll see here that we can search through dates the more traditional way by selecting a range of dates and what date type we want to search through. Or you can use the time wheel below to explore the distribution of all date values in the database. This one is organized by century in the outermost ring, half millennia in the middle ring, and millennia in the innermost ring. And that can be configured in your Arches instance by decade, century, or however you want to do that.

But using the outermost ring, I'm going to select the 13th century BCE, which you can see has 76 total date values that fall within that century. Now, because we have various filters enabled in the search box, our search returns nine resources that are chamber tombs north of the road originating in the 13th century BCE.

Now, one of these resources here is the tomb of Nefertari, QV66. Let's take a look at the record for this tomb. You can do that by clicking QV66 there in the search results, which will take us to the report for this particular resource. I'm going to zoom out so that I can see that clearly in the context of the other resources.

You'll also see as I scroll through the report various points of information that are available for this-- for the tomb itself, as well as-- and I'll just point this out-- here's the extended date time format that expresses the fuzzy date range that our time search picked up on. And then further scrolling you'll see the images that are related to the tomb-- basically, images of that, and/or drawings and elevations.

And down here at the bottom, what we have here are the relationships to other resources in this Arches instance. So that can include the people, the overall group that it's related to, historical events, like the archeological mission that uncovered the site for the Western world, and then any information resources, such as drawings and such.

But this isn't the only way to explore relationships. Let's go back to the search panel and click on Related Resources. Now, this is bringing up the same information that we saw in the report. But now we have a visual way to explore these connections, as well as extend those connections. I'm going to minimize the date-- the time wheel and date interval here on the right-hand side. And you can see here that this right-hand panel lists all the connections that are available to QV66 or tomb of Nefertari, as well as connections that aren't currently shown.

Now, I'm going to load some more connections. Let's load more connections from the Italian archeological mission investigation historical event. Now, if I click on Load More, that loads
additional resources. And these are the other tombs that were uncovered by that archeological mission, which took place in the early 20th century.

OK. I'm now going to clear all of these searches and quickly touch upon some of the other search filters that are available for you to use in the demo site. Switch on the map. Go back to the map filter tab. All right, the first one that I'm going to take a look at is the Saved Searches. So next to that time filter button you'll see this pendant.

And by clicking on it, you'll see that there are some featured searches that we can just click on to bring up all the resources in that search. I'm going to select Frank Lloyd Wright, which more specifically are resources relating to Frank Lloyd Wright in Los Angeles, which is taking us back to LA. And now that we're here, I'm going to change some of the map settings to make this a little bit easier to see.

In particular, you're going to see that I'm going to change the base map to streets. And then I'm going to turn off all the overlays except for the search results one, which is based-- which is composed of the gray and black search results markers. So I had 18 resources here that had been returned now. And these are all related to Frank Lloyd Wright.

Now, because some of these are people who have some association to Frank Lloyd Wright-- and including him and his son-- I want to just see the buildings. So under resource type, I am going to select Heritage Resources, which leaves us with 10 resources. Now I'm going to use advanced search to further drill down on this search.

And you'll see here on the right-hand side you've got a bunch of facets. And they're organized under each type of resource. Each facet corresponds to a group of data fields for that resource. And we can find a facet by scrolling. Or you can also just type it in and search for the facet that you're looking for. So I'm going to type in designation. And I'm going to select that under Heritage Resources. Because what I want to find out is, how many of these 10 resources are on the National Register of Historic Places?

So that brings up a couple of fields that I can search under. I want to find out type of designation or protection that equals National Register of Historic Places. Select that and that has whittled down my results to 6 from 10. Now, I want to download information on these six resources. And in Arches version 5, the ability to export search results is included. To do that, you conduct a search, as we just did, and then click on the Export button to the far right of the search navigation. So it's right there.

And we'll click on that. And you'll see that we can download a CSV or shape file of the data for the six resources. So I've got CSV selected. I'm going to leave coordinate position alone for now. And I'm going to press Download. Now, I only have six resources, so that took-- that was basically instantaneous. For a larger job-- say, if you were downloading data on 100,000 resources-- Arches version 5 comes with a task manager that will notify you when your download is ready to go so that you can do other things in your Arches instance while you're waiting for that download.
And here is the resulting CSV in Excel. What data is included in the CSV is determined by the administrator of your Arches instance. For example, this is only a subset of the data that is available for these six heritage resources. And you can see that we've only included things like name, description type, the type of designation, description, and the actual coordinates in a well-known text or WKT format.

But that is up to you to determine. If you want-- in your own Arches instance want people to be able to download all of the data available, you can do that. Or if you only want a subset, that's a determination that you can make in your own Arches instance. OK. If you have any more questions about searching or export, please do ask those in the Q&A panel.

But I'm going to switch to data entry now. Now, using the demo site, you're able to change existing records or add your own if you're logged in and have the appropriate permissions. I'm currently logged in right now, so I'm going to add a new resource by selecting Add a New Resource and selecting Heritage Resources in this dropdown on the left-hand side. And you'll see it takes me to the Resource Editor for a new resource.

Now, to start entering data, you can start anywhere in this tree. Now, I'm going to pause this video briefly, because what I did want to say here is that I mentioned that if you have a defined data entry order and process that you need to enforce-- I mentioned earlier that Arches Workflows was made to give you that kind of control over how your users enter data.

But because we don't have a workflow here defined, you can really start anywhere in this tree to start entering data. And this might be helpful if you're not sure what kind of data might be available to you to enter. So I'm going to start the video over again. I'll just restart this. And to let you know, we're going to start with place.

To do that, we'll click on Place. And you'll see here that this shows us all of the field groups that we can enter data for. And I'm going to press add, which adds this plus sign to each of these data field categories. And I'll press the 1 for spatial location. So now I can digitize the location for this resource. I'm going to zoom in on my location-- or actually, now I'm going to type the-- I'm going to type the location in the geocoding box. And that's not what I want. Actually, I want New York City.

So let's go over to New York City. And I want to digitize-- I want to create a record for the Statue of Liberty. Now, if you've seen my other-- if you've seen my other demos, you'll know that I really like this one, because in particular, it's really pretty. So I'm going to add a polygon so that I can outline the base of the Statue of Liberty, which is in this beautiful starburst pattern.

And to do this I'm-- the same as before-- pointing and clicking to add all these vertices. So once I'm done digitizing this spatial polygon, I can save it. So now I have a record with this geometry associated with it. Obviously, I did that very quickly. You probably would want to be more deliberate about this. But now I'm going to add a name for this. So that's Statue of Liberty. And that's the primary name for this resource.
Now, you can add as many names as you like. And to do, that I'm going to hover over name in the left-hand tree. And there you see the plus sign is there. And I clicked on that. Now I can enter a new entry. And I'm going to call this Lady in the Harbor, which is an alternative name for the Statue of Liberty that people might want to search for. So you can add as many names as you like based on how it's known, and also what you think it might be searched for under.

Now, that's a quick overview on how to add additional data to the demo site and how to edit a resource. Now, regarding data entry, I did want to mention that once you're logged in on the home page, you'll see a new menu item, which is manage data. That will take you straight to another entry point to enter data on a new resource. See here, you can add-- this is very similar to the menu you had on the left-hand side where you can add a new resource.

But right now I'm-- the last thing I'm going to show you today is how to add a new label to an existing concept to improve search. So we're going to access the Reference Data Manager, or the RDM. To do this-- and this manages the controlled vocabularies in Arches that power concept search and data entry. Now, I'm not going to go over the RDM in as much depth as I possibly could, due to the limited time. But if you have any questions about the RDM, please feel free to ask in the Q&A. We will likely do a webinar in the future on the Reference Data Manager and controlled vocabularies, as that is a very deep topic.

So earlier, we used the concept term chamber tomb to search for resources that had been classified as chamber tombs. But maybe our users might know a different label for this concept. In this case, you might want to add additional labels. So in the RDM, we'll search for that concept, which we just did. And that will bring up the record for chamber tomb. And you can see that in your-- on your screen right now.

So this has-- to add a new label, it's as simple as clicking add a label, or add label and typing that in. The label I'm going to add is a tumba de cámara. And then that is the preferred label in Spanish for chamber tomb. Right. So now we've added this new label.

And we can now start-- regardless of whether we search for chamber tomb or tumba de cámara, we will return the same search results. So here we are now in this search interface. And this is a note, if you want to get back to this search interface anywhere within Arches, you can always click on the magnifying glass here. And it's always different. Sometimes it's also on the right-hand side.

Now, let me type in chamber tomb under concepts. Type that in. We've got 23 resources that are chamber tombs. Now, note from the search results, which are the black and gray markers, they only appear for the resources that are showing in the search results panel on the left. Now, let me close that out and type tumba de cámara. Right. And I get the same 23 results.

Now, using the RDM, I can add additional labels for other concepts, or add entirely new concepts, which is a multi-step process and I'm not going to have time to go through that today. But feel free to ask questions if you want more information on the RDM in the Q&A, as there are a lot-- there's a lot of information on how to do this.
So I'm closing it out by telling you what's coming soon. I've already alluded to this, that we'll be adding additional data sets and the ability to test Arches Collector. Now, something I wanted to mention is that if you, as an Arches community member, have suggestions or comments about the demo site and data that we are featuring, please let us know, because ultimately, we want to make sure that the site is useful to you all.

You can let us know what comments you have once you've navigated the site on your own by posting on the Arches forum. And there is the link to our Arches forum. All right. So let's move on to Q&A. Let me reintroduce David and Lindsey, who are going to be coming off of mute to help me field these questions.

Questions and Answers*

Hi, everybody. This is Lindsey. Thank you for joining us today.

Hi, this is David. Great to have everyone on.

Yeah. So OK.

So looks like we're getting some questions in. So if anybody has any questions at all, please go ahead and submit those in the Q&A section at the bottom of your screen and I'll be sure to get to your questions here. We'll just start going through them in order.

Lindsey, I'm going to-- sorry, did you want to mention something at all?

No, go ahead, David.

I just wanted to mention that as Lindsey said and Annabel said, questions you post in the Q&A panel in the bottom center of your Zoom screen. And we already have a few there. I just wanted to mention the very first question that came, because there have been a couple of responses in writing there in text and within the Q&A panel.

Question #1: What about QGIS?

Answer: So our very first question was about-- Annabel mentioned the upcoming development to enable integration with Esri technologies, Esri data. And someone posed the question about, what about QGIS? So our colleague on the Arches team, Alison, responded that at present, the plans are to focus on Esri integration. And really, this came from a requirement from Historic England. And they've co-founded that development.

And I know that in discussions on the Arches forum, in the details about what technologies will be employed there, there's been discussion about. That will actually help with being able to integrate QGIS data in the future, or likely some QGIS data once the Esri integration is available.
So under that question in the Q&A panel, I posted the links to both threads on the Arches forums where those things were discussed.

So yeah, so definitely take a look at that in the Q&A panel for those full answers. The other thing I wanted to mention about the Q&A panel, you can click on the like button if there is a question that you want to upvote so that it tells us that that is a question that is a priority to many others. So yeah, so we got one upvote vote there for this question here.

**Question #2:**

I have never used Arches. Is information on archeological sites around the world available through Arches?

**Answer:** Now, OK, so this is a fundamental thing about Arches that you should know. Arches is not an uber site-- we're not-- the GCI is not collecting information on sites around the world. We do not host one site that collects information.

Arches is software that individual organizations deploy on their own servers and have their own data for. So you might be part of an organization that is collecting that data. But generally, there is not information on archeological sites around the world using Arches. And this demo site is just a demo of what you can implement on your own server and deploy to your own users via web browsers.

So yeah, so that is-- hopefully that answers your question. So and the reason why we have this demo site available is so that you can use Arches and see how it works without deploying it on your own server, because there is a lot that you would have to do to do that.

**Question #3:**

OK. All right. Next question is, the GIS features and planned Esri integration are great. Thanks. Can Arches also visualize 3D models of Cultural Heritage Assets, similar to, for example, sketch fabric poetry? If not, is this something that the project is considering in the near future?

For example, this could be comparable to the full GIS integration you have currently, or if this is not possible, simply linked as an information resource.

**Answer:** OK, so already we have some arches implementers on their own instances who have integrated viewers for 3D models, in particular ones for poetry, for sure. And you could definitely inte-- you can customize arches to integrate yours for sketch fab and other 3D point cloud viewers, or even video viewers, within Arches.

That's something that others have done, and they've made how they've done that available to the community. Now if you're asking whether there'd be a full integration between those software packages and Arches, that is currently not planned at the moment. But this is a good point-- time
for me to point out that because Arches-- because we've developed Arches using the open source model, its community members are able to add functionality to the software.

It's part of your use case and you need to do that and you have funding to do that, you can go ahead and add that functionality to your Arches instance. And the license that Arches operates under means that-- it basically stipulates that you have-- that you have to share that functionality with the rest of the community. So if someone else develops that for their own project, then that functionality should be made available to the rest of the community. But right now we don't have that under our roadmap as something that we have planned.

Annabel, I'm just-- one good example of an Arches implementation where 3D data like that is incorporated is Global Digital Heritage. And I'm just typing in the URL in the response to that question.

**Question #4:**

Yep. All right. So the next question I see is what type of approval is required before resources can be added?

**Answer:** All right, so this-- it depends on your instance. So in the demo site, we don't require any-- I mean, you just have to be logged in. You have to have a demo account to add resources. But Arches gives you the ability in your own instance to determine who gets to add what kind of data and restrict that. And not only can restrict who adds data, but you can also have-- you can designate which users have to have their data be provisional before it publishes to your Arches site.

So for example, if you have interns who are entering data, you can make sure that their data doesn't get-- any data that they enter does not get published directly to the Arches site by making sure that their data is marked as provisional. And then you as an administrator can then look at the data that they've contributed as provisional and then push that live to the site if you think it's OK. So hopefully that answers that question.

**Question #5:**

All right, great. So the next question is, has anyone used Arches for museum events to promote exhibitions? No, actually. Not that we are aware of. As an open source project, we are not privy to every single instance of Arches being used in the world. We don't keep track of that. But has anyone used Arches for museum events? No, not that we're aware of.

**Answer:** But there is nothing to prevent anyone from using Arches for museum events because you can really configure Arches to meet that you can configure the database to meet your needs. And then if there is further customization that you would need to do to make it easy to use for promotion of exhibitions, you can also make those changes.
If in the case that there is somebody here listening in who has an example of this that they have used an Arches instance for museums or even for 3D images, feel free to send that in the chat. We'd love to go and look at it if you do have that.

**Question #6:** Is it possible to print the map from the browser?

**Answer:** So I mean, you could print it as you would normally from a browser. But I don't think it would show up the way that you-- mean you, can't-- might not be able to customize that in the way that you would if you were printing something directly from another JS.

**Question #7:**

All right. So I'm going to answer this next question live. Could we add Esri world topology to the base map in version 5 as in previous versions?

**Answer:** Yes. So if there's a map service that is serving maps that you want to include as a base map, or even as one of your overlays in Arches, as in previous versions, you can do that.

**Question #8:** Are there intensive, hands-on Arches workshops planned in the United States beyond one or two hour webinars, assuming we are back being able to travel?

**Answer:** Yeah, that's a big assumption, right? I think that-- I think that that's an important point. And if there is-- right now we don't have any planned because we don't have any travel plan, to be honest, or any live events planned. We're not even thinking about that right now. But if we hear from the community that there is a demand, especially if it's a demand in a particular area of the United States, that would be helpful to know.

So if you want to post on our forum and let us-- and remind us that that's something that you want to see and others could respond to that by saying, yes, we want to have a workshop when we're all back out in the world again, that's something that you can do. But at the moment, we don't have anything planned.

**Question #9:**

Right. OK. So this next question-- if a community wants to adopt arches for its Heritage inventory, is there training available for people who would implement? How many people are needed to oversee an Arches inventory for a small community?

**Answer:** So if a community wants to adopt Arches for its Heritage Inventory, is there training available? So a couple of things here. Arches-- I don't want to belittle how much-- how much work it is to stand up an Arches instance for yourself. You probably-- you will need some technical-- you will need some technical help. And on our website, we list service providers that can provide that technical help.
But not only can they-- not only can they deploy an Arches instance for you, they can also-- if that's not something that you want to do and you just want training, you can also ask for training from those service providers to implement. And in regards to how many people are needed to oversee an Arches inventory for a small community, it depends on the data and what you're doing.

If it is the sort of thing where you-- here's a scenario. You hire an Arches service-- an Arches service provider to deploy an instance of Arches for you and set it up so that it's ready to go and you're ready to enter your data, or maybe they're loading your legacy data in for you. And now all you need to do is add new resources here and there and have-- and make sure it's up to date.

That's not going to require a lot of people ongoing. But if you are-- I mean, again, this depends on your inventory program. If you have a robust inventory program in your community and you have people constantly updating with new information about your resources, you would need to make sure that you have enough people to handle the update of those resources.

Right. I think hopefully that answers that question. I'm going to move on to the next one.

**Question #10:**

Is it possible to configure the export CSV differently for different types and categories of users?

**Answer:** So I mentioned earlier that the administrator can configure the export CSV for export for each of the resource types.

Now, whether or not the export-- what exports different-- what exports is different for each different type of category of users, I actually can't-- I've actually never tried that. So I can't answer that definitively. So that's a question that I would post on our Arches forum to get the more definitive answer on that. All right.

**Question #11:**

Do you have a digital Arches user manual that can be circulated?

**Answer:** All right. So what we do have is we have our digital Arches manual for people who are implementing Arches. So how do you install and configure Arches and how to generally use Arches. But we don't-- like, the things I went over through-- the things I went over today, we do not have a user manual for that, mainly because every Arches instance is going to be different.

The fields are going to be different. How it looks is going to be different. So essentially, we're leaving a digital user manual up to each individual instance. Now, do let us know if that might be something that you might be-- that people who are implementing might want help on in regards to having, say, a template, or even just like a sample user manual. But at the moment, we don't.
And that's one of the reasons why we're holding these webinars to show people how you could use Arches specific to this demo instance.

Annabel, I could just add that there was a recent national-level Arches implementation by Jersey Heritage and they produced some really excellent-- I think it's a series of five videos called "How to use the HER" that are really oriented toward users. And also there's a written document that is a companion. And I'm just typing-- I've just typed in where you can access that.

**Question #11:**

OK, so this next question here-- any guidance available for how Arches could be best implemented in a classroom setting for use by university students?

**Answer:** OK, there is-- I know that-- I know several professors who have used Arches in the classroom setting, or are planning to use Arches in a classroom setting.

And in regards to guidance for that, we don't have any lesson plans or any guidance on that available. But I think this is a good time to invite anyone who has done that to make that available. And in general, what we've seen is that it's been used for students to collect data on built heritage in-- locally, in their local area. And they've entered data. And for example, at-- probably one of the best examples of this is Hong Kong University.

Hong Kong University in their classes have implemented Arches so that the students can collect data on various sites in Hong Kong, as well as-- not just the sites, but intangible heritage in Hong Kong and other areas. David, do you want to add anything about that particular instance?

I just know that they have two Arches implementations up that they've been using with students, one for focus on Hong Kong, another focused on Yangon in Myanmar. So they've been using that in some practical work with students. Another example that I think has gotten more also into the technical side of things, and also archeological research, is Liverpool John Moores University in the UK.

So I'm just typing in how Liverpool John Moores can be contacted. And I'll add the-- where you can find the Hong Kong implementations, as well.

**Question #12:** OK. All right. This next question, has Arches has been used to inventory museum collections?

**Answer:** To answer this, I'll answer it live. Yes. Arches is currently being used-- it's in progress, I know, to handle the kinds of data that you would find in museum collections. So I think it's-- you know, it's not the-- one of-- at the Getty Museum-- or actually at the Getty itself, the Getty Research Institute, the Provenance Index there, they're using-- they'll be using Arches as their back end to power their Provenance Index remodel.
And then there are other implementations that are using Arches for objects. Now, this kind of brings up a good point, in that what you saw in this demo site is geared more towards Built Heritage. But Arches can be-- Arches can be used to really inventory any kind of object you like. It really-- what it really boils down to is being able to model your data and define your-- the structure of your database using the Arches Designer. And you can use it for anything.

I will tell you, at the moment, the Arches deployment that I am currently working on is to deal with museum conserva-- excuse me-- to deal with conservation science data. So I'm currently working on an Arches instance which is going to be called Arches for Science. And that will be available within the year, or within the next year, to basically handle museum science-- conservation science data.

And so that-- I think just saying that shows how flexible Arches is in being able to handle an inventory or management of any kind of data. Hopefully that answers your question.

**Question #13:**

The next question is, I noticed the report only displays a mapped location for the site resource. Can an image be added to the report?

**Answer:** Yes. So to answer that question, yes.

There are several report templates that come with Arches out of the box. And one of the report templates-- templates is one that, instead of having a map as your header, is an image as a header. So for example, if the report template for people, you probably don't want a map. You probably don't want to map there. What you would probably want is a picture of that individual as the head image-- as the leading image for that report. So you can do that.

**Question #14:**

OK. Will you support-- the next question is, will you support monument management processes and operational data collection? And then the follow-up is, for example, restoration or law enforcement data and actions.

**Answer:** OK, so I touched a little bit on this when I talked about workflows. So you can configure workflows to support any process that is going to be adding or altering data in your database.

And that includes things like not just restricting your data entry workflow, but also creating flags, spitting out letters and reports at any particular time. And that can be configured according to your use case. So workflows will be managing-- can manage those organizational processes. Let me-- hopefully that has answered your question.

**Question #15:**
Let's see. Next question is, apart from point, line, polygon, WKT and geoJSON spatial data input, can we add a geoTIFF to a resource? Until now, geo referenced map and images are only available as overlays.

**Answer:** So I don't have the specific answer to this question. So I'm going to refer you to the Arches forum to answer that question.

Or if someone else in the-- another attendee can answer that question. If you know the answer to it, feel free. OK. Is the demo site-- and let's see how many questions we have left. Yeah, so I think I have four more-- or three more questions. And I'm going to try-- let's go ahead and try to answer these next three questions and then I'm going to cut that off.

**Question #16:**

Is the demo site modified from the default Arches installation? Is it modified? If it is modified, would it be possible to share the code or a package of the models in the data to reproduce the site locally?

**Answer:** So yes, actually, this demo site is-- there is a package that this demo site is operating from. And that's located on our Arches GitHub-- Arches GitHub site. And it's under v5 demo.

So that is a demo site that is-- so that is a package that you can use to basically recreate the demo site on your own Arches instance. So I will try to give you a link to that later. And hopefully-- maybe Lindsay, you can add a link there to the v5 demo package on archesproject.org.

Yep, absolutely.

**Question #17:** OK. All right. Next question-- any instances exist outside of the heritage realm?

**Answer:** Yes, there are. I think one of-- like, one of the most-- a couple of examples are there was a Arches instance that was used to map oil spills-- oil slicks and oil spills-- out off the coast of the Pacific Northwest here in the United States. And also the port of San Francisco used Arches to manage their project management. David, did you want to add anything to that?

Those are the two recent ones that come to mind I know that in the past, the California Department of Transportation also used it for infrastructure project management. And I think there have been others like, I think, related to groundwater quality. I think those are some different examples that come to mind.

**Question #18:**

Yeah. All right. And then the last question I'm going to answer is, is Arches built to use linked open data?
Answer: When you say built to use link open data, Arches has an API and can you can ingest linked open data-- or you can-- if it's being pushed out there. But if you're saying, is it built to publish linked open data, I'll say that, yes, Arches has been-- are some recent changes to Arches in version 5 have created the ability to push out linked open data if that's something that you want to do.

All right. OK. And hopefully that answers your question. I'm going to-- I'm going to go ahead and move on. And thank everyone for joining us today for this webinar. Again, you can share your feedback, either at contact@archesproject.org, or through our forum. And again, our webinar repository for Arches is at archesproject.org/videos.

Within a couple of weeks, we will have this-- we will have the video for this webinar, as well as the transcript for the Q&A and the slide deck available for you. So I'm going to go ahead and sign off right now. Thank you, everyone.

Thank you.

Thank you, everyone. Have a great day.

*Part of the Q&A transcript was modified from the original version for formatting purposes.*

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