

Presenters:

Alina Myklebust, Getty Conservation Institute
Annabel Lee Enriquez, Getty Conservation Institute
Dennis Wuthrich, Farallon Geographics Inc.

Note: Q&A transcript begins on page 6

Welcome, everyone. Thank you for joining us for today's webinar. My name is Alina Myklebust, and I'm a Project Specialist at the Getty Conservation Institute in Los Angeles and I work on the Arches Project. Joining me to co-host the webinar today is my colleague, Annabel Enriquez. Also, Dennis Wuthrich of Farallon Geographics in San Francisco is joining us to moderate the Q&A session. Thank you, Annabel and Dennis, in advance.

Just some housekeeping notes before we get started. The webinar is being recorded, and we will share the recording and the transcript one week from today. Also, I'll share more info at the end, so you know where to find it. The Q&A box will be open for you to submit questions during the presentation and during the Q&A session. We will answer questions after the presentation. Without further ado, let's begin.

Before we present the agenda and dive into the main topic of today's webinar, we should mention that this is a four-part webinar series. Today we will focus on part 1, the core capabilities of the Arches Platform. And in parts 2 to 4, we will cover data management tools, data technology concepts, and information architecture of the platform.

Onto the agenda for today. After sharing a brief background on Arches, we will begin with today's topic. The topic is Arches Platform capabilities. And we'll spend about 20 minutes on it before moving on to the Q&A session for the last 20 minutes or so. At any time during the webinar, you can submit your questions using the Q&A box on your screen in your controls. And we will respond to your questions after the presentation.

Some of you may know about Arches from presentations in the past, at workshops or conferences, or from visiting our website. Arches was developed jointly by the Getty Conservation Institute and World Monuments Fund. And Arches is an open-source software platform purpose built for cultural heritage data management.

From the beginning, the Arches team has worked with both technology and cultural heritage professionals to address the needs in the field by developing digital solutions for heritage

inventories. It is a growing community of professionals from around the world who are using, maintaining, and improving Arches to manage their heritage resource data.

Some notable mentions about the Arches Platform. The platform is open-source and free. So you are free to install, use, configure, and customize the software for your needs. There are no licensing fees. And there are no limits to the number of users. The platform is Enterprise-level software. And by this we mean, it is server side and not client-side software. So either a server on the cloud or on premises is needed to host Arches. Also, the platform is to be deployed independently by an organization or institution. We do not manage, own, or have access to your data. We build the software and you are free to take it and implement it independently at your organization.

We are now back at showing you the four parts that make up this webinar series. As you will see in part 1, we will review the capabilities. And this is what Arches does for you. And in parts 2 to 4, we will go over in the future webinars how it does it. And why are these features and capabilities important? Because it gives you easier access to your data and information. The ability to find and visualize your data allows for improved insights and actions for analysis, interpretation, and decision making.

In the next few slides, we will be demonstrating the core capabilities through various example scenarios and use cases. I will now switch presenter mode to my colleague Annabel Enriquez and she will take you through the Arches platform capabilities. Thank you, Annabel.

Thanks, Alina. And I want to thank everyone for joining us today. Alina has given you a quick overview about Arches. And I wanted to remind you that if you have any questions about anything she mentioned or if you have any questions about what I'm about to cover or anything else Arches related, please use the Q&A feature to log your question. And we'll try to get to as many questions as possible at the end of the presentation portion of the webinar.

So to pick up where Alina left off. Arches is a robust, fully featured system for cultural heritage organizations to manage their data. And by fully featured and robust, we mean that we've created a platform that can both manage your data behind the scenes, using the latest data standards and technologies and, if you wish, also publish that data in a controlled way. The users to whom you've given access to your data, based on your own user policies, can then discover information visually via various Arches visualization tools. Or if you have specific questions, you can really interrogate the data using Arches search tools.

For this webinar, I'll briefly go over the data management capabilities at a very high level and then go into a little bit more depth on the data gathering and visualization tools within Arches. As Alina mentioned, the second webinar in the series will cover more of the data management aspects.

So regarding data management, Arches just gives you the ability to collect and ingest data in several different ways. You can bulk import existing legacy data. You can enter a new information via the Arches interface. And if you're out in the field, you can use the Arches collector on your mobile device to collect data and sync to your Arches instance. And not only is that data stored in Arches, but you also have the opportunity to define how that data is structured and optimized for use and dissemination, as well as who gets access to that data, which leads us to the search and discovery and visualization capabilities.

I'll be discussing most of these capabilities today by looking at various use cases in which some of the features you see here in this slide are shown. What I will not be going over in this presentation are fuzzy dates, the viewers for the triple IX standard, and spectral charts, which will be covered in other webinars.

The Arches platform is meant to be deployed by cultural heritage organizations independently, meaning that each organization makes decisions about how they want to brand their Arches powered system, how that data is organized, and generally how to configure the system to meet their own use case. So what I'm showing you now is it's screen capture of how the City of Lincoln in the UK is using Arches to manage data on both archaeological and heritage conservation sites.

ARCADE is the Arches powered online heritage information and management system for the City of Lincoln. And a distinctive feature of ARCADE is the use of maps in various different ways to tell the story of the richness of the heritage in Lincoln. ARCADE provides several different types of base maps for users to select based on their needs.

And with the interactive map, you can view 3D volumes in oblique view with various different types of overlays. A city like Lincoln has layers of history. And as such, the use of historic map overlays from various time periods were incorporated into this Arches implementation. And using all of these elements together, you'll see how the story of Lincoln's heritage really comes alive by interacting with the map.

You can also perform a geospatial search by drawing a boundary directly on the map to filter your data by location. And you can see the data on the left-hand side has been filtered by that location. This is a good time to note that Arches gives you the ability to use external map servers. Or you can host maps directly through Arches. The choice is yours.

Moving from ARCADE, we've set up a sample Arches instance here with the information loaded from the Getty Conservation Institute's Valley of the Queen's Conservation Project. If you've been to the Arches demo site, this is a similar instance of Arches. So in the last video, we saw how you can use the geospatial features to explore data in an Arches instance. But in addition, the Arches platform has features that give you the power to make more direct queries and do so in any combination of ways.

So here's the use case that I'm going to be exploring. I have a research project in which I need to understand how many chamber tombs in the Valley of the Queens were constructed in the 12th century BC. So here's a way to do that. First, this particular instance of Arches has some saved searches that you can store some curated data. So the first thing that we want to do is look at those saved searches and then select Valley of the Queen's.

Once I've selected that curated set of data, I'll see that I have 99 resources in the left-hand panel. Next up, what I want to do is narrow it down by chamber tombs, because there are many different kinds of tombs here in the site. So by typing in chamber tombs and selecting the correct term, that narrows down my search results to 23.

But I haven't fully answered the question I posed, initially. So how many of these were constructed in the 12th century? What you're looking at now is the time wheel feature which helps you to visualize or actually visualizes all the time values in an Arches instance. What I've done there is I am using the time wheel to filter the search results by time. And each ring represents-- in this case the outer ring represents a century. The middle ring represents half millennia. And the inner ring represents the millennia. And I selected a portion of that outer ring which represents the 12th century BC. And the search results were whittled down by that.

So often it is important to understand the various relationships between whatever resources you are recording. This year a collection of eight heritage sites were inscribed in the UNESCO World Heritage list as a showcase of American architect Frank Lloyd Wright's legacy on modern architecture. In this example, we'll explore his impact on the City of LA.

So you saw there that I selected a saved search on Frank Lloyd Wright initially, which yielded 18 results in the left hand panel. And now I want to explore what relationship those 18 results have to Frank Lloyd Wright. So what you're seeing now is the related resources visualization tool, which shows all the relationships between the resources that you're recording within Arches.

As I'm interacting with this visualization, you'll see that it visualizes relationships between Frank Lloyd Wright and the various people that he worked with. There were relationships to people who own the houses that he designed. And you can navigate that either directly in the visualization or on the right-hand panel, you can navigate through that. And then you can click any of those records to see the resource report. This one is for the Hollyhock House which is actually on the UNESCO World Heritage list.

Here's another question that might be asked in the course of say development planning. If there is a development project, what are the potential impacts to the historic fabric? To answer this question, let's look at data from the City of Los Angeles or rather sample data from the City of Los Angeles. And the more specific question here is, what is the potential impact of a new subway line construction on art deco historic resources in the Miracle Mile area of Los Angeles? That's quite a mouthful.

But let's go ahead and see how we can answer that question. So the first thing we're going to do is define the impact area by drawing a line using the geospatial search tools and then specifying a buffer of about 1,000 feet. So now we have 12 resources there. So let's do a search of art deco resources in the impact area. You've got nine now. And let's further whittle it down by resource type. I know that I'm not interested in multifamily residential buildings. So I'm going to select that and then double click it, which gives me the inverse search. So these are all of the resources that are art deco in the impact area and are not residential multifamily resources.

Now, I also want to find out whether any of these are on the National Register. And so I'm using another search tool, which is Advanced Search, to help me do that. Advanced Search give me a selection of all of the data entry fields within Arches, so that if I was not familiar with all of the data entry fields in Arches or any particular Arches instance, I will be able to see what I can search against. And here's the results of that. There is actually one art deco building that might be impacted by the subway construction that is on the National Register and is not a residential multifamily building.

So we started these examples looking at our ARCADE, the City of Lincoln's Arches implementation. And we'll end looking at another implementation of Arches. Global Digital Heritage is a non-profit organization that is dedicated to using digital visualization, 3D virtualization, geospatial informatics, and open-access solutions to make digital data and 3D models of cultural heritage freely available. In order to serve their mission of making all of their scanned data and the results of that scanned data accessible, they extended Arches by modifying the Arches standard report template to include various interactive 3D and video viewers.

So in the video that we're viewing now, we're going to be exploring various types of 3D models and results for the Molina Campo de Criptana. And as you see-- which is a windmill. This is the report that describes the site. And you'll see there the related resources include many of these 3D models and other results from the documentation. At the moment, you're seeing a Sketchfab model viewer embedded in a resource report.

This shows the model of the windmill mechanism for the windmill. Next, we'll see a pointing cloud of the site. And you can see that using these viewers, you're able to explore these point clouds more fully to really explore the site. And again, these are all embedded within the standard Arches report template. And they've also done some customizations to how that metadata shows up. Now these fields are all customizable within Arches. And this is something that we will go over in the second webinar regarding data management. And lastly, they've embedded videos in these resource reports.

So one other thing that Alina touched upon earlier is that Arches is an open-source platform. And the license under which we operate requires that any improvements at the core Arches code be made available to the rest of the Arches community. So the ability to embed these

kinds of viewers is now available to anyone else who is implementing Arches. And instructions on that are available on the Arches discussion forum via a post made by Arches community member, Vincent Meyer, who actually implemented this for Global Digital Heritage.

So that was a brief tour of Arches more forward-facing capabilities. In the next part of this webinar series, we'll be taking a deeper dive and taking a look underneath the hood, so to speak. As mentioned earlier, part 2 will cover the data management tools that allow you to collect, structure, store, and control access to your data. Part 3 will cover the underlying data technology concepts that help to explain how Arches deals with your data and why this is important. Part 4 will be an overview of Arches technology and information architecture, including a look at the various software components and standards.

We will be announcing dates for these in the future. Be sure to subscribe to our mailing list, follow us on social media, or check our events page on ArchesProject.org for more information as it is released. And now we'll move on to the Q&A portion of the webinar.

Questions and Answers*:

Hey Dennis.

Hey, Annabel.

Question #1:

I'm going to ask this first question here. You mentioned that you can upload legacy data to Arches. Can Arches store multiple legacy surveys with overlapping geographies?

Answer:

So Dennis, do you want to tackle that or I can take a stab at that one?

Well, sure if you want to take a stab, go ahead. I'm happy to embellish if necessary.

OK, so you can upload legacy data to Arches. And Arches can store multiple legacy surveys of overlapping geography. One of the things that we didn't really touch upon in this webinar is that Arches allows you to collect data over time for any particular resource. And that's really up to your own specifications.

So if you wanted to have-- if you wanted to store say for that windmill site that we just saw, if you wanted to store surveys that were conducted that have information on that particular windmill, you might, say for example, want to date those. And say that OK this survey from 1985 had drew these results. And then this survey from 1995, 10 years later, had these additional results or further elaborated on previous results.

That's more of a question of how you would end up modeling your data as opposed to whether or not Arches can store multiple legacy surveys. So Arches can store all of that information. How you want it to display and how you interact with it, is really determined by you as you figure out the specifications for your Arches system. Did you want to expand on that, Dennis?

Sure. I guess, I would just say in a word, yes. Arches is super flexible and would let you manage multiple surveys with overlapping geographies. I think that's really the clearest way to say it. To your point, Annabel, Arches is-- when I say it's flexible, what I really mean is it gives you the power to decide the depth and breadth of information that you want to capture and maintain for your cultural heritage resources. So you have a lot of flexibility in deciding exactly what attributes you want to manage and how those attributes capture geospatial information, temporal information, and topologies. So there's a lot you can do with Arches. And I think you'll see that in one of the upcoming webinars. I believe the next webinar will go into that and in quite a good bit of detail.

Question #2:

OK, yeah. So I am going to move on to the next question. And I know that I see a couple of questions on installation. So there's a question on how easy it is to install Arches on Windows 10.

Answer:

And I'll have you answer that question, Dennis.

Yeah. It's a good question. So Arches is designed to run on all the major operating systems. So it'll run on Windows. It will run on Linux. And it will run on Mac OS. And it will run on others as well. And of those three, Windows is probably the most-- is probably the one where it takes-- it is sort of the trickiest to install, which is just to say really that Arches requires some dependencies. So it requires a database and a web server. And its dependencies will run on every operating system.

I'd say the Windows operating system requires a little bit more configuration than the others. But Arches is quite happy to run on Windows. In fact, many of our clients, many of our Farallon Geographics clients are using Arches on Windows with no issues whatsoever. If this is meaningful to you, I'll say that, it's quite happy to run on Azure and in virtual machines on Windows. So it absolutely can run on the Windows 10 platform.

And maybe the last point I'll make is just recently, the Arches developer community has been contacted by a group that's interested in supporting runtime environments for Arches including a runtime environment for Windows. So if anything, Arches will just get even easier and easier to install and deploy.

Thanks, Dennis. OK, so I'm going through some of the rest of these questions.

Question #3:

OK, so in that diagram with Frank Lloyd Wright and all of those related people, did Arches create those connections or do we have to create them ourselves? And if so, what do you mean about discovering new relationships?

Answer:

OK, so I'll answer that question.

So really you do have to create those. The short answer is yes, you have to create those relationships. So there is no AI involved here. Arches is taking the data that you are entering into the system via either upload or directly into the Arches interface and it is visualizing those connections. So you have to have the data before those connections actually appear.

And in regards to this discovering potential new relationships in the data, assuming that you have multiple people entering data, multiple teams entering data, you might have one team entering data on one project and another team entering data on another project or architect. And what might happen is if all that data is entered into Arches relationships between those two particular research projects or research teams might be revealed. So that's what I mean. But you do have to create at least all of the initial connections within Arches or just have access to that data to enter. Dennis, did you have anything to add to that?

I guess the only thing I would add is, if you have rules for how resources relate to one another, then that's the kind of thing that could be implemented in Arches as a customization. So for instance, if you know that there's an automatic connection between specific kinds of resources based on your own rules, then you can automate the connections that Arches makes.

Question #4:

So there's a question, have any State Historic Preservation Offices in the US implemented Arches for their survey and inventory?

Answer:

At the moment, there are no SHPOs that have implemented Arches yet. There has been definitely been interest. But as of today, no SHPOs have implemented Arches.

Question #5:

**Can the time wheel be changed to show smaller increments than millennia and centuries?
The resources I'm managing aren't that old.**

Answer:

OK. So, yes. So the time wheel can be configured to show smaller increments than millennia and centuries. The data that I was showing was better served by those time increments or those particular rings within the time wheel. But you can configure it to show decades and centuries and millennia. Or if there's some other increment that you want to show, you can customize that.

In addition-- and correct me if I'm wrong, Dennis, you can even use that-- you can customize that time wheel widget to show other data besides time, to show the distribution of attributes in an Arches instance. Dennis?

Yeah, so that's is absolutely true. It's just a configuration to decide how finally you want to define your various time increments. And really, we look at the time wheel as one example of how to provide a visual way of selecting specific information. So let's say you had information about architectural style. You could use the exact same approach to indicate the kinds of architectural styles of the information in your Arches instance.

That is to say, you could use a visual metaphor like the time wheel to let people see the distribution of different styles, for example, in your data set. You could look at the time wheel as an example of how you could provide more visual ways of interrogating an Arches database. And you can use your imagination. There's lots of other ways that you might be able to think about using that kind of way of presenting your data. A time wheel or a circular histogram is a way to present your data.

Yeah. And I see that there is a follow up question about days. And I think I mentioned that you can-- and as Dennis mentioned that you can really configure it according to your use case. So if your data is best represented by days, you could do that. But you just have to figure out whether that is really the best way to visualize your data.

Question #6:

Is there a sample instance available that people can use to test out the new Collector mobile app?

Answer:

So at the moment we don't have that available yet. But we will be deploying an instance. Actually it will be-- most likely it will be at that demo instance that you see on ArchesProject.Org that you can use to test out the mobile collector app. So just stay tuned and

we'll let you know when we've enabled use of the mobile collector-- of Arches Collector with our Arches demo instance.

Question #7:

Is there an export tool for search results, for example, to output your search results to a CSV? Dennis, could you answer this question?

Answer:

Yeah. We're actually working on that right now. So at the moment search results are available on screen. And we're working on making it easy for people to download search results in various formats, So CSV formats, in geospatial formats, like shape bios, view JSON, as well as straight up JSON files.

And there's lots of technical details for why we're just getting to that now. But suffice it to say that we want to support export from Arches for very, very sophisticated data and very large data sets, which means that there's some additional plumbing that we need to implement to do this well. And that's what we're working on right the moment. If anybody is interested and would like more detail on kind of the specifics of supporting search export, I'd be happy to have an offline discussion with them.

Question #8:

Would you suggest the use of Arches also for single artifacts?

Answer:

So I think one of the things that we've been kind of dancing around is the idea that Arches is just as customizable according to your use case. The examples that we showed mainly had to do with inventory for historic places and sites and monuments and including people.

But you can configure Arches to really handle any kind of cultural heritage data or really any kind of data period. A lot of that depends on how you model your data. Or conversely you can model your database within Arches to be able to record information on single artifacts. Dennis, did you want to add anything to that?

Yeah. Both the City of London and the City of Lincoln are doing exactly that. They are using Arches to manage information about artifacts. And I notice there's a question about managing information or modeling information that's non-spatial in nature too. And I guess I wanted to get back to that as well as part of this answer, which is to say that Arches does not require that all your data have location information associated with it. So you absolutely can build models in Arches for things that are non-spatial. I think that question included the reference to

bibliography, for example. So that's absolutely possible. And again, it's being done by many of the implementers of our Arches, including the City of London and City of Lincoln.

I think regarding that question about location, I think one of the common misconceptions about Arches is that it is only a geographic information system. But it actually is more than that. You don't have to have geographic location. It really is a cultural heritage data management system with enhanced geospatial capabilities. So you can start from any-- you can have data that doesn't have any geographic location or data with. So it doesn't matter. Again, as Dennis mentioned, it really depends on how you model your data.

Question #9:

What types of database servers do users use to store data? The cloud, Laserfiche, and internal server.

Answer:

Before I pass this off to Dennis, what I will say is that, first of all this-- that's entirely up to each individual implementation. So all of the Arches implementations out there are pretty much independent from the Arches Project and are independent from each other. So however, they choose to implement Arches is up to them. And so we don't necessarily keep track of how everyone chooses to implement Arches. So with that as kind of a preamble maybe, Dennis, you can elaborate on this question.

Yeah. Thanks, Annabel. So I think the question is at its heart, a question about implementation and then a little bit about technology. And so I'll just give, I think, a pretty broad answer, which is to say that Arches can be deployed in many ways. So you can deploy it on the cloud, if you wish. Or you can deploy it on your own on-site server or servers.

So it's designed to be very scalable, which means that you can deploy it on a single server, if that meets your needs. Or you can deploy it in quite a sophisticated way to support high volumes and high fault tolerance. So that's kind of an answer to the deployment side of the question. As far as the storage, how does Arches store data? It really has a couple key components.

So at its foundation Arches stores data in a database. And we happen to use a database called PostgreSQL, which is an excellent open-source database, great piece of technology. Really many would argue the equivalent of Oracle. And that's what Arches uses to manage all the transactional data, all the transactions that you use to enter, update, and manage your data.

Then Arches also indexes that data into a search engine. We use Elastic as the search engine. And that's so that you can support very quick queries, so asking questions of Arches and having it retrieve very quickly through the use of the search engine. And then for certain kinds of data,

like files, that could be documents, that could be images, it could be audio files, it could be video files, Arches can be configured to store those on the cloud or on a dedicated server specifically for file management.

So that's the quick, I guess, overview answer. Hopefully, that's sufficient detail. If not, I'm happy to answer in more detail if you want to ask a follow up question.

OK, thanks Dennis. Going through the list of questions that have been submitted. Here's a question.

Question #10:

Has there been any experience of Arches implementation using a language other than English?

Answer:

And the short answer to that is, yes. There are several implementations of Arches that use other languages besides English. And there have been implementations in Mandarin, in Slovenian, in German, and other languages. And maybe Dennis, maybe you can expand on that by talking about-- going briefly to you how that actually works.

Yeah. So I'll just add that I'm also aware of implementations of Arches in Arabic, as well.

Yes, that's right.

So bottom line is the question really kind of, I think, it is really important. Can Arches be internationalized? Can you configure to use languages other than English? And you can do so. And the way it works with-- the way Arches works is it supports multiple languages and multiple scripts. So you're not limited to Latin based languages. You can use character-based languages, like many Asian languages. You can use scripts that are non-traditional. And Arches is built from the ground up to support that.

As far as implementation goes, there's really two things to consider. One is the content of the database. And so that can be really any language and any scripts. And Arches does that right out of the box. So there's nothing stopping you from implementing Arches and storing data in your native language, if you wish to.

The second thing to worry about is the presentation of the information, so the user interface of Arches. And the Arches code includes all the appropriate internationalization tags. So really all you have to do is determine whether the new user interface has already been translated into your language. And if it has, then you're more than halfway home. All you need to do then is implement the translated strings.

If the user interface hasn't been translated into your language, then there's a bit more work. You'll have to do the translation of all the user interface elements. And then once that's been accomplished, you can load that into Arches.

And I'll just say that there's a really good tool out there called Transifex that makes this process, I think, as straightforward as it can be. It's the supports community translation, so it isn't all on you. If you have a group of people who are interested in supporting a particular translation, then you can do it in a distributed manner. So I would I guess I would just say for those who are interested, take a look at Transifex as a tool to help support translation of Arches, if it hasn't been translated into your language already.

Question 11:

Are you familiar with any Arches users integrating intangible heritage data into their information database? If so, how has this worked out?

So, yes, we are familiar with some Arches implementations that have used Arches to model intangible heritage data. One instance of this is Hong Kong University created an Arches instance in which they recorded some of the intangible heritage of Hong Kong. Naturally, there's a master's thesis that was written about it. It seems to be successful for that particular instance.

Again, that was done on a bit of a smaller scale. And then currently in the Caribbean, they are recording information on intangible heritage through various Arches implementations. And I don't think that those implementations are accessible or alive yet. But we know that they're doing that work. Dennis, are you aware of any others?

I think the City of San Francisco is exploring the city's use of Arches to intangible heritage, as well, specifically things like festivals and that sort of thing. So it's work in progress. I don't think it's publicly available yet.

No, it's not publicly available. And I think, yes, I think in regards to intangible heritage, a lot of that modeling work is still in progress and still being sorted out. But then a lot of it is currently being implemented. So be sure follow us on social media, because oftentimes when we are-- or subscribe to our mailing list or other or follow us on our forums, because oftentimes we will send out information about various Arches implementations that are doing this kind of work or implementing different kinds-- or implementing Arches in new and different ways. So I would definitely strongly encourage you, if you're interested to see what others are doing with Arches, to follow us in any of those ways.

Question # 12:

Has it been all of your experience that any Arches installation requires a delegated administrator or employee focused to make it work well?

Answer:

OK, I will start off answering this question. And then I will hand it off to Dennis. So I think it depends on your individual organization. But generally, we find that to implement Arches, initially, you will have to have some sort of technical expertise, whether that's in house or if that's an external service provider that you contract with, that's up to your own organization.

But in regards to ongoing like having a dedicated technical administrator, we found that is not necessarily important, especially on a day to day basis once Arches is up and running. But in regards to the data in Arches, I think what we do recommend is that in order to make sure that the data in Arches is always up to date and-- yeah, so the data is always up to date, we do recommend that there be someone who manages the data in Arches and perhaps just overall manages the data in Arches and works with either a technical service provider or in house technical staff as needed. So Dennis, do you have anything to add to this question.

Yeah. I think this is a good pragmatic question. And the answer I think is really simple. Like all Enterprise software, you do need to think about maintaining it and administering it. And so Arches is no different. It's like every other piece of Enterprise software that you use. But there is some level of maintenance and oversight that you'll need to be aware of.

I will say, though that our experience and our clients' experience with Arches is that it tends to be-- once it's installed and configured, it tends to work just fine. Where I think you'll want to have access to some ongoing IT support, really it comes down to applying upgrades and bug patches to Arches, which I'll just say come on a pretty frequent basis. We are building and maintaining and extending Arches all the time. And really typically, we will release a new version or an update for Arches every couple of months.

And so those require a system level person to be able to apply them properly and confirm that the software updates are implemented as expected and as necessary. And so that's the one place where I think you'll want to have someone either an in-house support or contracted support to help make sure that the software is updated on a scheduled basis.

Question #13:

I'm seeing several questions about whether or not Arches can handle different kinds of data, whether it be disaster, post-seismic disaster, reconstruction sites or we've talked about intangible heritage. And I think there was there was a question about-- and I'm talking about the single artifacts which we answered.

Answer:

And I just want to reiterate that what Arches records is really up to the individual implementation and how each individual Arches organization who's implementing Arches, how each of those organizations decides to use Arches.

So if the question is, does Arches have the capacity to start the records about post-seismic disaster or reconstruction sites or really any other type of data? Yes, it does have that capacity. But again, this is really kind of a configuration question when setting up Arches.

Question #14:

What about IPR? can we use Arches for internal use, with user and pwd access, while we have a front-end for external users?

Answer:

So not sure, Dennis do you know what IPR is?

I'm not 100% sure what the acronym is referring to. May be the person who's asked the question-- intellectual property rights.

Ah, that's possible. But I think for me, I'm-- oh, yeah, intellectual property rights. Yeah. And then can we use Arches for internal use with user password access? Well, we have a front end for external users. So I'm going to say, in summary, yes. But I'll have Dennis expand on that.

Yes. The short answer is yes, you can use Arches for internal use and require password authentication and still allow an externally accessible front end for users. And by the way Arches will let you require that external users also log in with credentials. So there is absolutely no problem in deploying Arches in this manner.

That's right. And I think that a point that we will be focusing on in part 2 of this webinar series is the ability to control access to data. So it's not just controlling access to Arches, but also controlling access to sets of data within Arches. And that plays into-- that is part of the whole topic of data modeling, so how do you model your data and what data you want to be accessible to what users or what groups of users. So there is a lot of different configuration possibilities in regards to access to your data. we've tried to make that as flexible as possible.

OK, so in regards to the intellectual property rights. Sorry, I am assuming that you ask that question because you want-- if there are rights involved with your data that you can make that accessible-- you can make it accessible or not accessible depending on those rights issues.

Questions #15:

Is it possible to perform a search through multiple databases maintained by different Arches users? And let's say, I want to search churches in different countries.

Answer:

Dennis, do you want to answer that question? And I think we'll do maybe one more question after that.

Yeah, it's possible to do that if you do the hard work of deciding how you want to orchestrate the consolidation of the data. This is a sophisticated question with quite a sophisticated set of requirements to support it. So I'll just say that out of the box, Arches wouldn't do this. But it is definitely possible. You could do this with Arches as the key information management platform. It's a non-trivial.

Question #16:

Can we configure Arches to accept non-definite dates as well as definite dates in a date field? For example, we may sometimes know the exact year a building was constructed, but sometimes just approximate e.g. circa 1840. Will this affect the performance of the search tools?

So before I hand this off to Dennis. I will say that, yes, you don't necessarily have to configure Arches to do this. I mean, Arches actually has a data type-- and I mention this frequently because we'll be covering it in probably webinar 3-- to accept fuzzy dates, which is how we refer to it. We have a data type so that you can capture information or date information according to the Library of Congress' extended date time format so that you can record circa dates, range dates. And that can be ingested by Arches. But also not just ingested, but you can search against those types of dates. Dennis, do you want to expand on that?

Well, I think you nailed it, Annabel. The point I think here is Arches is built to support uncertainty in dates, which is a common challenge for cultural heritage institutions. So being able to enter a date like spring of 1840 is possible on Arches. And Arches will automatically convert that to real dates that a computer can query against. So it's one of those-- I think it's one of the things that really distinguishes Arches from a lot of the other cultural heritage information management systems out there. It's really designed to support the complexity and nuances of cultural heritage data. And these uncertainties in dates are a great example of that.

-End of Questions and Answers-

Great. And I think-- let's see, I think that it's 10:32 right now. so that we're going to go ahead and close the webinar. But just to reiterate what Alina mentioned, there will be a recording of this webinar that we will post to our websites on the videos page in about a week or so, maybe slightly longer. But we will be posting the video of this webinar as well as a transcript of all of the questions and answers. And if there are questions and answers that we did not get to, we will try to either roll those into the next webinar Q&A section or answer them via our forum or other means.

So thank you everyone for attending the webinar. And hopefully, you will all register for the second webinar of the series in which we delve deeper into the data management tools. And it sounds like there's a lot of interest in how actually that works, just based on these questions. And yeah, and in regards to when that second webinar will take place, again, we don't have the exact dates, but definitely stay tuned for information on that. Thanks, everyone.

Thanks, Alina.

Thank you all for joining us today for this webinar. We would really appreciate your feedback. And you can reach us at Contact@ArchesProject.Org. And if you would like to continue the conversation or post questions about the webinar or the content presented today, please join our Google group forum.

Also as Annabel and I have mentioned, we will be posting the webinar, including the slides and transcript of the Q&A portion on ArchesProject.Org/videos. That should be happening in about seven days. You're also always welcome to join us on social media where we share community updates and implementations that are happening around the world. Thanks again. And we look forward to seeing you next time. Bye for now.

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

Users do not have to request permission from the J. Paul Getty Trust and/or the copyright owner prior to using any of the materials but must comply with the terms of the Creative Commons license noted at the bottom of each didactic material. Please note that teaching materials created by different instructors within the same course may carry different Creative Commons licenses.

Materials that indicate "CC BY-NC-SA" **may be adapted** and you may use them to create derivative works non-commercially, if you credit the Getty Conservation Institute and the original instructor or author of the material and license your new creations under the identical terms. In this case, please use the following citation format:

Based on original teaching material created by [name of instructor/author, if he/she is identified] for the course [course title] presented by the Getty Conservation Institute.

License: [Creative Commons BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/)

©2019 J. Paul Getty Trust



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).