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Note: Q&A transcript begins on page 7

Hello, and welcome everyone to part two of our Arches Webinar Series, Intro to the Arches Platform. Thank you for joining us today. We really appreciate your participation, and we hope you will find this intro series informative and helpful. Sorry about that. My name is Alina Myklebust and I'm on the Arches Project team at the Getty Conservation Institute in Los Angeles. Joining me to co-host the presentation portion of the webinar is my colleague Annabel Enriquez. Also, David Myers and Dennis Wuthrich are joining us after the presentation to moderate the Q&A session. Dennis is based in San Francisco at Farallon Geographics where he leads development. Thank you, Annabel, David, and Dennis, in advance.

Before we get started I'll review some housekeeping notes. This webinar is being recorded so we can share the recording and transcript with you all approximately one week from today. I will show you where to find the past webinars a few slides ahead. Also Zoom has a Q&A feature where you can find-- and you can find the Q&A box in the control panel on your screen. This will be open throughout the webinar, so you can submit your questions at any time. Just a quick and important note, we will answer your questions after the presentation and during the Q&A session.

You may already be familiar with Arches from past conferences. I'm sorry, I skipped a slide here. So, as you can see here, this is a four part webinar series. Back in October, we previewed and demonstrated the capabilities of Arches. And today, we're going to be covering the data management tools. In part three and part four, coming soon probably in the new year, we will be covering data technology concepts and information architecture.

Our agenda for today is going to cover a little bit of background about Arches, and then we'll go into the main topic of today, which are the data management tools. And before that, I will do a recap of the capabilities. Then, at the end of the presentation, we'll move into our Q&A session.

You may already be familiar with Arches from past conferences, webinars, and workshops or from visiting our website. Arches was developed jointly by the Getty Conservation Institute and World Monuments Fund. As you will see and demonstrated throughout this webinar series, Arches is an open-source software platform purpose built for heritage data management.

A few important mentions about the Arches Platform. The platform is free and open-source, so you are free and encouraged to install, configure, customize, and use the software for your needs. There are no licensing fees to use Arches, and there are no limits to the number of users. We will also add here, Arches is enterprise-level software intended for deployment on a server. Either a server on the cloud or on premises, also known as in-house server, is needed to host the software and its dependencies.

Also, if you have had a question or a concern about who manages your data, the Arches Platform is intended to be deployed independently by an organization or institution. We do not manage, own, or have access to your data or information. And we have been asked this question in the past, so I wanted to clarify. The Arches team and community contributors build the software, and you are free to take it and implement it independently at your organization.

Some notable mentions here about Arches. 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 management. Arches is supported by a growing community of professionals from around the world, and everyone is welcome to be a part of this process.

This slide will be familiar to you if you attended part one several weeks ago, or if you watched the webinar recording on our website or via YouTube. This diagram depicts a very high level overview of the capabilities of the Arches Platform. In the past, we demonstrated the data discovery and visualization capabilities through various use cases and examples. And we also provided an overview of the data management capabilities.

For easy access to our past webinars, including part one of this series, please visit our webinar repository on our website. As you can see here on the screen, this is the website section where we maintain all of the webinar information including full transcripts and slide decks.

In the next part of this presentation, Annabel will guide you through the various data management tools available in Arches, and point out many of the key features. If you have posted any questions, please just make note that we will get to your questions at the end of the presentation. I will now pass on the webinar hosting duties to Annabel, and thank you, Annabel.

Thank you, Alina. So building on part one of this webinar series, today we're focusing on data management. Or in other words, what enables all of that great functionality you saw in the last webinar under data discovery and visualization. In the highlighted portion of the diagram on the screen, we've listed a lot of different functionality. But I think to better frame this discussion in the time that we have, I'm going to try to answer this question. How are the data management tools in Arches different than in any other system, or what distinguishes them?

So generally, we assume that data management functions as the workhorse back end to a dazzling front end interface. But with Arches, in addition to providing the power for all that data discovery and visualization, the data management tools themselves are impressive in what they enable you to do. And by understanding what makes the data management tools in Arches

different, hopefully you will begin to see how Arches' unique combination of tools and capabilities provide you with a platform to fulfill whatever needs your organization might have.

So the first point is that once you've installed Arches and have fully defined what your organizational requirements are, the data management tools in Arches give you the ability to rapidly configure in Arches' web application with absolutely no coding required. So now, what do I mean by this? I mean that if you have a clear idea of what you want Arches to do, then for the most part, you, your staff, or your service provider will be able to set up Arches quickly to effectively create bespoke software just by providing the tool-- just by using the provided tools in the Arches interface by essentially pointing and clicking.

And part of what makes that setup rapid is that we've integrated a fully featured data management and web publishing system in one. So when you configure the database, you're simultaneously configuring how the data entry fields, the search and visualization, all of it, appear to users on the web, and by extension, on mobile devices. The level to which these are integrated allow you to make configuration change on the back end using the data management tools, and see those changes immediately pushed to whatever is published on the front end. And the reason why this is different is because, oftentimes, these two functions are housed in different applications, and perhaps managed by different teams. So we've streamlined this entire process.

The next point is that the data management tools in Arches control permissions. So who can access what data. So what that means is that you can give different groups varying levels of access to your data. For example, you might want to give your staff full access to all types of data in Arches including the ability to view, edit, and delete every type of resource. But maybe a member of the general public may only get to see the name of a historic Resource Manager, what its designation or level of protection is, and where it's located. Arches data management tools give you that level of control, again, just by using the interface and pointing and clicking.

So I mentioned earlier that we all assume that there is some sort of data management back end powering a front end user interface. But how Arches manages data behind the scenes really creates the structural environment for the powerful search and visualization capabilities to be as effective as possible. In a way, it kind of supercharges the search and visualization capabilities by the way that we structure the data.

So in summary, the data management tools and Arches give you the ability to create as purpose-built bespoke and powerful platform as possible to fully manage and publish your data without building the software from scratch. And with that context, let's actually look at these tools and how they work together.

Here's a very simplified diagram, which shows the three main data management tools that we are going to discuss today. The Arches Designer, the Reference Data Manager and the Resource Manager. So the Arches Designer creates and defines the parameters of your database, including the permissions, and works with the Reference Data Manager to define what controlled vocabularies should be used. The Arches Designer then automatically creates the data entry

interface that is housed in the Resource Manager which influences what you actually see in search and visualization, as well as in Arches collector, the mobile data collection app.

So now, that's a very high level look at how all of this fits together. So let's look a little closer. As I just mentioned, the Arches Designer and Reference Data Manager work together to define the data parameters for any Arches web application. But what do they do individually? So the Arches Designer, in a nutshell, is an interface to design your database, and dynamically generate the user interface that your users will be interacting with, with no coding required.

In addition to creating the data entry forms, it also defines who will have access to what data. And I won't go into this much here, since we will talk more about this in webinar three of this series, but the Arches Designer also defines the semantic structure of the data, which optimizes the search and discovery as well as provides a pathway to data longevity.

We'll take a quick look at the Arches Designer and how it works in a few moments. Generally, most users of Arches will not have access to the Arches Designer interface as it's typically used at the beginning of an Arches implementation, or when any major changes need to be made to the system. But the point is that whomever has access can generally make changes to the system fairly easily without writing a line of code.

So you'll see here in the left panel, there are three tabs. Graphs, cards, and permissions. Starting at the data node for a name and name type under the graph tab, you can see that what I'm doing here is defining the parameters for name and name type including the semantic relationships and the data type. And I'm moved onto cards, and you can see how I can change how they appear in the data entry form. So that center panel shows you a preview of what's going to be viewed by your audience in the data entry forms. So once I'd make these changes, they'll be saved automatically.

Now, under the permissions tab, I can determine who gets to see, edit, and delete the data entered under name and name type, and I can do this for all of the other data fields and nodes. But you can see here that I'm just clicking different access levels for this resource editor group. So anyone who's part of this resource editor group will be able to read and create and update all of the names for built heritage resources.

So how do I add a node slash field to this data model or resource model in Arches terminology? So here's an example. Let's say I wanted to add a very, very simple conditions assessment with a condition type and an image. Generally, there would be more such as data and description, but for the purpose of this example, let's go with this simple assessment. So this video will show you how relatively easy it would be to make the selections to create the change.

Now, the assumption here is that whomever is making these changes has a good understanding of your organization's data and of data modeling in general. We will be talking more about the data modeling semantics and standards in the next webinar, including the documentation and resources we are developing to help you with this. So at this point, you see I'm in the process of creating these two new fields for condition type and condition assessment and condition image.

So I've done that, and now let's take a look at the cards and how that will actually look in the data entry fields. And you can see that I have fair, good, poor, very poor as the selections under condition type, but we need to add another value to the dropdown for condition type. And to do this, we'll need to work with the Reference Data Manager which works with the Arches Designer to define these dropdown values.

So moving on to the next video, you'll see-- what you're looking at now is the Reference Data Manager interface. What I'm doing now is I'm going to add a new value. I'm going to add excellent because maybe the condition is excellent, and I want to make sure that is associated with the list. Now, going back to the resource-- to the Arches Designer, you will see that that selection is now available when I didn't have it before. So this is just a very brief and breezy look at how those two tools work together. And again, we'll talk a little bit more about this in webinar three.

So again, as with the Arches Designer, the Reference Data Manager and controlled vocabularies. There's so much more information to cover here. But as a summary of what the Reference Data Manager tool does, it basically manages controlled vocabularies, i.e. The terminology that Arches uses to populate data entry and field search. And it also helps to ensure consistent data entry even when you have multiple terms for the same thing. Again, definitely tune in to webinar three for all of that exciting information.

So the Arches Designer and Reference Data Manager work together to define what is actually seen in the Resource Manager So let's talk about the Resource Manager or in other words, the data entry interface. In the Resource Manager you can create new resource records based on the data models you create in Arches Designer. You can add, edit, delete data on existing resources you can review the edit history of a resource record, and you can view and approve provisional edits.

All of this I will show examples of in a few seconds. But I did want to remind you that what each user gets to see and gets to do in the Resource Manager depends on the user permissions that you defined in the Arches Designer.

So first of all, let's enter some names for a new resource, and the resource will be the Statue of Liberty, it's one of my favorite ones. So you can enter multiple names because you might have multiple names. And in fact, the Statue of Liberty does, and perhaps in different languages. But for this example, we're only going to be entering two names, the primary and alternative names. So if you had more could do that as well.

So the two names we have are the alternative name of Liberty Enlightening the World and the primary name of the Statue of Liberty. Let's go ahead and add a location now for the Statue of Liberty. Because Arches has many geospatial capabilities built into the system, you can actually digitize locations directly in Arches. So that's what we're going to do here.

In addition to what you're going to be seeing, you can also import geometries from other systems if you want. So if you already have an existing GIS and you just want to import shape files, you

can do that here as well. And in addition to the geospatial, you can also define location in other ways, such as address. Again, you can define how you want to describe location in the Arches Designer.

You can also upload a photograph or any other digital file you want to associate with this resource record. And that's fairly simple to do. You just click add files, and then find the file in your computer and then add it. And then, here's the data entry form that we defined when we were looking at the Arches Designer earlier. You'll see that we added an image for the current condition, and we selected the type as good, not excellent but good. Obviously, you can have more values and you can change all those values in the Arches Designer.

And for each record created in Arches, you have access to the Resource Manager, which will enable you to view the edit history of that record. I mean, again, if you have access to the Resource Manager. So here, you can see all the changes that were made to this particular record, when they were made, and by what person. I think this is particularly helpful if you are auditing data.

And even before the data is entered, you can assign provisional data status to information entered by certain people so that you can review it in the Resource Manager before it's published on the web. So this report shows that it has provisional edits that need to be looked at and potentially approved. So I'm logged in as the administrator, and these were made by me when I was not in administrator mode. I'm going to go ahead as the administrator, change the date here because that actually is the correct one, and then approve it.

You'll see in the left-hand panel that condition assessment record is no longer gold, which means that it has been published to Arches on the web, and whomever has access to see that can't see it.

So to begin to wrap up the presentation portion of the webinar, these three main data management tools really give you the ability to create the fully featured Arches system that your organization needs without building this software completely from scratch. And as a reminder, part of that fully featured system is the Arches collector mobile data collection app for iOS and Android. We did a webinar on just the collector, which you can access on Archesproject.org/collector for more information.

So during today's webinar, if you got the sense that I was only scratching the surface of what makes data management and Arches different, you're absolutely right. So coming next in this introductory webinar series is a slightly deeper dive into some of the conceptual underpinnings of the data management tools in Arches. We'll be looking at some important data technology that is incorporated into Arches, such as standards, semantics, controlled vocabularies, and fuzzy dates.

We don't have a date as Alina mentioned for the next webinar, but hopefully it'll definitely be taking place some time in early 2020. But definitely be sure to sign up for our mailing list to be alerted when we open registration for part three. And with that, let me introduce my colleague David Myers, who will be moderating the Q&A portion of this webinar.

Questions and Answers*:

Thanks, Annabel and Alina. And thanks everyone for joining the webinar today. So the remainder of the hour is open for questions from all attendees. So we welcome you to go into where it says Q&A in Zoom at the bottom, and that's where you can start entering your questions. So can be questions on anything that was covered so far, or anything else related to Arches. We'll do our best to answer those questions. And we'll try to take them in order that they're received, but there's also a way that you can vote up questions that you think are-- if someone else poses a question that you would like answered, you can vote that up and we'll also pay attention to that.

If, for some reason, we don't get to all questions during the webinar, then we encourage you to post them on the Arches public forum if you think they're appropriate there. And then, I'll be marking each question answered in the queue, even though maybe Dennis or Annabel answers them. And we also see some slides that are rotating there during the Q&A time, and that's just so we don't have one static slide the whole time. You might find something of interest there, or you might not.

So do we have any questions posted here? I don't see anything posted yet.

There are some questions posted in the Q&A panel.

Question #1:

So our first question is, can I ask about the difference between resource models and branches in the Arches Designer? How did the two integrate with one another?

Answer:

Yeah, I would be happy to take a swing at this question. It's a really good one. So the question is, what's the difference between models and branches in Arches? And, in some ways, they're quite similar. Our Arches-- we use the terminology model for what I think would be traditionally understood as a database. And models in Arches are defined using a graph model, a graph structure. And those graphs you can visualize as having components or branches. So Arches lets you define branches. They would be the equivalent of tables in a traditional database. And you can save those. And you can reuse them.

So think of branches as a series of saved table definitions that you can choose to add to a model. So one way you might think of this is imagine that you have a way that you like to describe the location of a cultural heritage object, or a condition as Annabel was showing in her presentation. Once you define that structure, you can save it as a branch. And then, it can be used in any model that you want in the future.

So branches are really components that can be built-- that can be assembled together to create a model.

OK, thank you Dennis.

Question #2:

We had one other question asking whether the presentation will be available as a PDF in the future. And I see that another member of the Arches team, Lindsay, has answered that.

Answer:

But yes, we will be posting a video recording, transcript in a slide deck at the link provided. To that question-- Alina showed earlier on the videos page.

Question #3:

All right, next question, does the Arches Platform only accept projects related to heritage sites? We have a project that we'd like to use Arches for, but it will relate to heritage objects with oral histories and different sites around Niger. Would this qualify?

Answer:

I'll take a first swing of that question. Anyone else can jump in. So really, being open source software, anyone can take the software and use it as they wish. So there's really no process for accepting projects. And although, I would say that majority of implementations of Arches have focused on heritage places or sites as you've mentioned.

There have been some that have recorded objects or find spots of cultural heritage objects. And there are some Arches implementations that have or are in the process of also recording intangible heritage-- I believe also including oral histories. So we've noted your question, also similar question on the forum, and we'll be following up with some additional information on the forum in response to your question.

Does anyone else have something to add?

No, I think you've answered that question pretty completely. But again, just to reiterate the point that you can customize Arches to do what you want it to do. And we have heard from other people who had that kind of use case that you described.

OK, thanks Annabel.

Question #4:

All right, we have a question, how might Arches be configured to import and manage legacy heritage data alongside newly collected data? So Dennis, that might be a good one for you also.

Answer:

So Dennis, that might be a good one for you also.

Sure David, thanks. So we get this question, actually, quite frequently. And it's always, I think, a good one to remind people that Arches is really designed to let you define the data that you want to manage for your cultural heritage resources. And hopefully, you got a sense of how that's possible in the presentation today.

Once those models have been defined, you're free to import existing data into those models. And Arches provides bulk data importing tools. So if you have legacy data that you want to import into Arches, there are tools that would allow you to take a comma delimited file or a shape file if you have GIS data, or we also support a JSON format. And do bulk imports of your existing data into Arches.

And the process, I think, is actually pretty straightforward. Really what it boils down to is telling Arches how to map information from, say, a comma delimited file into an Arches model. So it's the process is pretty straightforward. There is a little file that you use to say, in my comma delimited file, take the first column and put it into this data field in Arches.

So it's a pretty simple process. And it's a common way for people to import information in bulk into Arches.

All right, thanks Dennis.

Question #5:

Next question is, do you offer assistance in setting up Arches? Guidance on downloading and using the software? Can Arches be used through the website directly, or is the downloaded software required?

Answer:

So Annabel, do you want to--

Yes. Thanks, David. Actually, I'm going to answer the last question first in that. So Arches is enterprise level software. So this is software that you implement independently of us. But we do offer-- there is assistance available if you're going to do this yourself via our Arches discussion forum, which you can find on Archesproject.org. Also, if you decide that you would like some help with this, we have a page on Archesproject.org that lists service providers that can help you with any portion of the install or setup and configuration process. And hopefully, that answers your question.

All right. Anything to add, Dennis, to that?

I think that's a nice, clear, concise answer.

Question #6:

OK. Next, is Arches available in other languages? So Dennis, how about that one?

Answer:

Yeah, this is a good question. Arches is designed so that it can be customized so that the user interface can be presented in alternate languages. And those languages can be languages that rely on multiple scripts. So what does that mean in plain English? It means that you can take the Arches interface and translate the interface into really any language that you desire, including languages that use scripts such as Chinese or Thai or Arabic. The software is designed to accommodate that kind of translation.

We don't actually provide the specific translation. We assume the community will do that. But the process for actually supporting a translation to another language is, again, pretty straightforward and well understood by the open-source community. And the actual process for doing this is-- there's a multi-step process for this. If people are interested in the details, this is something that I would encourage you to post on the Arches' user forum, and you'll get quite a detailed answer.

Question #7:

All right. Next, is there a trial instance of Arches available to try out the Collector app?

Answer:

So Annabel, I know you know something about that.

I do. So this is a question-- thank you, Hannah. We're actually working on that right now. At the moment, what we'll be working on is providing, basically, through the Arches demo a way to use the Arches collector app so that you'll also, not only be able to use the collector app on your phone, but you'll be able to see the-- I guess what you enter on the Arches demo site. And we're looking at doing that in the early part of 2020. So definitely watch this space for that.

Question #8:

OK. Next, do you feel Arches may be adopted for archaeological excavations?

Answer:

Dennis, do you have thoughts on that?

Yeah, Dave, I'll take a swing at this. This is a really interesting question because it hits at, I think, one of the subtleties of Arches, which is we've tried to design this system, this platform, so that it could be used appropriately at really many different spatial scales. So we've seen Arches used at scales ranging from the size of a project site all the way through multinational inventories. So inventories that span, say, up to 20 or more nations. And Arches really at its core lets you, in fact, in some ways, I guess, requires you to decide to what scale you want to manage your information.

And the scale of an individual archaeological excavation can be quite a local scale. And Arches is actually quite capable of supporting that. The models that you might create to support that level of spatial resolution might be quite different than the models you used to manage cultural heritage resources at a city or county or national scale. But the fact that you can define your models to meet your specific use cases, and in this case, the use case of managing, say, the recording of various strata in an excavation, is something that Arches can support from a data management perspective.

So hopefully that's not too detailed or too theoretical of an answer, but hopefully, that answers your question.

And I'll just mention in follow up to Dennis, that the Arches team has heard from a few groups fairly recently who are interested in looking at applying Arches for excavation level recording. And if you were to post that question on the forum, then we could prompt some of those other people in the community to see if they can offer any information on what they're looking at, or whether they're moving forward.

Question #9:

Next question. Is it possible to control access on an individual resource level, i.e. Some resources in the same model might be sensitive, others not?

Answer:

So Dennis, I know you've dealt with this very question. Yeah, this is a great question. If you were paying close attention, one of the things you might have recognized in the presentation was that you can define permissions on individual attributes, or individual data fields in Arches. And that's super powerful. In version four, which is the version that Annabel was using to demonstrate this, we don't support the creation of-- we don't support permissions on full resources.

That is to say, let's say you had a model of historic buildings, and you wanted to limit the access to one specific building to just a particular group. We don't support that in version four. However, we are working on version five at the moment, and we expect to release version five of Arches in January of 2020. So really, in just several weeks.

And this specific kind of permission, the ability to set permissions on entire resources, is something that will be supported in version five of Arches.

Question #10:

All right. Next, we have the question, which tools are available to link the metadata result from oral resource-- In Vivo example to different objects into the same collection database? Dennis, do you have any thoughts on that, or are you familiar with In Vivo?

Answer:

I'm not, David, I don't really know too much about In Vivo. So I can't speak specifically to that particular example. At a more general-- but if we look at the question a bit more generically, looking at the question of linking metadata to resources, that's one of the key things that Arches lets you do. In fact, we didn't really touch on this in too much detail today, but one of the key things that Arches really is designed to do is to let you define relationships between resources. And those relationships can be quite rich and semantic in nature.

And you can extend relationships to between resources-- so one particular resource might have multiple relationships with other resources. And those relationships could include metadata relationships as well. In particular, if you have a metadata model that you really like, you can define that in Arches, and that can participate in relationships between resource instances.

So in the general sense, yes, Arches already provides you with ways of linking to metadata. In the specific sense of In Vivo, I'm not familiar enough to know exactly how that would work.

All right, thanks Dennis. And Laura, if you'd like to pursue that question further, you could always post on the community forum with some more details. I know that this Q&A panel limits how much detail you can put there. So that might be helpful. All right, I see one other question, if we do have some time left in the Q&A period. So if other attendees still have questions, I'd encourage you to go ahead and post those. But let me get to the next question we have in the queue.

Question #11:

A follow-up to the archeology question, do you also integrate CRM extensions such as CRM, CRM RKO, CRM GO?

Answer:

Dennis, I'll point that one to you, but I'm sure Annabel might have some thoughts on that too. Yeah, thanks David. Well, the short answer here is yes, Arches does support CRM extensions. And the two extensions mentioned in particular, CRM RKO and CRM GO extensions are supported in Arches. In the general case, really Arches will let you load other ontologies as well as the CRM ontologies. So it has a degree of flexibility there that, I think, is potentially quite

interesting. So if you find that you'd like to add an upcoming or newly approved CRM extensions, Arches has the tools that's already in place to allow you to do that. And really, even consider using additional ontologies if you need to.

All right.

I don't really have anything to add to that, except I think Dennis pretty much said that all. But again, just to reiterate, you can extend the ontologies in Arches by either using the CRM extensions or adding additional ontologies outside of the CRM family of ontologies.

All right.

And actually, to add to that, one thing else, again, I'll plug the webinar three. Because we'll be talking a little bit more about ontologies and the semantics of Arches in that webinar. So we'll have a little bit more information about that in early 2020.

OK, I don't see any other unanswered questions at this point in the queue. There was one other question that an attendee regrettably missed the last presentation and most of today's.

Question #12:

Is it possible to see the webinars again?

Answer:

And I see Lindsay from the team has posted that past webinars are available at the [Archesproject.org videos link](https://archesproject.org/videos). And this one will be made available there also in about a week's time.

So feel free to-- attendees out there, if you have more questions, go ahead and submit those. Do you, Dennis or Annabel, have any additional comments on the content that was presented today?

I'll just say, David, that I appreciate everybody attending today. Hopefully, we've generated some additional questions for you, and some interest in the upcoming webinar. And if you do have any questions, if anything occurs to you over the next day or two, by all means, please avail yourself to the Arches user forum. We're quite happy to take a stab at answering any questions that might pop up in the next day or two. So thanks again for attending.

Question #13:

We do have one new question, which is, could you detail more about future plans for development, such as version five?

Answer:

I was hoping somebody was going to ask this. So thank you, Lindsay, for posting that question. We have, really, quite a long summary of-- or maybe the better way to say it is we have quite a detailed summary of what's coming in version five. And I believe that is posted, or will be posted shortly to the Archesproject.org website. There's actually quite a bit of work there. But I can just quickly highlight some of the main things that we're going to be including in version five.

And they really are, I think, quite interesting. So we'll be doing basic technology upgrades in version five. So refreshing the key technologies that Arches uses. So in particular, upgrading to the latest versions of Python and Django, and post GIS and Elasticsearch. Those are really, I think, key technology upgrades. Those have been completed, in fact.

Additionally, we are introducing some brand new capabilities in version five. And the most important couple I think are workflows. And workflows are a new capability of Arches. They're a way of defining a multi-step data entry process. So think of this as a way of orchestrating the order of operations of a data entry workflow. We think of this as a way of mirroring a business process that you have in Arches software.

So examples might include things along the lines of ensuring [INAUDIBLE] a data entry person enters the right data in the right order for, say, the description of condition assessment on [INAUDIBLE] really, the sky's the limit for what you can do with the workload [INAUDIBLE] flexible, and [INAUDIBLE].

We're also including a thing called the task manager in Arches version five. Task manager is a way of supporting longer running tasks without asking people to wait for a response. A really obvious example here would be allowing someone to request a data download of, say, search results. That might include several tens of thousands of records. Arches task manager will allow you to request the export. It will then go ahead and do the work, and it'll email you when that export is ready for you to download.

Hand in glove with that are notifications. So having Arches be aware of when a task is done, and then notifying you specifically when the work that you've requested is ready for you. I touched earlier on the support of improve or enhance permissions. So that's part of V5. We're enhancing many of the default data entry forms. And in particular, data entry forms related to image uploads, file uploads, and geospatial data. And I guess, I just mentioned this briefly, but we're also supporting export of search results in V5, as well as just general performance enhancements. So improving the speed of data import and export. And lots of lower level things along performance and technology enhancements.

And I guess maybe that's a reasonable place to stop. Those things are all coming in January of next year.

And I'm going to add to that, Dennis, that you can go to Archesproject.org and look at our road map and all of that is published now in detail.

Excellent.

All right, well we don't have any more questions in the queue. And I think that summary of ongoing development that's coming up is a great place to stop here. So we'll just-- oh I see someone saying one more question. So all right, we'll just wait for you to type your question there. In case you don't know on the website, the roadmap is under the development section of the website. So you can find it there.

OK, well I don't see the--

Oh, there it is.

Question #14:

Here we go. OK, one more question. Would a client be able to view the data on your website, or would they require the software?

Answer:

So I'll pass that to Dennis, and we'll see-- there might be some teasing out to do there.

Yeah, potentially. I mean, I think the most direct answer is to say that once you have Arches setup, access to Arches is done via browser. So anyone with a browser has the ability to access your Arches web application. Everyone has to log onto your Arches web application. And based on their log on-- based on their authentication, they're granted the privileges that you define for that particular user or that group.

So you have access to Arches via a browser, and you define the level of access that each user has to your data. And for specific users, you can also allow access via Arches mobile app, which is designed primarily for supporting field-based data creation, data updates, and data edits. So hopefully, that hits to the heart of the question.

And just to add to what Dennis said, and I know you alluded to this, but again, the Arches Project-- so we don't collect everyone's data. So there's not a single website that collects everyone's data. Arches is software that you are independently deploying on your own server, and with the controls on your own data.

OK, and we do have another question.

Questions #15:

What about public access? For example, we can view the City of Los Angeles data from their implementation, which is historic places LA. But it appears like there are other surveys that cannot be seen from the browser.

Answer:

OK, well, should I answer that question?

Sure.

All right. This is Annabel. And so all of this, again, each organization decides what data to publish via the Arches Platform. So for example, for Los Angeles, they might still be in the process of entering their data and making that data available. But that, again, is up to that individual implementation of Arches. So they control who sees their data, what data that they're publishing. But again, that data might be available, for example, so there might have been other surveys that were done. But they might still be reviewing that, and making sure that it's ready to publish to the general public.

Question #16:

All right, one more question has come in. So which is, is an intangible cultural heritage resource, such as festivals, rituals, culinary heritage, associated with the historic site compatible for presentation or collection in the Arches Platform? Any existing case study to those that have availed of Arches already?

Answer:

I'll take a first pass at this.

So this has been asked on our forum fairly recently. And there are already some implementations of Arches that have worked with recording intangible heritage. For instance, Hong Kong University, their implementation focused on Hong Kong. I know that there's a project in the Caribbean. Implementations for Jamaica and Barbados, where my understanding is they are currently dealing with that. And we actually posted a video of a presentation of that work that you will find in the same video section of the Archers' website by Angela Labrador on that.

But feel free to post your question, if you like, also on the forum. And I'm sure we or others can provide more detail there. Anything to add on that, Dennis or Annabel?

No, that seems like a good answer.

Question #17:

OK. One new question, will version five be a direct upgrade from version four, or will the data need to be migrated?

Answer:

Version five will be able to read version four models and data. So in that sense, it'll be a direct upgrade. However, as with any major upgrade, the right way to do this would be to install version five, test it, confirm to your own satisfaction that it meets your requirements, and then I

would then migrate data from version four to version five. That is the fail-safe way to do it, and the recommended way to do it.

OK, we're just about at the end of the hour. So at this point, there are no active questions in the queue, and I'm going to turn it back to Alina to close out the webinar.

Hi, everyone. Thank you so much for joining this webinar today. And we hope you found the content informative, and that you learned something new about Arches. We will announce the dates for the next webinar via our email list, if you want to sign up on our website for that list, and through our social media channels.

If you have a moment, please share your feedback about today's webinar, or any of the previous webinars you've attended by e-mailing us at contact@Archesproject.org. As everyone has mentioned, we're happy to continue the conversation on the Arches forum. And that is a Google group, and I think I have the address posted on the screen here. And if you haven't followed us on social media yet, we share a lot of community updates about what's happening related to Arches around the world. So that's a great place to learn about new content.

So, thanks again. We hope you'll join us next year for part three of this series. Have a great day all. Bye bye.

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