GovInfo API Overview and Search Service Preview – Transcript of audio

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Hello, I'm giving those of you who just joined us the opportunity to set the volume. We will get started in about five minutes.

Hello, this is Austin, sweat GPO. Giving those of you who just joined us the opportunity to set your volume. We will get started in two minutes.

Hello, everyone. Welcome to the Academy. I am with my colleague who is wearing tech support. Today's open art is 25 insert service preview. Our -- John has been GPO since 2009 and has been working at the office of programs, strategy, technology, and the government foot program in various capacities since 2011. He currently serves at the the Debbie program manager helping to Courtney development a release the product owners and development teams. He also serves as the product owner and lead for the government info API. A bit of housekeeping. He will be sharing his view for part of the presentation. When he starts sharing his green, the screen will disappear. To reactivate, there will be a blue bar at the top of your screen. Chat will be one of the options when you hover over it. You will want to click on the icon to reactivate your chat. With that introduction, I will let John take away.

Thank you very much. Can everyone hear me? Okay. Great. Thank you. All right. I'm happy to be bringing an overview of the API and giving you some pointers and tips on how to use it as well as some of the other virtues that are available. So, this is a high-level agenda. I will also be covering how to sign up for the API. There is some steps in the slides, which I think are [Inaudible] in case you want to follow along as I'm doing a presentation. Just a few sort of quick reminders, in case you don't remember why we are here, gum info is more than just a public website. It is sort of three main components but there is lots of subsidiary components. We are a content management system that allows us to manage digital content to ensure authenticity and integrity. Iso 16363 digital preservation repository, currently, federal and I think in the world, repository to hold the certification. As well as the public website that all of you know and love. And it is the website the folks use, we also provide a lot of [Inaudible] first, just another definition. What is an API? I included something from Cevilla. The key things I wanted to take away from this is just that an API or application programming interface is essentially a defined set of rules and features that allows two programs to interact with each other. An API is primarily intended for one system, software system to interact with another system. So, while this can be used to [Inaudible] individual request basis, the primary intent is that this is going to be used by someone who is a developer who is both a script or something that will be able to pull repeatedly the same type of information to pull in, especially in our case, government, you know, official government documents from different collections and content. Again, we are providing a consistent structure to those request and response is to allow someone to predictably use our data. so, we provided documentation. We dropped the Lincoln. Um, this allows you, um, this is where we essentially specify our contract with users. Here are the ways you can interact with our API. The great thing about this particular documentation is that it is live and interactive. It allows you to actually try out the API from this sort of user-friendly interface and then from there once you learn more about you can go and build your own tools to use it. We use an industry standard open API specification, which basically just is sort of a way that developers and users of APIs document how an API works so that you can very easily understand how to interact with it. We also use something called swagger. We use the swagger UI to take the opening notification and make it [Inaudible] view. And again, when I get to the demo, I will actually be

showing this. We also use the API, you do need a key. This key comes from our friends at GSA who manage the API.data.gov program. At this is an awesome resource that provides access to almost 20, or around 20 more federal agencies that are using this to make access to their data. Um, so, I will work through steps on how to do the sign-up. Um, but if you don't want to sign up, I think there is going to be, um, a demo key put into the chat that you can copy and you can use that. So, another thing I want to point out, the API is not just used by individual developers out in the wild. It is also used by other federal agencies like the Library of Congress, the use that to pull information from guv info into Congress.gov. Similarly, national archives office registrar uses it to provide data to federal registrar.gov sites as well as the easy [Inaudible] so, moving right along. Here are the steps to sign up for your own key. I can briefly demonstrate these but I'm not going to go through step-by-step want to get to the demo part. I will just highlight and show you what it looks like. There is a sign-up form. You just fill in your name, last name, email, and you can actually provide to be required to use it. But that is not required. Quick sign up and in a few minutes you should be getting an email, it will come from no reply [Inaudible] . It will give you a key. Nikki is going to be important for when you access our access the API. We will go back to the API docs and you will enter the information in a certain area. And then all your requests from that page will use it. I will demonstrate that using a new key that I created for myself. But, you can come again, use the demo key. So, one final bit before we talk more specifically about the different functionality and services you can find in the API. The sort of foundational concept for guv info. It is our collection package granule model. This is derived from the open archive information systems reference model, another Isis standard. I'm not going to read all of this for you. But I really want to highlight this diagram and the key take away for the slide of way that our content is organized. It is very important for us to understand how to use the API. It is also useful for knowing how to navigate through the public website, but it is very key. We see these terms and in flexion package and cringe throughout. So, collections are these large buckets of content that are logically grouped together. You can use the congressional record as an example. Within a collection, there are individual packages. Those were sort of like a complete publication. And then for some collections, not all, the packages are further broken down into smaller subsections which we call granules. Granule is a funny name. But, we had trouble figuring out a way to use a term that was not already privileged in some type of other content. We can't use perk, section, that sort of thing. Those have specific meetings [Inaudible] so, this is the first time I have tried out this slide with folks. So, I would really love feedback in the chat when you have a chance. If this diagram in particular for this explanation of this model has been helpful, and if you have any questions about that, give your answer later or questions for you to think about and feedback so I can improve this to make it more accessible for you to use [Inaudible] final note before I move onto the next thing, I did mention that not all collections will have packages that have granules. There is also another note that there are some cases where a package can exist in multiple collections. For example, Congressional serial set documents in the serial set collection but are also accessible from the congressional documents section for example. So, [Inaudible]. Okay, so, again, I note that these slides of got a lot of text on them. I will not read through them because that is not exciting for anyone. I wanted to these to be a good take away for you for later is a good reference. So, the two services and endpoints I will talk about in this slide are really useful for the discovery of what is available. So, the first one is called our collections endpoint. There is a basic version of the request frequency what are the collections that are available and you will see there is a collection code and here is what it is called. So Lexi rep is the congressional record. This we built sort of as a supplement and ideally a more powerful alternative to our site maps. This is used by developers to understand what is new in the system and I want to be very clear here, this is a date, there is a date range as part of the request. That date range is not the official publication date. The date that it was added or updated in guv info. So, for example, the congressional records from yesterday, the date would not be for yesterday. It would be today or at some point later whenever the last time it was added. The updates could include if somebody made an edit to the metadata to improve something or if

we reprocessed it to enhance the particular package, you will see that the last modified date is. In addition to that sort of just a sick going about collection and time, there are some additional filtering and parameters that are [Inaudible] our published endpoint provides some similar functionality to the collections endpoint. But, the key difference here is that the dates are the official publication date. So, again, going back to the commercial record example, yoga the congressional record for yesterday would have yesterday's dates. In the ranges would be little different there. The other key difference on this one is that you can do, get results from multiple collections whereas the collections endpoint only returns [Inaudible] okay. And then these next two services are especially the next step that you take after you discover things from the collections or publish point. Because the collections and publish and points are going to return a set of results that include links to the individual packages. So, this is an example of the euro or one of the package summaries for congressional hearing. United 17 Congress for this will return a set of Jason, which is sort of a lightweight data exchange format, that is very similar to the information that you would find on a details page. On the public website. This is also going to provide some access to the related endpoint. Which we will talk about in a little bit. For collections that have that enabled us all as if there are any granules for a configure package you're looking at it will give you access to that list of grants. So, again, the just as a reminder, the package is a complete document. And then if you look at a granule it would show you the next level down. So, for an issue with the federal registrar, those of the packages at a daily issue level. But, if you're interested in an individual notice, or a final rule, those would come a final rule from the EPA would be a granule. Granules can be a varying size. Depending on the collection and content. Like a granule could be half of a column on a PDF page, essentially. Or it could be an entire, you know, 300 pages of the physician fee schedule. So, trying to give you a little bit of a sense of that size. Similarly for the Code of Federal Regulations, granule could go down to an individual section or it could include chapters or whole volumes, essentially. So, so, we talked about the packages. So, the granule endpoint is a subset of the packages, so you know a package and then you look and see the list of granules. So this particular run is going to give you a list of those granules. And then the results will have a summary for one of those granules. the next one again, as I mentioned, we have our related documents featured on the public website which is, in my opinion, one of the sort of key, you know, secret sauce type key values of government info and helping our uses and understand how official documents relate from one type of document to another. Or from one branch to another. So, for those of you who have been around for a while, this is an evolution of some of the related citations that you would see on details pages where you would say this congressional record has a reference to a bill. Instead of just seeing that that congressional record has a reference to the bill, now you can click something and see the bill that it is referring to, or the version of the bill that it is referring to. So, so this was one of the major features when we did the transition to guv info. And still, in my opinion, the most important. Talk too much but technology but there's a lot of really cool tools that we are using to help define and make those relationships better. We are continually adding new use cases to that expanded relationships between different document types as we go through, as we have time. So, I want to show, or, we talked about that from the public website. On the left-hand side of this slide you can see this is a congressional bill. The frog enforcement recovery act of 2009 could and you can see some of the relationships. So, different versions of the bill. The history of the bill. Related congressional committee prints and reports. And then a presidential signing statement which comes from the executive document collection from the published presidential documents and then the public and private logs related. And you know, in the future and actually this one doesn't include it? I can see on the right Camino you can also see the statutes at large references. On the left you see this is a virgin that is available on the public site or in the user interface. And on the right you can see the same idea, the same concept here is the relationships for this particular bill. In the API. So, each one of these gives you a link to a relationship which will then have a set of results. And I will walk through that briefly using the sample. So, again, the related service is going to get that list of relationships and some of the collections,

the relationships are either at that package level or a bill, which doesn't have any granules. But otherwise are going to be related done at the individual granule level should select a register number. And then each relationship is going to return one or more of the [Inaudible] and then I do need to apologize, I need to update the slide. It doesn't have a full set of relationships that are enabled. We adding new ones I keep forgetting to add them. So I will try and update this slide and I will bring some updates to help provide a more current [Inaudible] the next thing for both the user interface and API is as we make those available, if you go to a bill or whatever the document is, you will see that related to tab a show of, or in the case the API, you will see it in a relationship or related service that might [Inaudible] this is just a subsample of what is available. We also added relationships in congressional committee prints and we have got some relationships [Inaudible] him. The thumb typical usage scenarios for this. Developers who are going to crawl and get content from us or updating the content they have, so, as I mentioned, Congress.gov uses our API to grab new content, you know going to congressional legislative content as we make it available so that they can add it into their system and they can do some additional supplemental work on it. Uniquely suiting the needs of Congress. But, the idea with this is you would use either the collections are published and points to identify new packages of interest and then follow those to look at the individual summaries and grab the links to the metadata or the content and use that. That could be, you know, using it just to display it or using it to do some analysis. There is also the things that can be done with it. And some collections you dig further into the granules, actually, and then for the other one is the related documents. And as users are crawling an update they may decide as part of this process of checking out what are the related documents that are available for this. Finally, before I jump into the demo, something I want to kind of give the current preview, something that is coming soon in the next few months, we are working on a search service. This is one of the, for most exciting features for the API that we where released and prevent provide a lot of flexibility for users to actually, um, create very specific queries to find the things that they are specifically interested in and in a very flexible way. So we will be doing things that are allowing you to put in a query that is very similar to what you put on in the search box in guv info and you will get the same set of results plus some additional content that isn't necessarily available from the UI. So this is just a quick preview, snippet of what the proposed set of results are. We will be sharing some more examples of this on hub appeared shortly. Sometime this month is my goal. And so the initial launch is going to just return a subset of fields. I'm not going to read through all of them. But, you can get the general idea that it is giving you information about this package as well as the availability of what kind of files you have. So, and when we get into the demo I will show the page where you can see more information about this particular feature and provide, you know, feedback, learn more about our plans and write feedback. so now I'm going to jump into our demo. okay. So, first things first, I will show you on our, on the main government segment developers and developer hub, you can see sort of a good high-level summary of the what different things are available for developers. So, we have got links to our get hub repository. As well as a little bit more explanation of what some of those individual tools are as well as direct links to the service. So, for example, this will take you directly to our API documents. Which we will go to. We also have a repository that is primarily I think it is entirely XML. For a certain subset of our collections. Our government info link service that allows you to use a query parameter based request to always get the latest version of a document. It is an evolution of the old [Inaudible] as well as our RSS feeds from the front collections. And our --. We also have a link to how you can embed a search widget for government info on your website. So, I will not talk anymore about those, but just as a quick pitch, that is somethings you can do. All right. So, I will jump over to our API documentation. If I can actually move the chat over here just in case. Make sure I'm not missing anything. all right. So, the first thing you will do when you come to this page is if you don't have an API key, a key yet from API.gov, like if you used the EPA or vibrate congresses, there is a large number of different agencies that have federal APIs, you can click on the sign-up here link and that will take you to a form on the government

post site work and I can come you can put in some basic information. Click sign-up, and you can get that email very briefly after sending the format. With an API key. And you can immediately start. So, again, the reason, so, we use that service to help, you know, make it easier for users to to get themselves and it also provides some [Inaudible] to make sure that, you know, no one user is taking up so many resources that other users aren't [Inaudible] . We are really excited to work with [Inaudible] . It is a great tool in service. I just love it. So. Once you have your key, you will come if you want to use this interactive documentation you can click this authorized button. Which is going to return this. So, you can put in your API key. So, I will put in, so, you can put in, say, the demo key. Now this key is very rate limited. It is not for someone -- I will put in a different key just so that if other people were watching or using it [Inaudible] the rate limit on this is very low. In the orders of 40 or so requests, that kind of thing. Whereas the normal requests are much higher. Actually, I think it might be 40 per minute. I don't remember. It's not intended for production. I will put in this. And close that. So now I can use this interactive documentation to actually execute the race against API and get my responses back. So, the basic request that we have here, and don't worry, I'm not going to go through all of these, but if someone wants to ask questions I'm happy to do a demo. Or if you have somethings you want to try and you can try on your own or put it in the chat and I can look at it. [Inaudible] so again, we have the top level scenarios. We have our collections and publish endpoints. Those are sort of discovered documents. And then our packages endpoint, which is give me information about this actual document. And at the bottom we have got our related. That is wondering about relationships between documents. In the future, we will have a search service that will show very similar to this that will have some different things on it. Be on the lookout for that. So, the first thing you will do when you are learning about guv info API is you will want to see what you actually have? What can I get? So, we will click on this and it will execute and you can see for developers this is helpful because you can see you can curl up with this or put the request [Inaudible] this is their response that shows up in this documentation. But can we also have a set up to give you a view of it in just a separate URL. So, you can see here, each of our, so, this provides us a list of collections. So coming here you can see the collection code, which is that short form that basically every single one of our packages has this as a starting point. So, if you're looking at a version of congressional bill it will start with bills and it will bills dash something something. So there you have got our friend Kevin the user readable name of the collection is. And then you can see our package count. This tells you that we have over a quarter of 1 million different versions of congressional bills. Number is constantly growing as Congress does its work. We also have a number of other corrections. So, here, both bills and bill status. Don't include any granules. But, we have other collections like the budget. Or Dakota figural regulations where there is a sizable number of packages, but there is a huge number of granules. So, depending on the type of content you are looking at, you are going to end up with a different structure. And that is all based on our interactions and discussions with the content originators. The original providers of this information. So, the Code of Federal Regulations, if you know about it, it is highly structured. So Camille got the parts and some parts and chapters. All the way down, each one of those levels we can have a granule fork. That is why you will see that there is just that large disparity. So, this gives you a sense of the idea for this is just to give someone a sense of what can I query and what are, how large is the set of content? So, and, feel free to let me know if you have any questions as we go through this. that goes down just a little bit. All right. So, um, but once you know, but, what collections you have then we can look into learning about a specific function. This is where we would say I want to know what are the new [Inaudible] because it is a nice one that has got a set of, you know, granules that we can drill down into later. You can see here in this, we have got a, this is sort of like a high-level version of what your process would look like. If the corrections with you need to specify with the last amount of start time. Again, a reminder that the last modified time is not the official publication date. It is the time when it was added to government info or if it has been changed since it has been added the last time it was changed. So, so, again, I will choose the congressional

record. Hopefully, we do provide a list of different collections that are available. So, you can choose this and it will be fine. So, [Inaudible] start date. So, another key thing. All APIs are very specific about how you put in your parameters. If you put in the parameter wrong it will tell you that you did it wrong. And that is just, again, the API is a contract. You say if you give me this I will give you these set of responses. So, so, we are going to do, we are going to see how many, what has happened to the congressional record collection since the beginning of the month. So, I will point out that this is an iso-86014. This gives you the date and then as well as the time. We use the Zulu because this is UTC time. Sort of just the standard similar to that UTC time. So, you have to put in this format and it will complain if you don't. We have got some other optional parameters here. One thing that is not optional as we want to know how many records he wanted to return. I'm going to do a smaller set but we can do a max value of the thousand. I will do 10 for now. Some other optional parameters that we thought were important to make available were by Congress. Or by.class. So, if you want to say I want to see all the updated congressional bills for this past year, but I only care about the 115th Congress, you can specify that. Similarly, for.class, there is some categories within each, within each collection that are.class. They are categories. So, for bills, you see here, we have got different build types. Like a house bill, house revolution. Senate concurrent resolution. So, you have to put these in specifically but you will, as part of our responses, [Inaudible] and I will give you a demo of this [Inaudible] and then since we know bills are very important folks, we can allow have a specific parameter for that. Here as well. You can go for a specific, when we get the enrolled bills or something you can do that. But, we're doing congressional records. That doesn't really apply. This last one is the offset marketer this is our way of telling the API where you want to start. We originally had a concept of an offset parameter which we are deprecating. This offset Mark is allowing you to get all of the collection content that is available with the original offset marker ensuring the first 10,000 results. That was not really a great thing. So, in the past year we did at this to make it more useful for folks. The star is the first request. And then subsequent requests, to provide you that information. I will click execute. Again, it will load into a new tab. But, the information is also here. So, you can see what it looks like you can see what the URL will look like. So, you can see here, for the collections response, we have got to here's the total count we can see that, given this, you know, our parameters that we provided, so the beginning of July, there have been 19 added or updated packages in the current irrational record collection. So, you can see we have got a link to go to the next page. So, we also set of 10, that we can see the first 10 results but then you can click on, you know, a system could follow this next page information that you get from the next [Inaudible] our packages, you see the results. We have got the package I.D. That last modified time, which, I will keep harping on is very important to know when is the last time that it was added or updated in the system. And in this package link, which I will refer back to in a little bit. It is that Jason, equivalent to our content details page. It will give information about the package at a more detailed level than you would get in the list. This.class will tell you a little bit about it. So for congressional record, all the.class is [Inaudible] we also give the title and what associate Congress is good in the case of finical collection that doesn't have a Congress metadata value, this will just return as know. You will see that in a lot of instances where we will either return it with no, which is essentially blank, or it will be returned at all in some cases. And then the date issued. This is the official publication date. So, I will back into the documentation and we will talk about, we will jump back into this one to look at the actual package summary [Inaudible] we can figure that out. So, this next one, I'm not going to demonstrate people, it is the same thing that we just looked at. But, instead of just saying show me everything that is been added or updated since this time, it is show me everything that has been added or updated in between these two times. So, it is just a little bit of a easier to say I only want a smaller slice of the data. So, again, going back to our packages, so can we have discovered a list of packages from the congressional record. Now I want to learn about one of those packages. So, I will go back [Inaudible] package I.D. So, we are just entering the package I.D. That's all we need to do here. Execute. And it is, and this information will

vary from collection to collection and packaged package. But, the idea is that it will give you a lot of good, descriptive information, not quite the level of our mods metadata but in a very lightweight and user-friendly way. System from the way to learn more about it. So, you can see, again, some of those information that was available on the collections endpoint. But can you can also say hey, this only had one physical book. And what session [Inaudible] you can get a link to that congressional details page. So, again, this is the user, you know, person looking at it view. And then this is a system view. So, so, we have got volume in the congressional record is, what ranch. You can also see here is links, API download links for different portions of this. You can see our preservation metadata, and linked to the house, the PDF for just the house section of this particular one. Visibly, which will give you access to the entire package. So that is all of the content in metadata both at the package and each individual granule. Both together, the mods metadata which is, again, that sort of a standardized format that we used to provided to captive the data for our end-users. And that is in XML. And then the Senate. And overall PDF and again, the different sections. Again, so, this download section is going to vary by piece of content. So, some that will have XML. Some of them will have Excel files. Some of them will just have text. And so on and so forth. So, we will see that. You can say hey, this one had total 45 pages. You can see some other basic information. You can say we have got this too.class number here. And what category it is and some other identifiers that are useful. Such as the IOS system I.D. And at the bottom here, you see the link to the granules link. I will go back to the documentation, but you can just click this and see [Inaudible] so, close this. And we will go back here. So, similar to our collections endpoint, the granules endpoint is going to ask you to provide page size and that is because sometimes there is 10 granules and sometimes like in the case of the history of bills collection of the congressional record index daily package could have 10 or more thousand granules. So, we can, so, again, we will provide the page slide in the offset mark. To just say we want the first set of results to execute this. That is going to give us this results back. Again, you can say we have got 123 granules in this package. That means that for this issue of the congressional record, there are 123 different sub parts. So, it can be something until 10:00 tomorrow or someone speaking on adding additional sponsors. They actually go to it and see if there is we have got a tribute to Iraq with a speech on the Corunna Veterans Memorial Park. This allows to go and get a full list of all these things. And then go drill into granule summary and get [Inaudible]. So, I will grab one of these. I will give it a steakhouse, let's go with that. So, so, again, that was a instruction of getting that list of granules from an individual package that you already have. Again, from a system view, once a system will take and discover documents using our collections or publish service and get the list of packages and then from that list of packages, grab an individual package and then from there, you know, have a to script a thing to say. I want this particular piece of, you know, this key package. So, these Jason values are in oh, key in values and say I look for the granules link and execute a request to grab the next thing. So, we will just do that here in the U.S. you can get a sense of what these fields look like. Again, we have got the same, let me go down here. So, we have got our package I.D. and our granule I.D. So, again, granule IDs are going to be different based on collections. But, again, if you are following some of the API, we are providing all the information to allow you to discover the next step. So, for congressional record, the congressional record package I.D. is just basically the date that is associated with, generally speaking, there are some that added issue number case multiple issues or volume issues on any given day which happens often on a changeover of Congress for sessions. Then, you provide the granule I.D. in the granule I.D. in the case of congressional record is going to be the package I.D., plus something else. So, you can see I got a page reference to the Senate. And then it is the third granule for that [Inaudible] that is not particularly important but just [Inaudible] . We will click execute and now we see the granule summary. This is the same general idea as a package summary. But that full issue of the congressional record. But, this is at that individual speech level. So, we can see things like okay, we have got what committee is this associated with? The title? A link back to the package. Where can I download this? I can get the text, I can get the PDF of it. What book is it in, what

page prefect? What type of congressional record thing is this? So, if you wanted it later, you can recognize they can put that in. Who is the speaking member? And so forth and so on. So, and I think, yeah. Close a few of these. Um. But it is our granule summary. I'm going to show the publishes as well because it is a different way of thinking about this. The key part for this is again, the sort of parameter for this is based on the date that something was issued. So, this is looking for the official publication date. Don't care about when got info in it. Just to say I want to know something that happened on, um, I'm going to do the start and end date. Makes it a little bit easier. Um, I will want to know this thing that happened between these two dates. We will say 2022, 01, 01. So, we have to remember this is year, month, date. So we provide some help on that. And we will say 2022, 12, 21. I want to see all of the packages that were officially published between these two dates. Give me the first 10. And I want to know about congressional hearings and congressional reports. So, this again shows that you can do multiple collections on this using this service. Again, we have the same sort of thing where you can go [Inaudible], depending on what you're doing will make more sense than others. In this modified sense allows you to then say further limit the stand and say I want to know about this date range. Further, I only want to know about the ones that have been changed, added or changed since whatever time I [Inaudible]. So, the concept of modified or let's modified in the overall scheme of things is useful for a developer. Because I'm executing a request for new documents as of this time. Get a set of results that are true as of whatever time you put the request in. So when you do a follow-up request you would say hey, I need to know what are the set of documents that [Inaudible] since after the last time I looked. So, that is the value of that. Again, we will just give our offset market here. Which is, again, that sort of, what is the page creation. So, we have some congressional hearings. Let's see. Looks like we only have congressional hearings on this page. If we kept going would have additional ones. But, I will just highlight on the next page, you can see what the request is for this offset Mark is this very long and complicated string that is meaningless to a user but if you send this back to our API we will say we know you want to start after this last result. So on, so forth with that. Again, you can click here and say we have congressional hearing. This is about shareholder primacy. It is a joint hearing. So on and so forth. I can look at individual granule information. There is only one in this but this will give us some more information. This is a joint economic committee. Here are links to download the content. Here is some members of the committee that were mentioned or listed in the documents itself. So, this allows you to really rapidly, if you understand how to build APIs, or points, things that rely on APIs I should say, grab a lot of information very quickly and then do some very powerful things with it. Even within GPO, we are using discovery for API to help with certain tasks that we are doing. So. So, and, again, I showed the date issued a start date and date issued and date. This is the state issued start date only is going to be the same thing. But only for it is going to be a starting point. But, it will say giving everything since this time. And then the last one, I will just try and quickly demo related service. And then that will leave hopefully about 10 minutes for questions. So, I will use that same bills package that I demoed earlier in the slides. So, again, we can but this axis I.D. A key thing I want to point out here, and it is going to be a thing that will provide some additional documentation on in the future, but it is also going to be exposed the API itself is that the access I.D., which is more of a generic term for package I.D. or granule I.D. is going to very taste on collection. So, again, thinking of the Federal Register as an example. You can see at the complete issue level there is not going to be any relationships to other federal registers or other collections. But, for an individual rule, we could see that final rule and what is the CFR in section that is affected by that find. And that is where we need to have the granule level access I.D. So, but, we will show this example for the bills. so, and, again, you can see here is what you would do if you want to execute using curl. Or if you just want to grab this and put it directly into the browser you can do that as well. We also provide [Inaudible] to some extent it is sometimes a little bit easier to view it this way. So I will put pick this bigger. And this is returning a list of relationships for that particular bill. So, we can see a related bill status, different versions of the bill. The bill history. Congressional committee Prince and so

on and so forth. We have a very large number of wide variety of relationships. And as you might surmise, some bills will have more relationships than others. That is partly due to where this is in the legislative process. I can introduce Bill may only have the bill stats relationship in the history of bills. It may not have any other relationships or it may only, you know, may only have a few. And as things get kind of into statutes and put into U.S. code, they will show player. If something never passes and becomes a public repertoire it will never show up here. So, but, again, this is giving a user site I want to know about this bill and say tell me all the related documents to it. So, I will just go from the particular access I.D. to show a set of relationships. Or we will look at the different versions of the bill that are available. So we can see hey, we have introduced in Senate version. The recorded Senate version. The engrossed Senate version. There is an engrossed in the house. So each of these represent a different version that has specific actions associated with it. Within Congress. Excuse me. Until it gets to be a moral version, which is what we are originally looking at your beck and you can see here that you can get, you will see the date issued per package I.D. The link to that package again. And some additional information. Each relationship is going to have a little bit of a different set of information, displayed at the sort of relationship link level. And it will be what makes sense for that sort of relationship. So again, this bill is to bill but there are other ones that we can get. yeah. That is, I think that is all I wanted to demo here. Which, again, we can do that same thing that we did showing the relationship bills here just by putting information here that you would see as well. so, again, you will see the same thing generated from the UI. Hopefully, that is, I don't know if it was as brief as I wanted but it is a brief overview of what you can do with the API and it can give you a little familiarity with what this documentation is providing. Before I jump back to this slide just to do a little bit of wrap up, you can get some time for questions. Again, I will point out our developer hub for the API. We have some documentation for it here as well the talks a bit more about how to manage keys. Also the real thing I want to point out specifically is issues area. So this is where we, and users of the API can provide feedback and ask for changes. Or we will often add something new like the search services and hey this thing we are considering and we want feedback from our user community. So, the search service is one that we put out several years ago and we just it is a thing that we wanted to do, we just, like, we have had to sort of think about other priorities. And it is a bigger thing and we want to make sure we are doing it right. So, burdensome criteria for it and we have been getting information back from the end-users that we are trying to incorporate that feedback into our [Inaudible] so, really highly recommend if you want to use our API, getting familiar with this, see what is available and is a good family would API yourself, if there's something that you want to see it do that doesn't currently do, create an issue and let us know and we will look at it and, you know, we will evaluate if it is something you can actually do and you just may not know about it or is it something that we want to put into our backlog to develop and make available to you. To everyone. So. Um. Get hub is a key feature for us in making sure that we are serving the needs of our users for the API and [Inaudible] him. With that, I will stop sharing my screen and we will, there's a few slides that I think I will run three is pretty quickly because they are somewhat repetitive. Again, we have got some things about how to get started showing how you can sign up for the key. There is some interesting information on how you can pass your key. I will not talk about this in detail. But, there is some more information in the link here about how you can do that. And there is some benefits to doing it this way, doing it one way versus the other. Again, you can look at our APA documentation and give us feedback. Give it API issues [Inaudible] again, we have got some links to some of the different key things that are useful for the API related documents as well as API documentation in our depot. And some other things for our related [Inaudible] which I talked about [Inaudible] and with that, I am done. But, I am happy to answer any questions that you might have.

If any of you attendees have any questions, please put them in the China we will get them to John to answer. Would you be willing to put the satisfaction survey into the chat? Thank you. So, for those in

attendance, pleasefive survey. It lets us know how we are doing in terms of the webinar, in terms of the content, there is any additional, um, content to provide that we might be missing out on. Come on, we are happy to take all of your feedback. Um, and just so that you know about upcoming webinars, we have one tomorrow on library something refugees in the U.S. financial system. And the Academy tomorrow. And we have another one July 18th, economic Census 101. I'm not seeing any questions in the chat so far. I see a lot of people think that this was very helpful to them. If you have a question, now. So, is there document content available to the API that is not available via golf info or via bulk download?

So, great question. Barbara. The answer to that is no. There are things available through the API that are also available through governments or the only sort of nuanced answer to this question is we don't make the bill, like sort of bill status, congressional build status can we don't make the ESR both data content we don't make that available via the main guv info website. But it is available for the API. So, um, kind of the API is providing programmatic access to anything that is available in guv info, including the direct access to bulk baby. I hope that makes sense.

All right. We have any more questions? If we do, please put them in the chat.

I will drop my email in as well. Generally speaking, if you want to put something into the get hub issues, that is probably for the best. But if you would email me with any follow-up questions, do have that [Inaudible] happy to answer your questions after the fact.

And [Inaudible] the slide deck is going to be, we will send out a link to the webinar once it is in our archive. And there will be a handout that includes the slide deck. For those of you who are looking to access the links in the slice, those be provided. All right. Well, if we have no further questions I will go ahead and wrap up this webinar. I would like to go ahead and think John for presenting this fantastic webinar. I would like to thank my colleague, Helen, for doing the tech support. And thank you all for attending. Have a great day, everybody. [Event Concluded]