

EVERGREEN ONLINE CONFERENCE 2020

Wednesday Track 1, Antora! Antora! Antora! - An Evergreen Documentation Bombshell

I would like to welcome Blake Henderson, a senior development engineer for the Mobius -- Consortium in Missouri and worked primarily on writing code to fine-tune the Evergreen software -- Missouri libraries and an active-- member of the Evergreen community at large. I will hand us over to you, Blake. And we will get started.

>> BLAKE GRAHAM-HENDERSON: Okay. Can everybody hear me?

>> RUTH FRASUR: I can.

>> BLAKE GRAHAM-HENDERSON: Great. Well, thank you, everyone for coming to Antora, Antora, Antora and Evergreen documentation bombshell. My name is Blake, thank you, Ruth, for that wonderful introduction, these are my slides prayed hopefully you can see those and there is a link to them there.

Incidentally, you can take the last part of the URL off and you can see it in the other presentations I have given you over the years. Also the future with the slides, you can press escape and see them at a Birdseye view if you want to follow along. Feel free.

So, starting right in, this presentation is about-- documentation. Don't let the Antora word confuse you. We will be talking about specifically Evergreen documentation so the question I just wanted to generalize little bit, what is documentation? Mainly, and I wanted to stress this the most, mostly -- communication is just words -- documentation is just words and sentences, nothing fancy just trying to convey the instructions or the training and documentation but we also want formatting, headings, numbered lists, highlighting, some images, navigation, extra stuff on top. How do we humans right documentation quite well we can write a book. That requires an editor, publisher and takes a long time. And by the time the book is out, since we are documenting in this case software, the software will probably be different by the time the book is out.

So we can publish online. We do not need most of that stuff, but we still need editors, but suddenly you need to know HTML.

It is a pretty big hurdle. So now we can do it online with AsciiDoc. We still need editors. Do not need to know HTML but need to know AsciiDoc. That is where we are. The Internet is full of websites and every single website is basically HTML at the bottom, it all comes out HTML in your web browser shows the browser what to show the user. But instead of needing to know all that nitty-gritty HTML we can write it in AsciiDoc, just a brief overview of AsciiDoc, those of you that were in Lynn's session, she got into great details about AsciiDoc and I will not get that in -- that deep into it but I feel I need to run over a few basic ideas.

AsciiDoc, it does lower the bar of entry as compared to knowing HTML. Which will attract new editors because it is easier to learn and it does reduce the number of keystrokes required, that is another big one. So we can really just focus on what we really need to focus on, which is the words and sentences.

So it is simple. We really just need the words from everybody. We want to minimize the amount of stuff around the words. We really just want people to provide the instruction, the instructional sentences. And all the formatting ought to be just dead simple.

And images --

So let's look at some words. These are some words -- that were taken directly out of an Evergreen documentation page. At the top, we have item status followed by deleting items statuses, followed by some order instructions, telling the user what they should be doing to a Compass the task. Then there is the supplemental image right below their-- there , followed by the note, you will not be able to delete statuses if items currently exist with that status. Pretty straightforward. Those are the words but of course -- that is not pretty it is all just walk and white and it is hard to follow. We have a subheading and heading and these are the words here, breaking it down a bit, followed by the numbered list and it can also be bulleted, followed by a picture file and that is a note there at the bottom.

So, AsciiDoc in action. Here we see how we can tell the AsciiDoc interpreter what each of these means so that the top heading is a single effect single =, that is the mustached format and when you look at all the different syntax for AsciiDoc, you'll find variations that accomplish the same thing. We're focusing on this style, the mustached file for our headings in Evergreen documentation. A single = is the top heading, and there's only one main heading per page, that

is the title of the page. Followed by any number of subheadings and sub, subheadings End Sub, Sub, subheadings, and introduce more equal signs the further down the tree that you go great so a subheading is just one level below, 2 ='s and then three equal signs, etc.

The list, instead of manually typing the number 1 and 2 and 3, and then you come back later and realize you missed a step between step 1 and 2, suddenly find yourself having to change the numbers all the way down [Laughter] come all the way down the waterfall, then you introduce a new step and suddenly have to change the old two to a three and the old three to a four, etc., AsciiDoc simplifies that and is the number and for us and all we have to do is say period space, that means we want a numbered list. And it will figure out the numbers for us, pretty sweet. All we have to do to introduce a new step in between the at another period space and type out whatever it was.

Lists are more simple and they are an*.The picture file is syntactically like that, image:: and then a path to the image and if you want to signify a note, you bracket the word note, followed by your words.

AsciiDoc is really trying to minimize the time and that keystrokes it would take to put your formatting in, it really was to maximize those words, that is what is really important, so AsciiDoc is great.

Here is the results of the previous slide, translated into the website, interpreted by the AsciiDoc engine and turned into HTML. This is listed-- lifted straight off our documentation page 3 deleting the statuses, something popped up., Do we have a question?

It is okay. Do I need to --

>> RUTH FRASUR: I do not see a question there, only comments. It was me that commented.

>> BLAKE GRAHAM-HENDERSON: No problem. I will get through the slides and then maybe we will have a chat at the end. So, here we are, here's all the words and we have a nice -- subheading stands out, deleting items statuses stands out, it is more bold and has a different

color. So it is a little nicer than just the words. That way we can easily at a glance distinguish the headings and then there is our list, one, two, three and then our picture, the picture has an arrow drawn but that was just in the picture, there was not anything about AsciiDoc -- it is just the image itself. A post-it note with the pen on it wrapped in the box and then the words that we want people to read.

There you have it, the results of AsciiDoc. You may have noticed some of those words were italicized, I want to touch on that a little bit here. It is easy.

Lynn went into this and much more detail but if you want to italicize something, wrap it in underscores like that in AsciiDoc will slant the letters.

One of the biggest issues with documentation in general is the organization, really, all that stuff with AsciiDoc, how to get your words and undo your formatting, it is all good but we get lost in a sea of documentation and that is part of the issue that we are trying to solve here. Where is everything? Where are these documentations, the files? How do I edit those files and make something new?--- How do I make something new?

Let's get into it a little bit here. We, the editor -- community, we put this in the source code depository in there with all the rest of Evergreen source code, there is a magical, special folder dedicated to documentation right in the root of the Evergreen repository and it is aptly named, docs.

Everything else in the folder is not related to docs and the documentation so we can focus in on the folder called docs.

This is the state of the docs folder as of last week when I made the screenshot, there are 46 items in the folder, and it looks like that. Acquisitions folder, admin folder, admin initial set up and so on, followed by some loose files, mostly release note files and some root files. Now, well, I should have called out -- the media folder I have highlighted here is for the next slide so you understandable double-click on the media folder and show you the contents of that folder. That folder is somewhat special.

This is the media folder. There are 1344 items in this folder and these are all of the pictures that are referred to throughout all the documentation in the Evergreen documentation. It is quite a lot of files. Most of them are labeled aptly with the prefix acq, for acquisitions and so on. I wanted to point out the navigational little bit here so this is an example of the admin folder, and the Evergreen repo, and the results of that folder as it is shown in the navigation on our current documentation website.

I have highlighted here item status and deleting items statuses, to clue you in on those, the document Tatian I used as an example earlier. So they are down, number 61, down there.

Here's a look at the admin folder. There's a lot of files here and all of these files are just for the admin section of our documentation. Acquisitions admin, Action Trigger's, action trigger process, etc. You can let's take a look at the product of our documentation as it is today, the old current way. Here is our landing page. When you go to Evergreen ILS.org and you click on documentation, this is where you will end up, we have the 3.2 and 3.1 manuals, and older stuff than that. I'm clicking on the consolidated manual in HTML. When you click on that you come to a huge, huge navigation for all of the different pieces of the documentation and their headings and subheadings.

This screenshot is not exactly accurate because , so when you are clicking on something in the nav this would be your step one, here you have the system administration. I want to call your attention to the next button at the top right, the home and previous button on the top left and I will click on introduction and started the top I'm going to enter into Antora land. You've probably heard about Antora, maybe in emails on the list or in IRC or launchpad. Antora is open source and it generates a website from AsciiDoc. Think of it as a wrapper around the whole thing, you're still writing in AsciiDoc everything is the same there but it comes in and reads all that stuff and creates a documentation website. Put an excerpt from Antora's website here off of Antora it says, the static site generator for tech writers but so that is what they call themselves at Antora.

I thought it would be worth showing the old page compared to the new page, the way Antora interprets it, on the left-hand side, I am sure it is really small on your screen but here we are.

On the left is that same screenshot from the previous slide on that one page where we were looking at the example. We have the heading, deleting items statuses. On the right, you see

the same heading, except in Antora's interpretation it is much bigger, highlighted there in yellow followed by the numbered list, which also has more spacing in between, little more prominent. There is the same image and the note is also highlighted in yellow.

It is interpreted a little differently and shades the background in the light blue and puts the word "note" and that oval and calls attention to the note, better in my opinion may be.

Also Antora keeps the navigation on the same page, the navigation there in red on the left, of the Antora documentation, it has the navigation and it rings us in bold to the place in the navigation in the page in which we are looking, and it also have--has across the top what we call breadcrumbs so it gives you the path to OER, we are in Evergreen doc inside the main heading, system administration from the staff client and inside of that we are in item status.

>> RUTH FRASUR: Can I ask a question really quickly? Taking advantage of my ability of having a microphone. I notice in the old site you have that one page, and then of course you could go to the previous or whatever -- in the Antora page, above the deleting item status, there's an image up there, is this all in one page where it scrolls down and then -- are we seeing multiple things there, multiple pages we would not have seen in the old?

>> BLAKE GRAHAM-HENDERSON: That is a good question, I don't know if I've a slide that specifically answers that but I will mention it here since you can see it -- yes, Antora does put it all on one page. It is exactly mirrored from our documentation files. So each file becomes its own page, whereas, in the old interpretation of the document Tatian, being converted to a website, a lot of the subheadings broken into their own page with the next, next, next home and previous. So in the Antora style it will be one long page, flowing with a table of contents at the top etc.

On my next slide is a get into it a little deeper. This is a blowup of the navigation on the left hand side, some things to note here is that it is an accordion style, where it is collapsible. Each been having has a little triangular caret annotated to the left as you see in many interfaces where things are hiding underneath and it uses an accordion style and you can have several sobs so see the -- MARC record there which indicates more sobs--subs below.

I've mentioned breadcrumbs but there it is the bone up for you to see better. Our root is the Evergreen docs followed by where we were in the main heading and subpage. You can search, which was not shown on the first screenshot but here it is, on the top right. The way we have it designed now.

It is a search as you type, so here is a screenshot of me having typed circu, I'm trying to type "circulation" and it is immediately given the results and it is kind of a two column result, on the left are the main titles of the page, on the right, are places in that page where the word also appears grid on the left side, you might see some listings that do not actually have the word "circulation" in them like borrowing items, who, what for, how long. That does not have the word circulation but there is the word circulation on the page inside and the heading there was circulation rules.

Of course beneath that is circulating on catalogued materials, also mentioned on that page, and so on and so forth.

So those of us that were in Lynn's talk there was some talk about indexing and that is still important, but this search mechanism does automatically index and search the headings. So all of the level 1, level 0, 1, 2, 3 are done automatically and are searchable.

Probably some more testing on exactly what other things can be searched, is still in order.

Lastly, Antora gives us this great tool for versioning. What version of the Evergreen software and by association the documentation for that version, are we looking at?

In the bottom left corner, is where it is situated now in our example. Right now, we just have the latest and do not have Antora's document Tatian for any prior version. Which is just working off of a master right now.

Whenever new versions of Evergreen are caught, the documentation goes with it and Antora will generate a whole other site for each version, and you can quickly change versions on any page that you happen to be on in the documentation site.

If you wanted to see the page look like any previous version, you can click down here and change the version as we move into the future with this Antora product.

-- Pretty cool, with all that said, a lot of questions come up about, are we going to be having to do anything different? Can we just take what we have now and make this site? The answer is, well, some stuff is different, there's some stuff we have to do to make Antora happy. Antora enforces a folder structure, which is why I had all the slides about the state of affairs of our current folder structure.

In my opinion, it is an improvement. Here is the folder structure. Side-by-side. If we have the -- we have the old route in a previous slide and this is the Antora root folder. Notice there are much fewer files here. Most of these you can ignore and there is a readme which is not required by Antora. Really, the only thing required by Antora is the site yml file.

I have the same screenshot on the left because is not an associated folder in the old way but this is the modules folder within the Antora and I will go back up and recall that -- there's the modules folder at the top so by and large, modules folder is really where we will be heading.

Now you see some similarities, we have a mirror of our modules acquisitions, admin, API, appendix and so on -- as compared to the old way. Antora has this notion of modules which is the new term when it comes to documentation I would say. They want things broken into modules.

Within an example modules folder, I just picked circulation because I mentioned it already. On the left-hand side, those are the files within the circulation folder as it is today and if you go into the module folder called "circulation in Antora" you will see much fewer items here. We have a nav, and attributes file, assets and pages. You may have guessed that pages is where really all of the documentation is, and you can see the pages are basically a mirror from what we had the old way, with some added files, the attributes file, being the main difference there.

Okay. I have another one here which -- is going back to this folder we have an assets folder. Which is where it organizes mainly the images. I have gone into -- here I have highlighted in purple on the top-, Antora docs, modules, circulations assets and there's a folder called images

within assets, that is the current set of folders inside the folder called images buried on the left hand side we have the media directory which is the closest thing I could find you compared to.

Within every module, in Antora, circulation, cataloging, they each have their own assets folder which contains the images that really only apply to those pages.

You could probably guess that the 1300 files are significantly reduced when you break it into each module.

Here we are with the images for circulation, on the right-hand side there are --65 total images that are called out in our circulation -- in the left-hand side we have the 1344 items all slammed into one folder.

Organization, Antora enforces this organization. Some of the work we have been doing in order to make this possible is organizing all this in Antora's way so we've already done all the work to rip out all the pictures and put them into the appropriate modules knowing which go to which, etc.

We've also changed a lot of the headings and things. Also I have down here, it can be organized per doc. that means you can make a sub folder in the assets images folder, for each documentation file. For even more organization but you -- actually, it is worth noting we could have been doing that the whole time in the previous method but you could, if 65 items was still too many and I feel like it is, in my opinion, each piece of documentation needs its own folders for their images.

That way, you can have a folder that mirrors the exact same title of the document that contains just the images for only that document.

Anyway, a little worried about images. Antora knows, we have this little thing I mentioned a minute ago called attributes.adoc. That is a special file for Antora. These files have been pre-created in the look all the same, the condos of those files look like : attachments directory: and then some syntax for Antora to understand.

In this case, images directory is located/in assets images. They also assets/images where we are storing all the images, that we do not have to have such a long call out reference to those images. How do you refer to an image? We mentioned `image:: media/holds_title_options.PNG`. Also for screen readers you can add accessibility, alt text. You add a square bracketed piece of language there and then the whole thing altogether is `image:: media,` notice there is nothing in front of "media". Antora understands that if you say `image::` it that-- based on this line, images are located in assets/images so it is already starting at the folder images and beneath that we have a folder called media and it is only there because that is the way it was before but some of the work we might consider is to eliminate that media folder because it is redundant.

Anyway, we are at the completed image to show the image in our documentation, `image:: media/hold...`

Okay. Enter also gives us more control over the navigation specifically. Before, right now, we do not have a way to make that navigation as we see fit. It is automatically generated by our creation script, based on our heading tags. So, now, we have to make our own navigation in Antora, so the whole entire navigation on the left-hand side is handmade.

Which is good and bad, it is more work but it is good that we can control it. And here's an example of the root file, the Antora.yml file that I mentioned a minute ago looks like this. It has a name, docs, title Evergreen.docs, and this is where we would title each version, whenever we cut new versions of Evergreen, this all will need to be updated to mirror whatever version it is we are on in Evergreen.

And then it has this keyword called "nav" and this is where you teach Antora where all of the navigation AsciiDoc files are. And they look just like that. Modules/root and that's the main nav then there's the installation and initial set up nav, etc.

The beauty of this is that each module has its own nav, so you do not need to edit a master nav file in order to add your navigation links. You can just edit the nav for them module in which you are editing and it will be consumed along with all the other ones and compiled to create the one big nav on the site.

The circulation folder example navigation/file I would like to show you is of course in the circulation module folder for Antora, and this is the nav.adoc file, SRS right off with the navigation it has no headings or anything, it is just a bulleted list and a sub bulleted list, starting with a single bullet and this XREF language, then circulation is the name of the module. Followed by the name of the file introduction.

We will call that circulation for the humans. So on the final webpage, the navigation will have an entry for circulation, and that And that will take you to the circulation dock for that page greater want to call out this line, this one deviates from the pattern has the word "admin", in this example were putting an item in our navigation that calls out to a different module and in this case it is admin. We feather that into our navigation and we can control where it goes in the navigation and what order, etc.

Calls out too in this case, admin, patron, self-registration, AsciiDoc. On the right-hand side we have the results of those navs.

Circulation is expanded down, circulation items, holds management, booking module, etc. That ought to be a concrete example, hopefully people are following along here.

I have to get used to presenting to no feedback. Usually --

>> RUTH FRASUR: I can interrupt you as often as you would like. But people are following along.

>> BLAKE GRAHAM-HENDERSON: [Laughter]. Okay, good. Reading the room is definitely lost.

Okay so table of contents, want to talk about, and Lynn went into this as well, Antora and really it is standard AsciiDoc interprets this special little language :TOC:

That is such a tiny little line, and it has almost -- it is so insignificant on your document Tatian but it is very significant on the final product. This is an example of modulation -- module

circulation pages and below that main heading, to introduce the line called :TOC: and it makes the table of contents read on the right-hand side it is probably really scrunched on your screen but there it is, that's the entire table of contents that was automatically generated for us by Antora, just by virtue of having that one line read

You might wonder how or why or where or all of those questions -- and it does it based on the headings, the headings are super important. You have the main heading, the single =, and then you have your -- in this copy, I've actually got the old adding, which I think I left there for me to talk about it on this slide we preferred the mustache style which we have mentioned, in this case it would be 2 ='s wrapped around the word "checkout", in the table of contents it starts out with checkout which is a clickable link. Every one of these are clickable and when you click them it jumps you down to that part of the documentation on that page and these are all the headings and subheadings. Beneath check and, you see there are indented more table of contents entries for each of the triple =, for the sub, subheadings.

That is how that works. I am getting close to the end of my talk. We will have a good few minutes you have questions. I want to do throughout a great AsciiDoc editor, Lynn's talk was great and she mentioned many editors and then she went on into using a believe it was visual code.

>> RUTH FRASUR: Yes she uses visual code.

>> BLAKE GRAHAM-HENDERSON: In conjunction with AsciiDoctor plug in rouser. There is another till she left out and that is called AsciiDocFX, AsciiDocFX gives you a file browser on the left-hand pane, which is their squared in red, it allows multiple files open that is the red, in the middle, and you'll see the ASCII document there in the main pain, and the right-hand pane is the interpreted, roughly interpreted what it would look like on the browser. Of course, does not have any of our Evergreen styles are anything but it gives you the headings in the tables in the pictures and stuff like that.

It's a great tool for editing your document addition brood I found it to be very handy.

Here are on my slides, which hopefully, you have taken note of, you can click on these on the slides themselves. There is a link to Antora, AsciiDocFX and a quick reference that I use all the

time when I'm writing AsciiDoc, just how do you do bold or italics, and also refer to Lynn's presentation, which will be on YouTube soon I am sure.

This is the main landing page, goes to the introduction, here on the left you can click on these links and it will show you the nav for the when you clicked on. You can click each one, there is or table of contents and you can scroll down and see what it looks like. We did introduce the previous and next on the bottom, so you can click next and go right to the next piece of documentation in that navigation you are in.

We have also added some fun stuff in the top right, we've got some drop-down menus, duct mentation interest group, the Evergreen roadmap, Evergreen wiki, tabular release notes, these are things on our WordPress site also but we have mirrored them here so we do not discombobulated people too much from the main site. So you can see those and this is completely editable in our UI. In that top right I encourage you to use the search.

There you have it, back to my slides, the end -- there is my email address and link to the slides again for those who may have missed it in the first slide and the launchpad bug were a lot of the discussion has taken place.

At this point, I would be happy to open it up for questions.

>> RUTH FRASUR: You can put any questions you have in the chat box or you can use the Q&A feature, and I will be watching that. I do have a couple of questions, Blake. So, the breadcrumbs, and I don't know if you can go back there, I'm going to get into Tiffany's question otherwise I can just ask questions all that bad are all the official docs Antoraized, or is it still a work in progress?

>> BLAKE GRAHAM-HENDERSON: Let's see, the official documentation, I do not think there's been any commits to the master ranch for any documentation since we have Antoraized, them all but I understand there's a lot forthcoming pretty it is still in there its own branch and it is not been merged to master

It is kind of a problem if you're going to begin tripping documentation,-- contribute in documentation, there are two places, we have the old way, the main way right now which is in the regular docs folder and then there's this other Antora branch, were you would then have to contribute the very same documentation at least until we make this the real, the final version. Does that answer the question?

>> RUTH FRASUR: Yes. Sort of. I mean yes it does, but-- so the next question is, we need a -- core commander to get into masters and that was going to be my question, is the -- what is the mechanism to actually get that?

>> BLAKE GRAHAM-HENDERSON: I love these questions. Part of my other micro goal and the presentation was to get people excited about documentation. And come to the DIG meetings, we have talked about this question about what we need to do next and we have done so in the DIG meetings. Yes, core committed does need to do the actual final straw to merge the branch and the master. But just seconds before that takes place, we will need to prep the branch for that, we will go ahead and remove the old docs folder and rename the Antora folder to just be the docs folder and the fact-- the fact that we will take over, it will take over the docs folder so that we will have the Antora stuff in the folder called docs.

Right now, if you look at the branch you will see the old docs folder and another folder called doc. Antora. When he goes to master we will need to MELD those together.

>> RUTH FRASUR: Is there any danger of losing the old augmentation for deprecated branches or versions?

>> BLAKE GRAHAM-HENDERSON: Yes I address that with some code and Galen helped, we introduced a rudimentary batch script to through all the branches. Every branch in Git looking for non-merge documentation changed -- files that are changed enough docs folder and we did not find any outstanding branches in the docs folder there were editing files in the docs folder that is not to say does not different today but returned to address that and we won't lose any changes to the docs if we do make the merge.

>> RUTH FRASUR: There's a comment from Debbie saying that DIG did approve Antora as the way we want to go forward with docs. So... That aspect of it has been addressed.

>> BLAKE GRAHAM-HENDERSON: Right.

>> RUTH FRASUR: Tiffany, did that answer that adequately for you?

>> BLAKE GRAHAM-HENDERSON: Very recently, I will mention it here, Remington, spend time last week, just last week on this, with the new doc server and he introduced tools or reported some tools over that would generate the old docs and the -- new docs in concert for a while, but the foreseeable future until we resolve this, until we make it the Antora organization folder structure, the way. There is a crutch right now.

>> RUTH FRASUR: I have a question about the folder structure. Is it something that DIG still needs to decide on as far as whether or not each doc of those have its own asset folder? Am I asking that correctly? Do you know what I am talking about?

>> BLAKE GRAHAM-HENDERSON: Remington I decided whenever we return to make it work with Antora and we didn't back to that, that is a good question, are you questioning the folder structure?

>> RUTH FRASUR: How the community will come to consensus as far as the folder structure goes or if it does already there.

>> BLAKE GRAHAM-HENDERSON: It is already there, it is there, as I laid out in the presentation, that is the weight is paid but it definitely can change. Antora, as you saw there, the config file, could easily be updated and point to a different folder for each module, whatever we want. I was following suit with standard Antora practices.

>> RUTH FRASUR: Okay Preet anybody else have any other questions? Let me wait a second bad Jennifer asks, what version of Evergreen is the current Antora doc for?

>> BLAKE GRAHAM-HENDERSON: Master.

>> RUTH FRASUR: Okay Preet

>> BLAKE GRAHAM-HENDERSON: Yes, we are basing on master, I just read About 2 weeks ago. Rebased it about two weeks ago.

>> RUTH FRASUR: Bill, do you want me to, you want to say something? I think you have the power to do that by yourself. He's probably waiting seriously behind saying no. I will call Ed, thank you, Blake, that was actually very

I thought it was inspiring. We are going to meet back here at 3 PM Eastern time, 12 PM PT, for the Evergreen self-check roundtable with Bill Erickson and Terran McCanna.

>> BLAKE GRAHAM-HENDERSON: Thank you everybody.

>> RUTH FRASUR: Thank you.