

EVERGREEN ONLINE CONFERENCE 2020

Wednesday Track 1, Self-Check Round Table

Welcome for joining us. Welcome to the Indiana-- Evergreen Indiana library session into an Equinox open library initiative for sponsoring close captioning for the 2020 Evergreen international online conference. All of the sessions and roundtables are being recorded and will be a viable following the conclusion of the conference. Please take a moment to quit yourself with webinar tools if you have not already. Acquaint-- actually that will not be happening so I will skip that.

You will have the opportunity to speak during the roundtable if you want to -- if you want to raise her hand when we get to that point for feedback and I will unmute your microphones and give you the opportunity to unmute your mic. If you are using the chat window which I recommend highly, if you would like to send a message to everyone in the room make sure to select "all panelists and attendees" from the drop-down menu was only the panelists will see them. I would like to thank Terran McCanna and Bill Erickson for leading the roundtable, Bill is a software developer and engineer for the King County Library system in Washington state. And one of the original developers for the Evergreen ILS. Terran McCanna's program manager for the Pines public library automation and lending network in the state of Georgia. She also has been instrumental in coordinating regular squashing weeks and wrangling developers working group. I will stop sharing this and you all can take it away.

>> TERRAN MCCANNA: If anyone hears no Today what we would like to talk about -- we would like to talk about what issues in the current version need to be fixed or improved upon and what improvement should be made it would be really nice to get to the point where it is adopted and it is flexible enough that laborers can stop paying the large amounts of money they are paying for vendor products.

There is a couple of pages of bug lists on here that I am not going to take the time to go through. I want to include them on the site so we can refer back later. There is also a list of wish list items currently on launchpad as well that I would like to include.

So, one of the biggest issues that we are looking at is the self-check is basically unchanged since it was rolled out early on in Evergreen so updating the interface and adding more features to it is long overdue. There are also some more commonly expected features the people wish to have-- self-checks like being able to pay fees and fines through it. And renew their items

through it, etc. that people would like to have. Bill will talk a little bit about some of the customizations they have done at King County.

So I will go ahead and turn it over to you, Bill.

>> BILL ERICKSON: Thank you. We started talking about subject to my guess it was at the last Evergreen conference. A number of the wish list items that came up, I thought well, we've already done some of those and some of them I had done even before joining King County, but I mentioned we had done some so I thought I would show off how we implemented some of the features. And then maybe they will be instructive or useful in how we might be able to bring some of that back into the community.

Report the news or-- -- username and password in a single login form and it came up for us so we went ahead and took care of that. One of the lower hanging fruits, that is not a huge deal. You'll notice on the left, we added a picture of a barcode to give patrons some guidance. At the bottom, there is a high contrast mode button, and if you would, please jump to the next slide and you can see the same interface with the high contrast mode turned on so there's accessible-- accessibility features added and of course, that styling persists throughout the interface. If you turn that on when you login.

Next slide please. We have the items out interface and on the left there's a check box allowing you to check items in the list and review the items. This behaves similar to the OPAC, using the same code more or less. And that's a local feature we added. Notably our new items and your checkouts are the same interface.- They didn't know they could redo items we first had the functionality so we added an extra tab for that to help guide the patrons. And then there's the summary information about available available or available items, holds and in this case there is an up block around fines indicating I have fines in my account.

We broke this up into three sections. It starts off with ready for pickup and there's a section for active holds, pending and then section for suspended holds on this test account I just have the one active hold and we were created two different print options for ready versus all holds. Again, shows you the numbers in the tab down there for what is available and waiting -- finally the fines as last. Yes, so this is list defines and allows you to print them an obvious style differences between the stock interface as far as fonts and layout. I don't recall specifically but I think the finish and print receipt and finish email receipt, finish no receipt, the checkout buttons

are probably more in-your-face in our version rather than the stock version so that helped with patrons figuring out how they wanted to end the session.

I think the customizations that we have that have come up in some of these wish lists and bug lists.

>> TERRAN MCCANNA: I will pull up the Pine –self-check interface, which is pretty stock, for those who have not seen it, if I can get back to the right screen. This is what the Pines one looks like, one of the issues that Bill, that had been fixed is the stock one, you have to type in your library card or username first and then it asks for your password which almost everyone finds confusing.

I love that we have a chance to redo that. This is what the standard interface looks like, if you pull up your holds it shows on the left and you can view items out, we may have tweaked this a bit with colors but it's pretty much stock. The stock one, you do not have the ability -- you can view the items out but do not have the ability to renew the items. If you are clever you can get around it by putting the barcode into the checkout screen to renew it but patients want figure that out so having the ability to renew will be a big step forward I think.

We can view the fines, Bill, on yours, can your patients pay your fines through the self-check we

>> BILL ERICKSON: No.

>> TERRAN MCCANNA: So we have-- a lot of our libraries have kept stripes of the can pay for the OPAC but Stripe does not work with the self-check, so it would be nice to have the integrated so they could pay through the self-check as well. Let me switch back to other screen.

So, what I would like to do is I started out with a short list of things that -- changes we should make preferred, angularizing would be a good idea or at least using something that is a little more responsive and -- and integrate better with Evergreen. Integrates better with Evergreen bid without a lot of people comment that it was not working well with touchscreens, the buttons are too small and some of the pop-up searches are too small so modifying the-- Ft. touchscreen would be useful pit and we want to make it multi language friendly and we already

have that for the OPAC so we can also leverage that in the is well. Bill's accessibility feature, the high contrast-- contrast feature is handy and would be good to urge into the master version and rethinking the login screen as they did with breaking up the holds, by status.

Being able to use the same fine options as the OPAC would be useful. And so at this point, I would like to hear from all of you to brainstorm other things to make it helpful or if it needs additional features that would make you want to use it at your libraries.

>> RUTH FRASUR: We have a couple comments, the first from Josh saying that they run into many users not being able to read the default font sizes across the board. So, there is that. And then Jeremiah Miller put in, as a question, RFID. And then a comment from Lisa about KCLS, and Bill can speak to this but did not integrate find-- find payment because they're worried about long lines.

>> BILL ERICKSON: To follow up with that, self-check is usually important in all the KCLS library I think it's something like 80% of the on-site checkouts go through self-check, it's very important, yes 80% -- so, yes you can see white we have put quite a bit of work into that. And the comment about font sizes we were about to raise hours more as well because is quite a bit of screen real estate and you really can say quite a bit more than what you can see on the stock or in hours. One thing about RFID, and that me come up again if we talk about angularizing the interface. Angular and angularajs -- has the ability to essentially create, make a possibility so can integrate with other products because it acts at the OS level. So it is conceivable that you could have a third-party product that can integrate with self-check through Hatch.

>> RUTH FRASUR: There is a comment here, I'm sorry if I just cut you off. These are scrolling and I didn't want Elizabeth is a comment about having to enter the pin even when we scan the library card is confusing. I can see that.

>> TERRAN MCCANNA: That is a library setting and you can require that on or not. We require it just for basic security purposes. We do not let people use the app without knowing their password bad so we are not going to let people use the self-check without the password -- some libraries complain but if they don't enter the password then anyone can literally type in any number, if they know the barcode format they could get the barcode number.

>> RUTH FRASUR: Related -- so, just to clarify that is a library setting if they wanted to opt out of that, they could turn that off? Okay. Gary says the ability to suppress print options for devices that are not attached to printers URL switch --? [Laughter].

>> TERRAN MCCANNA: That would probably have to be the workstation level, maybe? I don't know.

>> RUTH FRASUR: Jennifer --

>> TERRAN MCCANNA: We do have a library system that wanted to use it without receipt printers connected.

>> RUTH FRASUR: Were they forcing like email receipts or something like that? Or just not worrying about it?

>> TERRAN MCCANNA: They wanted it to default to email -- they wanted to force it to email for everyone but not everyone has email.

>> RUTH FRASUR: Right.

>> TERRAN MCCANNA: And we don't customize things that the individual library system level because that is all we would end up doing-- so we didn't do anything to enforce that.

>> RUTH FRASUR: I am working down the list here. Michelle says that it would be great if there were options to turn off the functions we did not want to offer. Make a pure checkout station without access to holds management fines, etc. And have that be customizable. But have the options in and then opt out. In any easy fashion Jeremiah says still it has to be an OS level RFID app running.

>> BILL ERICKSON: That's true. The hatch is purely for her sending messages back and forth bad

>> RUTH FRASUR: Referring back to the password and pin setting, the self-check gas does not require it but when we use Evergreen self-check website, it does bad so -- I could see where that would be a confusing thing for patients to have those -- in their mind, in most people's minds is that the same operation but two different workflows depending on where you did it.

>> TERRAN MCCANNA: Yes and that's all of the third-party self-check casks have that option as well. You just need to talk to your vendor.

>> RUTH FRASUR: I am looking here.

I would say suppressed print option -- okay we're talking about technical things -- I will also say, the transcript for the chat is saved and if it is something that -- that Bill and -Tarran you want to because you are leading this gathering information, some of these suggestions and things, forwarded to you separately from all the other things we are doing -- I can make sure you get that.

>> TERRAN MCCANNA: I can put this into a working document afterwards prayed

>> RUTH FRASUR: I know they are scrolling past and I'm not great at seeing a question for the suggestion from the random comments.

>> TERRAN MCCANNA: I don't seem to be able to see the chat while I am presenting.

>> RUTH FRASUR: It is a weird little thing over there. I'm not even sure -- I will start here at the bottom and go back forward. Ken says would be practical to make the interface touchless, for example, scanning the barcode to start and again to finish? From the apud this is him saying from the -- app.

>> TERRAN MCCANNA: From the app. If--

>> BILL ERICKSON: You would scan the page barcode and then the item barcodes and scan the patron barcode to scan back out?

>> TERRAN MCCANNA: I think it would have to have a keyboard interface to meet accessibility requirements. I mean, from -- from the mobile app, I mean, they already have -- they would already -- have to have their login information entered. But his response to that is, yes, exactly, that you would use the patron barcode, scan in and scan out. Essentially.

>> BILL ERICKSON: That's interesting, I haven't heard that before. It

>> RUTH FRASUR: I'm going to go back here to Jessica's comment, we had some interest in having a public check in station to reduce contact between staff and patients during this time. Which I -- I think that is kind of a cool idea. Then back down, Jeremiah says, none of our self-checks have keyboards, no logins you just have to have the card in hampered I would say from my experience, this is not with Evergreen but another RFID product but you have to have a card in hand for the self-checkout. You have your card that they had permission to use it. Knowing that that is not the reality [Laughter].

>> TERRAN MCCANNA: So if they come across something that cannot be scanned for whatever reason, they have to leave their session and go to the desk.

>> RUTH FRASUR: That is correct.

>> BILL ERICKSON: Maybe you can set your password out loud at the machine.

>> TERRAN MCCANNA: Yes, that would require -- I mean there would be no way to use a password in that situation.

>> RUTH FRASUR: I feel like I have missed something up here, just as the audio alerts work for us in 3.3. Libraries ask about setting email as default instead of print and that is -- I believe that is something that can be separate

>> TERRAN MCCANNA: I think what happens now is if they have email selected as a notification option and it defaults it-- defaults to it I think that is how it works. There were some changes year ago or so that added the email option but I believe it had a default that way.

>> BILL ERICKSON: Or at least hide it if you do not have an email prayed may be is what it is doing.

>> RUTH FRASUR: Touch screen entering of password with that work like ATM machines?

>> TERRAN MCCANNA: That is a good idea.

>> RUTH FRASUR: I will go back up to Lisa, KCLS runs a kiosk ability, Bill? I need context for that comment.

>> BILL ERICKSON: Yes, I missed the context also. People generally have the ability to put the router in kiosk mode to prevent the patient accessing the URL or other links. I would hope that most people are already doing that. But it is something I would suggest.

>> RUTH FRASUR: Lisa, thank you for providing that, some asked how to do a kiosk. I know somebody that might be in here --

>> TERRAN MCCANNA: Most of our libraries are doing kiosk mode as well, it is different, depending on what operating system you are using. So, I don't know the details of it. But it definitely can be done in different ways.

>> BILL ERICKSON: If I recall, I think Firefox might require an add on, Chrome browser is just an-- a command line options you can set the kiosk mode when it starts and there's a separate kiosk printer option which sends the data to the printer without requesting input from the user.

>> TERRAN MCCANNA: One of the bugs in launchpad now points out that the self-check and OPAC use the same- pieces of the same login mechanism. And so if you want to have a kiosk that has both a self-check and the OPAC on – it can cause problems because if you are logged into, if you log into subject and then go to OPEC your login but then if you leave it, it does not log you out, I believe I am saying that right.

That is about people should also be aware of.

>> BILL ERICKSON: That is problematic and we do keep those completely separate.

>> TERRAN MCCANNA: It would be really nice to use the same kiosk to --

>> RUTH FRASUR: Right. But browser settings mess it all up. Bill has put a link to one way to do a kiosk in there, I know that-- I'm waiting on somebody to put -- there is an extension that -- can -- that is being used in Chrome but I don't know what the name of it is offhand. And then, I did get a comment from a library using touchscreens for their self-check.

>> BILL ERICKSON: After the URL in the browser URL bar?

>> LYNN FLOYD: There's all bunch of things and when you commit when you click on that link is the URL where you want to go to and then you put the kiosk end of it, that is the where we did -- that's how we did our OPACs previously.

>>MALE: Scott is put into the chat, "portius kiosk" I believe that is a browser add-on.

>> RUTH FRASUR: What about using, if we are talking about some kind of app thing or tablets, using the camera as a barcode scanner,

>> TERRAN MCCANNA: I don't know anything about the possibility of integrating that directly-- you can add a custom function in an android device but I don't know about a browser-based interface.

>> RUTH FRASUR: Jessica are you referring to the camera utilized as a barcode scanner from some type of handheld device? Mobile device? So many devices. Just the idea of mobile self-check in general. Okay bad

>> TERRAN MCCANNA: I think if the work on doing, on adding a self-check feature into the mobile app moves forward, that would be really handy bird

>> RUTH FRASUR: Referring to Hemlock?

>> TERRAN MCCANNA: S.

>> RUTH FRASUR: McKenna is in here? Ken, did you want to say anything about what you have been talking about with that? I see a hand. Go for it.

>> KEN: there's been a very light discussion so far, no specific plan to enable scanning barcodes from the mobile app. It is not hard to integrate it, but there are the questions of security and -- so there is -- there have been talks but no projects in motion yet.

>> RUTH FRASUR: Jeremiah had a question in here and I don't know if it relates to this conversation with the camera and the app, how is security turned on and off? Jeremiah, is that what that was referring to? In terms of -- either the camera or mobile app, or both? Oh, his comment is, I mean in general, not specific to advice.

>> TERRAN MCCANNA: Deeming the password option? Or are you talking about something else?

>> RUTH FRASUR: Oh, so, title tape --?

>> TERRAN MCCANNA: You would have to have a manual or third-party product, in the sense -- this is just working through a browser, you know, there's no integration with any of those products right now. Title tape you have a magnetizing pad.

>> RUTH FRASUR: There is a comment -- here mobile devices do not like some proprietary barcode, for example ours is not readable straight out of the box you also need to have an input box to read from the input. And if you get a wireless Bluetooth that acts as a keyboard by default, yes. Bluetooth scanner, I am assuming. Is the word that might be missing there. Chris is coming, if there were a generic device that could demagnetized that would be a possibility but it would still need to integrate in some manner my assumption.

>> TERRAN MCCANNA: I don't know what products are being used but I think it is just a pad they can just set the items to demagnetized and it's not tied to the checkout.

>> RUTH FRASUR: How would it verify I mean it could just demagnetized a bunch of stuff?

>> TERRAN MCCANNA: Correct.

>> TERRAN MCCANNA: That might be like with RFID, if there's a third-party product tied together could probably be done through the hatch level, to be honest most of our library's do not use anything --

>> RUTH FRASUR: No security mechanism? Yes.

>> TERRAN MCCANNA: The public library worked at Abigail's but they were not plugged in. And that is also, the case if self-check options get added to the mobile app there is no way to undo security that way either.

>> RUTH FRASUR: How about allowing patrons access to the message center? To view those from the self-check?

>> BILL ERICKSON: It can be useful, maybe even if certain messages are serving as an alert or pop up when they login.

>> RUTH FRASUR: Jeremiah's comment is we are all RFID automated sorted self-checks, gates, etc. So there are a lot of considerations with that. As far as going -- mobile self-check. I might have dreamed this up so if I did -- just tell me -- it seems like there are some products that if you have checked thing out the gates themselves will remove the security. I might have jumped that up though. It is possible, I watch a lot of sci-fi.

>> LYNN FLOYD: I think you did.

>> RUTH FRASUR: It was talk about circulation and watching the Expanse of it all got conflated.

>> TERRAN MCCANNA: That should seem in three possible with RFID.

>> RUTH FRASUR: [Laughter]. A lot of RFID is scanned and disable all at once. Yes. Thank you Jeremiah and -- it should work but it's not reliable. I would say buggy but, not reliable.

>> TERRAN MCCANNA: RFID is one of those areas that has always seemed better on paper than real life.

>> RUTH FRASUR: Jason says Some RFID systems use SIP, ITG, was the one he last use. I have 99 problems but EC self-check is not one.

>> RUTH FRASUR: Were all waiting, Jason. In that case, yes it has been a while. I mean, it makes sense that it should work that way. Then, there you go -- sir, I did not see you actually raising your hand. Go for it, Jeremiah.

>> JEREMIAH: As far as the gates thing, it just drives to read RFID tags as they go out the door, right? It can only talk over SIP get an answer back to so fast, and even just reading the tags to get a status -- the hit rate, people walking out the door at X miles per hour means--

>> RUTH FRASUR: Nobody is pausing to have their stack of books read by the gate.

>> JEREMIAH: unless you want to make a gauntlet to walk through it is not going to happen.

>> RUTH FRASUR: You must walk at this pace between this much distance from each stop.

>> JEREMIAH: and don't hold your books by your head or swinging down by your feet. His only so much radio -- yeah put it in your-- but a tinfoil hat on it. So it works awesome for lots of things but the gates turning off security --? That is based on status? It is no way it could work fast enough to do that. We have all the fancy stuff, and it is not going to do that. What they do is on the self-check itself, as you check them out,--

>> RUTH FRASUR: You are disarming pad --

>> JEREMIAH: The check out pad is the pad and it does the whole thing, but as the things are scanned, it gives feedback as to which ones are checked out and the ones that successfully are checked out, it flips the security bit off on those ones.

>> RUTH FRASUR: Right. That is the way hours worked as well and it even said, please only put like six items on this pad and you may need to actually, like, stagger them so that the tags, the antennas are not stacked on top of each other just to make sure that everything is getting read.--read. And look at the screen, and so

>> JEREMIAH: And we know how that goes.

>> RUTH FRASUR: Even getting the staff to look at the screen sometimes is difficult and then to translate that to patrons and, look at the screen and make sure -- Another option from Jason, plenty of libraries do inventories decide that the security systems do not pay for themselves and are either turned off or torn out.

>> TERRAN MCCANNA: That is what happened with my library.

>> RUTH FRASUR: I know Labrocote have gates -- I know more libraries that have gates unplugged under functional.

>> JEREMIAH: for us it's more important to check out faster, to check out things in the sorting system and that is where it is worth it and it is not like the gates are an additional thing to that, they are already there. So -- and in fact, just flipping the security bits off on everything to stop false alarms is not a terrible idea either. That is the main thing that would be here, is we don't want alarms going out the door. -- False alarms going out the door. --

>> RUTH FRASUR: On a slow day we tested how many bad alarms we could actually do on purpose. How do you walk through this to NOT trigger it? Patio walk through this to trigger something that you should? Yes, is flipping the security bit off part of core Evergreen?

>> JEREMIAH: I doubt it.

>> LYNN FLOYD: Is part of the RFID scan that turns that security bit on and off.

>> RUTH FRASUR: Yes.

>> JEREMIAH: It's an entirely separate piece of self check operation that looks to me like it is out of scope of the interface and what the Evergreen site is doing.

>> TERRAN MCCANNA: Yes. I think that would have to be a different project entirely. Than this.

>> LYNN FLOYD: The most RFID system I've looked at in the past have a separate software program you put on their -- there , on the computer that when you scan the RFID, the barcodes, it is the RFID reader that translates them to Evergreen.

>> JEREMIAH: Yes it feeds them into your ILS. The self-check products are all in one. Where it does not have a separate piece of software doing that.

>> TERRAN MCCANNA: Right.

>> LYNN FLOYD: All those work via SIP.

>> JEREMIAH: Yes.

>> RUTH FRASUR: Tarran and build you want to take this in another direction while we have the time or do you want to just keep --

>> TERRAN MCCANNA: I think that is all very useful, I mean, when -- I have been thinking about this and I hadn't thought about RFID or adding on third-party products like that. To handle those things. I have mostly just been concerned with trying to get the interface itself updated.

>> JEREMIAH: Yes I'm just thinking of it in terms of while designing the interface -- and what it can and cannot do, it is just to have future capability like that in mind, let's say, someone does come up with an open source third-party RFID handling thing that it can talk to. It would be good if the Evergreen self-check would be able to, through Patch--Hatch or would ever be able to talk to it and handle things like -- oh we just got the Thrive item scanned in at once-- just little we just got five item scanned in at once.

>> BILL ERICKSON: And there's things like is an -- there's new fun stuff in the browser world where there are APIs that allow you to talk to USB drives from the browser and things like that -- I wouldn't be surprised if other things came along that made it so that we wouldn't even need

to use hatch intentionally but Hatch is there potentially and assuming it is angularized is not just a program running on the system that could be taught to do whatever we need to teach it to do so could send message to an RFID agent that is running on the machine.

>> JEREMIAH: Most of the RIDT equipment is-- RFID equipment is just USB, even when on the big sorter, it's a big blocky unit but in the end it's plugged into a computer, USB, inside the casing of fancy self-check machines there is an antenna a brick that is in RFID unit, a USB connection to the machine.

>> BILL ERICKSON: Well, it's pretty crazy the level of granularity and control could do with these new web APIs. I mean, you're talking USB so it is possible something like that is closer than we think it is.

>> RUTH FRASUR: With --RFI system I used years ago, you could just pointed to the browser Graham you are using and they would scan the barcodes into the code you selected and that's my very basic understanding of what it should do.

So, you would scan just as easily into Evergreen the Xul client that you could do for Notepad print

>> TERRAN MCCANNA: It works like a barcode scanner accepted his RFID.

>> JEREMIAH: With the additional function of changing, changes the security state, the security bit on the tag, based -- there's a couple different ways they do it, like we used to Xul client at our front desks and have RFID out there and we use the web client now, it all works fine. But there is that little RFID program from the vendor and depending -- there are two different ways it can go about it. It can flip the security state, based on it uses like on Windows it uses a window API to read the title of the window, so it can tell what screen you are on and it will automatically change the state of the tag based on what screen you are in when it happens.

The other way it can do it is -- it can watch for function keys, what we do is -- we have mapped -- what we used to do is map hotkeys in the Xul client and now I just have a list of the hotkeys in

the web client, and we have those mapped to the different pages and staff are trained to use the function keys to switch between check in/check out, item status etc.

>> RUTH FRASUR: The self-check, you would not need to worry about switching back between secure and unsecure since everything is being checked out?

>> JEREMIAH: it would just be a matter of with such things to turn on and off which is different with the subject than with a staff client. A staff client, you know everything on that screen needs to be turned off or turned on, whereas, in the self-check it needs to know which is which, based on --

>> RUTH FRASUR: The state that it is in.

>> JEREMIAH: Exactly.

>> RUTH FRASUR: Yeah.

>> JEREMIAH: Not meaning to go through the whole thing here but --

>> RUTH FRASUR: Well somebody else can raise their hands and talk. Anybody, anybody? Or type, you do not have to raise your hand if you don't want to talk.

>> JEREMIAH: I'm going to throw in a typed version of that future thing, so it can be in the transcript I guess.

>> RUTH FRASUR: Thank you for putting that in there.

>> JEREMIAH: Yes.

>> TERRAN MCCANNA: Are there other things besides being able to -- that -- other commonly desired functions that people can do through the OPAC account that can also be integrated here besides being able to renew items? And pay fines?

>> RUTH FRASUR: I do not but I -- Josh says my dream self-check would be a touch interface like a Walmart, target self-service machine. That is my nightmares self-check right now, Josh because I don't want to touch that stuff but that has nothing to do with the functionality of the software [Laughter] releases say Casey was hoping to add Google analytics. That is cool. Much to Bill's chagrin [Laughter] bad

>> TERRAN MCCANNA: Is Google analytics not in that interface already?

>> BILL ERICKSON: I don't think it is by default.

>> TERRAN MCCANNA: There's a setting we can add it for the OPAC, right?

>> BILL ERICKSON: I forget bad

>> TERRAN MCCANNA: I don't know if it is a setting or I added in -- it into the footer in OPAC [Laughter].

>> BILL ERICKSON: The application code could be beefed up because a lot of analytics stuff, it is not just the patron visited the site -- they clicked on the certain things and performed these certain actions -- so we could add hooks into the self-check application that could Ben be extended to whatever analytics service you want to provide, but it could be hope that is called when this thing or when something is renewed or checked in. But to Michelle, this is --

>> RUTH FRASUR: Michelle, this is back to the password conversation -- it says I would have a concern about access to items out, holds, finds etc. if the option to create a password is disabled.

>> TERRAN MCCANNA: Yes.

>> BILL ERICKSON: Goes back to the ability to disable functionality pit

>> RUTH FRASUR: And I need to correct myself also, on our self-check machines, it did require a pin, but we did not like check identification, if you had the pin and the card in hand you could use that but it did require the pin it was not just walk up and do whatever you want, willy-nilly.

>> TERRAN MCCANNA: I know some of the library's that are using the third-party vendor kiosks, are not requiring pins MS a big point of contention for me. I do yes.

That is just opening up Themselves to problems. But yes, if all they could do was self-check, that would not be so bad.

Well, I know our time is running short.

>> RUTH FRASUR:.

>> TERRAN MCCANNA: What I would really like to do is start working on -- a working document to pull together all these ideas.

Open that up to the community for additional feedback. So, if all of you that are here can mull over this, over the next few weeks, maybe add any bugs that are not already in launchpad, to launchpad, or if you have wish lists your also welcome to email me directly. I will put my email address here.

>> RUTH FRASUR: Tarran have you Artie started some type of collaborative document?

>> TERRAN MCCANNA: I have not but once I am started I will share that with the community. We can -- if there are certain parties really invested in this, maybe we can set up some follow-up discussions or something like that.

>> RUTH FRASUR: Okay.

>> TERRAN MCCANNA: Bill, did you have anything to add?

>> BILL ERICKSON: One thing I will mention because it came about it, in a conversation in King County not too long ago. On the operations side, they are very invested Microsoft and someone said what can we just use the new Chromium Edge browser but we don't support that. With any of these application script heavy sites on the Evergreen side but given the move to chromium I can imagine is something that we might see how it works. Just do an experiment, and if it works out it may be something we open a launchpad ticket forges because unlike the browser client which has 1000 different interfaces, the self-check is limited to a very small set, so it is a lot easier to increase the range of support for something like that. So we will see what happens there.

>> TERRAN MCCANNA: Even the existing one I think will work fine on chromium.

>> BILL ERICKSON: Probably.

>> TERRAN MCCANNA: I believe one of our libraries, the one that does not have the receipt printers is using Chromium devices. And it is notoriously bad with printing [Laughter]. So that's one of the reasons they did not want to hook up receipt printers because they didn't want to manage that relationship between the machines and printers. But to Blake's comment, printing is always the issue.

>> TERRAN MCCANNA: Yes.

>> RUTH FRASUR: Always.

>> BILL ERICKSON: I have to switch tracks for another session.

>> RUTH FRASUR: Okay thank you to Bill and Tarran Fort leading this and all of you for participating, I appreciate all your feedback. I know there will be -- Tarran has been updating the slides and the recording will be avail and there's a lot of content in here to go through. We will be back here at 4 PM Eastern time/1 PM Pacific, with the panel discussion for communicating open source value. So, I will throw that little slide up there. If you are in here, thank you, everybody-- we will see you in a few minutes if not, have a great afternoon.

>> TERRAN MCCANNA: Thank you everyone.

>> BILL ERICKSON: Thank you.