Theme: Shanghai library FOLIO project

Time: Sept 28, 2022 07:30pm (EDT) / Sept 29, 2022 07:30am (GMT+8)

Attendees:
Vincent Bareau (Enterprise Architect, EBSCO)
Gang Zhou (Project manager, Shanghai library)
Lucy Liu (Product Owner, Folio China)

Notes:

1. **The opening of Shanghai Library East**
   Gang Zhou: Shanghai Library East was opened to the public from Sept. 28, 2022. It will be open during the national holiday from October 1-7. Around 3,000 people visited the Library on day 1 and about 5,000-6,000 people on day 2. The FOLIO circulation has been successful for the opening of the Library.
   Vince: Very exciting news.

2. **We have two buildings: the old one is the West Building; and the new one - the East. We implemented FOLIO in the old building. There's a fiber connection between these buildings. Do you have any solutions such as the implementation of clusters or load balancer in the consortia? Our concern is that if there are disasters/crashes in the server where FOLIO runs on, then we can't run FOLIO for the new building. (Gang Zhou)**
   Vince: Possible. Do you have two different distinct installations of FOLIO in your buildings or do they share the same virtual network?
   Gang Zhou: The same virtual network.
   Vince:
   - We typically run FOLIO in two different availability zones, which are effectively distinct data centers. I think there are even two separate buildings within AWS hosting. Then we load balance between them. If one of the data centers has a disaster, then the load balancer will direct to the one that is still running. You can potentially configure more than two availability zones if you wish.
   - The thing you need to be careful about is to ensure you don't have a cascading failure, meaning that if one data center is not sufficient to handle all the traffic and you split it between two because its capacity decision, then if the first one fails, then all the traffic is sent to the second one. Now you have too much traffic on the second one. And it will fail, causing a cascading failure. So you have to be careful to size appropriately or to handle the load balancing switch over in a way that you will increase capacity before you send all the traffic over. It's easy to do that if you have a controlled switch over. So if you take one availability zone down for service reasons, then you have the plan to increase the capacity and bring the traffic over. It's a little bit different with regards to disaster recovery because you don't know when this is going to happen. So you need to size your capacity appropriately.
   - If you place the load balancer outside of the two buildings and let it direct traffic between them, then your load balancer is able to direct traffic from one network to the other. It's

not just the AWS solution. AWS certainly has additional services that make it easier. But it's a traditional network configuration that is older than AWS.

3. **Sebastian from Index Data suggested developing the Workflow Apps at WOLFcon. How did the TC react to this call for action? (Lucy)**
Vince: This has been an initiative from Sebastian Hammer, with some support from TAMU. It was not coordinated with the TC. It's not on the TC agenda.
Gang Zhou: Will that be a standard app in the FOLIO platform or only at TAMU?
Vince: There's currently no workflow apps. And there is no active effort or active demand for the Workflow apps. It's just that some people feel this is a good idea.
Gang Zhou: We have a workflow engineer because there are many workflow requirements in China's libraries.
Vince:
- This idea came up several years ago. In the beginning of Sebastian's talk, it was mentioned that we had decided to put it aside because we should focus on what it would be necessary to make institutions set up FOLIO and to make the project survive. But before the idea was put aside, there had been a PoC, which was created by TAMU.
- It was not agreed on what was the best way to do it:
  - There are lots of workflow engines out there, which should be perfectly capable and have great features. We did PoC using the Camunda workflow engine, which is an open source, complete workflow engine that has many tools to go with it, including a modular console and a design application that allows you design workflow in a graphical tool. And it sits outside of FOLIO. I thought that was pretty good. You run your workflow in Camunda, which runs outside of folio. You design it with the tools that Camunda has. It defines workflow as BPMH syntax. Then it would have steps and tasks in the workflow which will make API calls into FOLIO to do things. I thought it was a pretty good way to go.
  - Sebastian proposed workflow apps that would work completely inside of FOLIO. It was trying to do workflow management in FOLIO. Implicitly, it would have a workflow engine built inside of FOLIO. The engine runs inside of FOLIO. And everything happens within FOLIO. There's no external calling into it. In order to do this, you would have to create a whole application to manage, create and define workflows because it's all built inside of FOLIO. That's a whole lot of work and can be difficult to do. It's kind of a duplication of existing things. There are projects, such as Camunda, that have all these things already. It will take years for FOLIO to build its own version. Even now, the focus shouldn't be to build a complete workflow within FOLIO. It should be to integrate the existing workflow like Camunda if you need workflow apps.
  - TAMU implemented the PoC. They also created tools for internal use with Folio at TAMU using Camunda. They use Camunda as an external tool to manage the upgrade process on their system. But what Sebastian presented at WOLFcon was a brand new workflow.

4. **Are there coordinations between the criteria work and the architectural work that are both ongoing in FOLIO? (Lucy)**
    Vince: I'm not personally following any such discussion.

5. **EBSCO will help the Library of Congress implement FOLIO. Will EBSCO recruit new development teams or use existing teams to work on this project? How will it affect the work on flower releases? (Lucy)**
    Vince: EBSCO will ensure that the LOC project won't disrupt the current FOLIO community work, implementing it will require new teams. Everything is still being planned. Need to identify needs first.