VuFind on FOLIO

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Open Market = Opportunity
“It’s axiomatic that a vibrant and healthy platform is dependent on the value created by partners who are outside the platform itself. If a platform is too closed, then partners cannot or will not contribute”

Ken Chad, Amigos Online Conference, Sept 15, 2016
THE INTERNET OF THINGS
My Custom Ecosystem

DLink Camera

Samsung Smartthings

Harmony Controller

Amazon Echo
Modular Apps

built on an open, extensible platform

“Radical Modularity”

App marketplace

Customized solutions by library

Microservices architecture
Core FOLIO Solution
open source

Extensible platform
System/Tenant
E-Resource Mgmt
Acquisitions
Cataloguing
Circulation
Data Conversion Tools
Knowledge Base
Resource Sharing
Expand the LSP
choose apps/solutions from the marketplace

Discovery
Open URL Linking
Holdings Management
Predictive analytics
ILL solutions
eBook integration
Collection Development
Imagine new apps beyond the ILS/LSP: the FOLIO difference
IndexData
- Development Begins
  - Mid 2015

Public Code
- FOLIO codebase public on GitHub
  - August 2016

Modules
- Special Interest Groups Forming
- Core Module Development
  - October 2016

Platform
- APIs Formalized
- App Market formed
- Core Module Development
- Extension App Development
  - 2017

Go Live
- First Library Goes Live
  - 2018

Go Live
- First Library Goes Live
  - 2018
Microservices Architecture

1. Language Independent: Build/Modify App in any language using OKAPI RESTful APIs
2. Deployment and Discovery: Apps are defined using JSON metadata
3. Marketplace: creates a distribution channel for sharing and selling apps

MyApp

ModuleDescriptor.json

UI Code (React Directives)

Business Logic (OKAPI Interactions)
OKAPI – Multitenant API Gateway

• Core API Layer
• Supports System, Tenant and Module configuration
  – /_/proxy – modules and tenants
  – /_/discovery – node management
  – /_/deployment – deploying modules
Running FOLIO

FOLIO Server

Register App with Tenant

New Tenant

http://localhost:9130/_/proxy/tenants

$ mvn -Dstorage=mongo exec:exec

http://localhost:9130/_/proxy/tenants/${1}/modules
VuFind on FOLIO – Proof of Concept

• Deploy mod-circulation module which includes APIs:
  – Patrons
  – Bibs
  – Configurations
  – Items

• Push MARC records to /bibs endpoint

• Pull bibs into Solr
Data Structures

OKAPI (API Gateway)

System Layer

mongoDB, Solr, PostgreSQL
VuFind on FOLIO – Future

- Embed Solr directly in System Layer to ensure records in data stores are in sync with index
- Utilize SolrMarc configuration files to define indexing and data manipulation to optimize for search

Let's work together to design this