Scholars@TAMU
Texas A&M University Libraries’
VIVO Conference 2019

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2013 – Violeta Ilik introduced Texas A&M University to VIVO we started using VIVO

2014 – Running VIVO in production context

2015 – The dark ages

2016 – Relaunch VIVO with a more systematic approach of implementation

2017 – Quickly outgrow the existing UI. (Currently using VIVO 1.9.2)
Outgrow existing UI

Let's face it we are all special!

- We quickly outgrow most native user interfaces that ship with software. That's why we love open source. We want to change it.
- We all just want it to do something just a little bit different.
So we started to make changes

- Researched what was out there
- Copied code from others
- Lots of trial and error
- Hacked and slashed until we got it to do kind of what we wanted

The process of doing UI changes just wasn’t working for us.

Nothing inherently is wrong with VIVO from a code, or technical point of view.

- Learning curve for SPARQL was steep for developers.
- VIVO showing its age from a technology stack.
- Developers just not “excited” about working on it.
The VIVO UI had to evolve for Texas A&M to continue to use it.

A lot of interest in VIVO from across campus.

VIVO is run out of the Library at Texas A&M so we need to maintain interest since no upper administration is “selling” it for us.

Under a tremendous time crunch. We need to keep up the momentum of interest on campus.
Initial requirements:

- Align the technology stack as much as possible with the existing VIVO stack to assist with implementation by others if they choose especially smaller libraries.
- The majority of the front end is customizable by others.
- Read only UI. No updating back to the triple store.
- All data is retrieved via a REST API endpoint using Spring Data for Apache Solr.
- 100% Search Engine Optimization. IE: A person / crawler can disable JavaScript and still have the same experience. Server side, and Client side rendering if needed.
Initial concept for TAMU Scholars v2
Service Architectural diagram
Combining the effort with others

A few months into TAMU’s development VIVO Scholar Task Force announced a new UI being developed for VIVO.

https://wiki.duraspace.org/display/VIVO/VIVO+Scholar+Task+Force

Both projects had a common goal and we were able to merge the efforts and created the Scholars Discovery / Middleware service.

https://github.com/vivo-community/scholars-discovery
Current development for TAMU Scholars v2

Service Architectural diagram

VIVO

Solr

Scholars Discovery/Middleware

Spring Data

GraphQL

Angular Frontend

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React
The Process

Harvest directly from the VIVO triplestore into Solr

Basically this involves pulling the data out of VIVO, flattening it, and putting it into a Solr index.
Using Spring Data for Apache Solr expose the Solr index as JSON

```
{
  id: "n3e6f7747",
  name: "Hahn, Douglas",
  type: [
    "NonFacultyAcademic"
  ],
  image: "/file/n2505/402001311.jpg",
  thumbnail: "/file/n6636/thumbnail_402001311.jpg",
  primaryEmail: "dhahn@tamu.edu",
  phone: "1 979 458 5777",
  websites: [ ]
}
```

```
},
orcidId: "0000-0003-4327-6476",
preferredTitle: "IT Manager IV",
positions: [
  {
    label: "IT Manager",
    id: "n3e6f7747",
    type: "NonFacultyAcademicPosition",
    organizations: [
      {
        label: "University Libraries",
        id: "n7f7f7f7f"
      }
    ]
  }
],
overview: "Douglas Hahn is a Sr. IT Manager at Texas A&M University Libraries with over 20 years’ experience degree from University of North Texas. His current interests are in the evolution of the web, and technologie
hrJobTitle: "IT Manager IV",
keywords: [
  "Collection Management",
  "Library Automation",
  "Tracking",
  "Document Delivery",
  "Authentication",
  "Authorization",
  "Single Sign-on",
  "Libraries",
]"
The Process

Take the JSON data apply templates and expose it in an Angular app.
Thanks!

http://scholars.library.tamu.edu/
https://demos.library.tamu.edu/scholars-ui/

Scholars Discovery Middleware, https://github.com/vivo-community/scholars-discovery

Scholars Embed, https://github.com/vivo-community/scholars-embed

Scholars Angular, https://github.com/vivo-community/scholars-angular