Developments and Innovations in the Vireo 4.x ETD Submittal System

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Michael Bolton - Assistant Dean of Digital Initiatives, Texas A&M
Ryan Steans - Assistant Director, TDL
Agenda

1. Vireo Users Group
2. Framework Changes
3. Foundations for Vireo 4
4. Current Status
Vireo open source deployments
Driving Features of Vireo 4 development

Customizable Workflow
- Total re-imagining of underpinnings of Vireo from a single-workflow to multi-workflow system

Controlled Vocabulary
- Re-develop database
- New user interface features on Student and Admin sides
2. Framework Changes
Framework Changes

Spring-Boot framework (v1.3.3)
- [http://projects.spring.io/spring-boot/](http://projects.spring.io/spring-boot/)

AngularJS (v1.4.9)
- [https://angularjs.org/](https://angularjs.org/)

Utilizing Texas A&M Weaver toolkits
- [https://github.com/TAMULib/Weaver-Webservice-Core](https://github.com/TAMULib/Weaver-Webservice-Core)
- [https://github.com/TAMULib/Weaver-UI-Core](https://github.com/TAMULib/Weaver-UI-Core)

More uniformity within code
- Larger open-source community behind Spring
- Easy to extend
- Easy to ramp up new developers
# Vireo 4 Development Process

## 2-week sprint cycles:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>Development</td>
<td>Merging Code</td>
<td>Demo</td>
<td>Sprint Planning</td>
<td>Development</td>
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### TDL JIRA
- [https://jira.tdl.org](https://jira.tdl.org)

### Vireo GitHub
- [https://github.com/TexasDigitalLibrary/Vireo](https://github.com/TexasDigitalLibrary/Vireo)
Jira Backlog
Git history for Vireo 4.0.x since Nov 2015
Git commits for Vireo 4.0.x since Nov 2015
3. Foundations for Vireo 4
# Vireo 3 vs Vireo 4 Organizations/Workflows/Fields

<table>
<thead>
<tr>
<th></th>
<th>Vireo 3</th>
<th>Vireo 4</th>
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<tbody>
<tr>
<td><strong>Organizations</strong></td>
<td>Static organizations: College, Degree, Department, Major, Program, Administrative Group</td>
<td>Dynamic organizations: <em>Will be pre-configured to have the same organizations as Vireo 3 all inheriting their workflow and steps from the top-level Institution Organization</em></td>
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<tr>
<td><strong>Workflow Steps</strong></td>
<td>One static workflow for all with 4 steps</td>
<td>One dynamic workflow for all and/or one dynamic workflow for each organization: <em>Will be pre-configured to have the same workflow steps as Vireo 3 in the top-level Institution Organization</em></td>
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<tr>
<td><strong>Fields</strong></td>
<td>One static list of fields for each of the 4 static workflow steps</td>
<td>Dynamic list of fields per each dynamic workflow step for the whole institution and/or for each organization: <em>Will be pre-configured to have the same fields as Vireo 3 in the top-level Institution Organization’s workflow</em></td>
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<tr>
<td>Vireo 3 field profile properties</td>
<td>Vireo 4 field profile properties</td>
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<td>---------------------------------------------------------------------</td>
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<tr>
<td>● Enabled/Disabled</td>
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<td>● Optional/Required</td>
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<tr>
<td>● Display Label</td>
<td>● Field Gloss(es)</td>
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<td>● Help Text</td>
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<td>● Usage</td>
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<td>● Repeatable</td>
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<td>● Controlled Vocabulary(ies)</td>
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Organizations in Vireo 3
Organizations Triptych in Vireo 4
Workflow and Fields in Vireo 3
Workflows and Fields in Vireo 4 (wip)
Controlled Vocabulary in Vireo 4

Uploading a Controlled Vocabulary

Creating new Controlled Vocabulary
Uploading CSV
Confirm New Words
Confirm Duplicate Words
Confirm No Changes
Confirm Updated Words
Flexible Exports (wip)

ProQuest zip file
SWORD DSpace Deposit
MARC Export
DSpace REST API Deposit
4. Current Status
Current Development Team

2 Developers from Texas A&M (rotating)

1 Developer from TDL (Gad)

1 Product Owner (Stephanie)

Project Management support from Texas A&M and TDL (Doug & Ryan)
Development Underway

1. Began in late September, 2015
2. A few breaks to work on other responsibilities at Texas A&M and TDL
4. Current deadline is for August 2016
Coding and infrastructure challenges

Complexity of Vireo 4 Development greater than originally estimated
Many consequences of breaking up “single workflow” vision for Vireo
  ◦ Ex: Dynamic and Customizable Metadata per field
  ◦ Ex: Dynamic and Customizable Exports from Vireo
Undergoing review of remaining points, application of resources
Remaining Work

1. Complete Beta Coding
2. Testing of application - You can help! (Contact Stephanie or Ryan)
3. Develop Upgrade Application
4. Roll-Out, Outreach and Training
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