

Tripal User's Meeting 2017/05/05

Attendees

Please add your name and institution as you arrive.

Stephen Ficklin, Victor Unda, Katheryn Buble (WSU)

Lacey-anne Sanderson (USASK)

Nic Herndon (UConn)

Yi Zheng (BTI)

Abdullah Almsaeed (UTK)

Ming Chen (UTK)

Meg Staton (UTK)

Bradford Condon (UTK)

Emily Grau (UConn)

Monica Poelchau (USDA/NAL)

Sean Buehler (UConn)

Ethy Cannon (ISU)

Announcements:

- Next Tripal v3 release candidate 1 planned for May, but may come in early June.
- Ag Data Survey: https://umdsurvey.umd.edu/jfe/form/SV_4TkuRnI1Ekl2dgx
 - Please pass on to your users.
- Documentation updates:
 - Bulk Loader documentation in the User's Guide has been updated to reflect changes in Tripal v2.1 http://tripal.info/tutorials/v2.x/bulk_loader
 - Improved instructions for using the Tripal Docker <http://tripal.info/tutorials/v2.x/docker-setup>

Reminders:

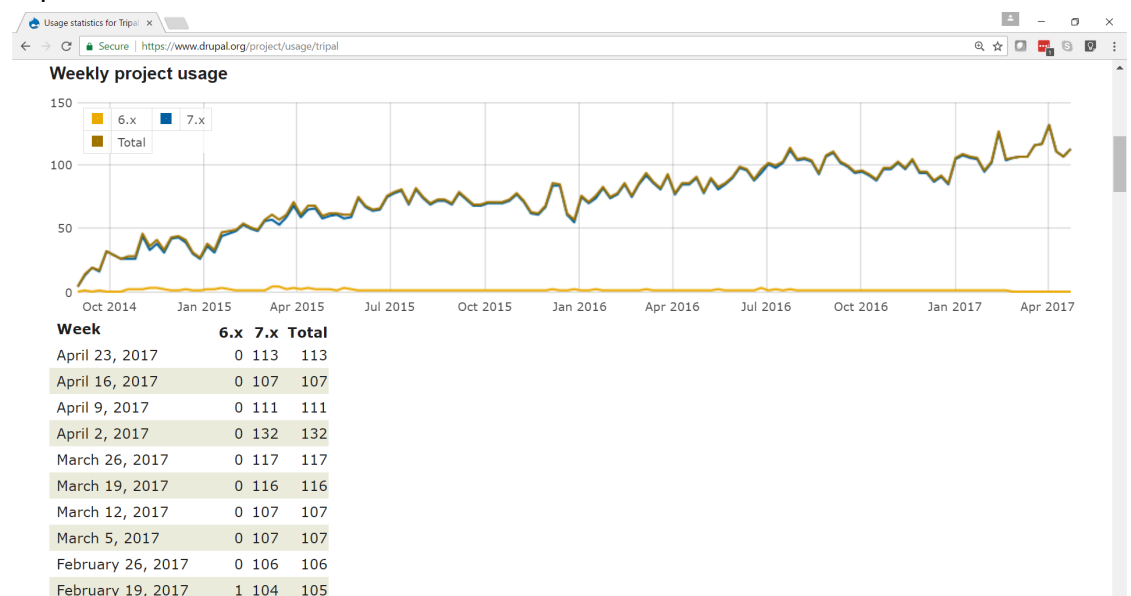
- Consider adding your modules into the [Tripal GitHub](#) organization.
 - if you prefer to have your Tripal modules in a your own organization or account consider "tagging" your repository with the word "Tripal" to make it easier to find all Tripal module.
 - Linke for all repositories: <https://github.com/search?utf8=%E2%9C%93&q=topic%3Atripal+&type=Repositories>
- Remember to update the status of your modules on the Tripal.info site.

- We now have "Powered by Tripal logos" if you'd like to add one to your site:
<http://tripal.info/logos>
- If you have a new site or major updates to your existing site let us now and we can publish those on the Tripal news feed and twitter accounts.
- Send us your logo if you have shared a module with the community and would like it showcased on the Tripal.info site



Agenda:

- State of Tripal
 - Tripal Installations



- Registered extensions on <http://tripal.info>

Extension Type

Bulk Loader Template	1
Materialized View	1
Extension Module	27

Development Stage

Released: Needs debugging	1
Released: Ready for Use	16
In Development	10

- Funding

■ Tripal v2:

- Need to add historical funding here...

■ Tripal v3:

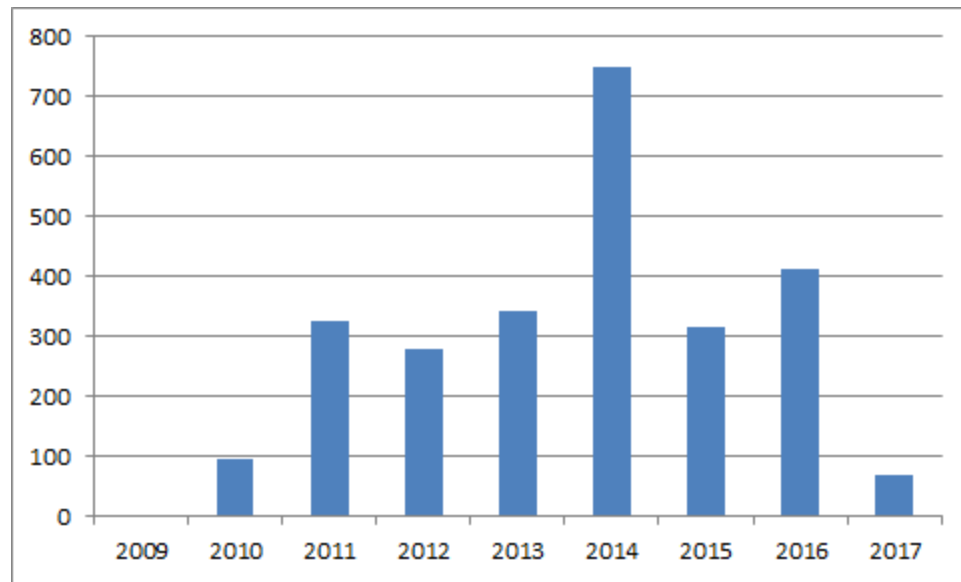
- [NSF DIBBs](#) (Award #1443040)
- [NSF PGRP](#) (Award #1444573)
- [NSF PGRP](#) (Award #1025974)
- Saskatchewan Pulse Growers
 - <http://saskpulse.com/news-events/press-releases/pulse-growers-more-than-double-investment-in-pulse-breeding-atc-dc>
 - Funds Lacey Sanderson's full time salary for KnowPulse including a clause for Tripal Core development

■ Tripal Extensions:

- Tripal [iRODS](#) Integration: [NSF CC*](#) (Award #1659300)
- Tripal [Galaxy](#) Integration: [NSF DIBBs](#) (Award #1443040)
- Tripal Phenotype Support: GenomeCanada AGILE
 - <https://www.genomecanada.ca/en/news-and-events/news-releases/minister-ritz-announces-major-investment-research-boost-canadian>
 - <http://www.genomeprairie.ca/project/current/agile/>
 - Please add your awards here.

- Action ITEM: Possibly add to the extension module creation page on Tripal.info a field for funding information.

- Mailing list support



- Twitter: started June 2016, 80 followers, 100 tweets, 1 moment (PAG XXV)
- Three Workshops at PAG: 2017, 2016, 2015. Approximately 30-60 attendees at each event.

- Hackathon attending: ~20 (according to sign-up sheet)

- Action Item: Average number of folks who show for our monthly online meetings
???

- Training

- April Online Training: bulk loader.
 - May Online Training
 - On Friday 5/26
 - Tripal v3 Development. Converting template to entity fields.
 - Tripal Summer School?
 - Interest in an all-day *online* hackathon (webcam encouraged) this summer?
 - Need to differentiate between "adoption" training and developers who want to collaborate on. Documentation updating. Have defined goals

- Tripal v2.1

- Any issues questions, problem?

- Tripal v3

- Support:
 - Example module already under development:
 - https://github.com/tripal/tripal_example
 - Tripal legacy example module was like "drinking from a firehose". This example module is broken out into common tasks.

- Currently provides examples for creating custom fields.
 - Do you have an example you'd like to see provided as an example? Please add an issue to the queue.
 - Updated API Documentation will be online
 - Tripal v3 User's Guide will be updated at the time of release, including developer's handbook.
- Any questions about Tripal v3? Upgrading, etc? Conversion of custom modules?
- Mailing list consolidation
 - Will remove **gmod-tripal-announce** and **gmod-tripal-devel** but keep **gmod-tripal**.
 - Major announcements will be made on the [@TripalProject](#) Twitter account and Tripal website for those who don't want to be on the mailing list.
- Report on GO loading problem
 - Tripal v2.1 still has the GO loading problem
 - Problem in GO is a combination:
 - Of "has_part" and "part_of"
 - When updating an ontology old relationships can cause a cycle as well. Action Item (Stephen) Check on solution provided by Ethy for this.
 - Ontology loads fully, but cannot be added to the cvtermpath table.
 - We are working on a fix to detect cycles and avoid them. We hope to have this fixed for Tripal v3 release.
- Nic (Tree Genes):
 - How to have different permissions for different users
 - hook_permission(), user_access(), hook_access()
 - Example module [VCF Filter](#) that does this.
 - This module has a table listing all the VCF files to make available and then a second table that link each VCF file to users/roles that should have permission to see it.
 - VCF File listing table: https://github.com/UofS-Pulse-Binfo/vcf_filter/blob/master/vcf_filter.install#L13
 - Permissions Table: https://github.com/UofS-Pulse-Binfo/vcf_filter/blob/master/vcf_filter.install#L48
 - There is also an administration screen provided by the module per VCF file allowing users/roles to be set
 - https://github.com/UofS-Pulse-Binfo/vcf_filter/blob/master/includes/vcf_filter.admin.inc#L178
 - The way access is controlled is by providing an API function that returns the list of VCF files

- This function uses the global \$user object and adds a user/role restriction to the query pulling out the list of files
 - https://github.com/UofS-Pulse-Binfo/vcf_filter/blob/master/api/vcf_filter.api.inc#L13
 - Then every time you need the list of files by using this API function to retrieve them you can ensure that only files the current user has permission to see will be available.
- Installation Profiles (Lacey, USASK)
 - Packages Drupal/Tripal/Extension modules needed into a bundle.
 - Simplifies Tripal installation.
 - Profiles:
 - Genomics (extensions and content types specific)
 - Breeding
 - Stock Collection (with eCommerce modules built in)
 - Headless Tripal with Loaders with privacy.
 - Current discussion on the issue queue: <https://github.com/tripal/tripal/issues/95>
 - We would greatly appreciate any input on content types and/or functionality you would like to see included!
- Wish List / Hate List
 - Gene/mRNA Pages: too chado-esque. Not as helpful to users as they could be.
 - Ethy: PeanutBase & LegumeInfo have an extension module to customize these pages. [Example](#). Includes JBrowse image, mRNA, and protein sequences.
 - Monica: I5K has custom gene pages with a more EnSEMBL-like. Example i5k page: <https://i5k.nal.usda.gov/OFAS001265>
 - Example Ensembl page: http://metazoa.ensembl.org/Aedes_aegypti/Gene/Summary?g=AAEL017009;r=supercont1.180:1754172-1755591;t=AAEL017009-R A:db=core
 - Transcript listing: Shows all the transcripts for a given gene including all the functional information & annotation for each transcript
 - Candidate Tripal3 Field that admin could add to their Gene pages
 - JBrowse Field to show a region of a JBrowse instance on any page.
 - This will be included in the JBrowse integration module when it has a Tripal3 release
 - And configuration to allow you to highlight a specific gene for example
 - (would be used in both LegumeInfo & I5K)
 - Sequence Field: Shows the sequence for the Gene, any transcripts and proteins (would be used in both LegumeInfo & I5K)
 - For suggestions see: <https://github.com/tripal/tripal/issues/100>
- What can core developers to better help adoption/training/etc...
 -

Drupal Entities & Fields

Entity

Type: SO:0000704

ID: 310

Label: Gene

*An **entity** is simply a “container” for adding fields. It only contains 3 fields by default: **type**, **ID** and **label**.*

*Fields are “added” to entities by the data storage back-end. Fields must always have a **label**, **type** and **value***

Label: Name

Type: FOAF:name

Value: orange1.1g022799m

*Chado
Field*

Label: Sequence

Type: SO:sequence_of

Value: AAGTAGGGAGACGGAGT...

*Chado
Field*

Label: Organism

Type: local:organism

Value: <link to organism entity>

*Chado
Field*

Label: Transcript Alignments

Type: TBD

Value: List of BAM snippets

*BAM
Field*