Help Desk Update

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September 2010 GMOD Meeting
13-45 September 2010
Agenda

Help Desk
Events
Grant Proposal / GBrowse → JBrowse
New Stuff
Interesting Documents
GMOD on the Web

http://gmod.org/wiki/GMOD_Help_Desk
Mailing List Archive(s): GMOD @ Nabble

Unified search - no matter where list is hosted
All active lists
SF.net search < good

Overview Lists

<table>
<thead>
<tr>
<th>Topic</th>
<th>List Link</th>
<th>Comment</th>
<th>Archive(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announcements</td>
<td>gmod-announce</td>
<td>Low volume GMOD announcements. Moderated.</td>
<td>Gmane, Nabble (2010/05+), Sourceforge</td>
</tr>
<tr>
<td>GMOD Developers List</td>
<td>gmod-devel</td>
<td>General GMOD developer list.</td>
<td>Gmane, Nabble (2010/05+), Sourceforge</td>
</tr>
</tbody>
</table>

Component Lists

Mailing lists about specific GMOD Components.

<table>
<thead>
<tr>
<th>Component</th>
<th>List Link</th>
<th>Comment</th>
<th>Archive(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apollo</td>
<td>gmod-apollo</td>
<td>Apollo mailing list</td>
<td>Gmane, Nabble (2010/05+)</td>
</tr>
<tr>
<td></td>
<td>gmod-apollo-announcements</td>
<td>Apollo code updates.</td>
<td>Sourceforge</td>
</tr>
<tr>
<td>Bio::Graphics</td>
<td>gmod-biographics-commits</td>
<td>Bio::Graphics code updates.</td>
<td>Sourceforge</td>
</tr>
<tr>
<td>BioMart</td>
<td>mart-announce</td>
<td>BioMart announcements mailing list</td>
<td>Nabble (2010/06+)</td>
</tr>
<tr>
<td></td>
<td>mart-dev</td>
<td>BioMart users, developers, code and installation</td>
<td>Nabble (2010/06+)</td>
</tr>
</tbody>
</table>

http://gmod.org/wiki/GMOD_Mailing_Lists
http://gmod.827538.n3.nabble.com/
Software Membership Requirements

• Codified in Feb 2010, following Jan 2010 meeting

• Version 1 Requirements:
  – Meets a common need
  – Useful over time
  – Configurable and Extensible
  – Open source license for all users
  – Interoperable with existing GMOD components
  – Commitment of support

• Want to add:
  – Support mailing list that is publicly archived
  – Publicly accessible code repository

• Thoughts, changes?

http://gmod.org/wiki/GMOD_Membership
Promotion

• Why?
  – Increased visibility
    → Increased adoption
    → More projects contributing back
  – Increased adoption & development → funding

• How?
  – Cite GMOD, GMOD Components
  – Powered by GMOD icons
  – Speakers at your event
  – Graphics & slides for your presentations, posters
  – Presentation and event promotion
  – Brochures (GMOD project, events)
  – Bling!

http://gmod.org/wiki/GMOD_Promotion
GMOD Logo Program

Logos by John Aikman's Spring 2010 Advanced Design class @ Linn-Benton Community College, Albany, Oregon, United States

http://gmod.org/wiki/Spring_2010_Logo_Program
2010 GMOD Community Survey is Coming

• 2008
  – Covered components and project wide topics
• 2009
  – Focused on genome and comparative genomics browsing
• 2010
  – Will cover components and project wide topics
  – Use it to produce a GMOD Project publication.
  – Suggestions for general topics to cover?
  – Free bling to random survey takers!

http://gmod.org/wiki/200[89]_GMOD_Community_Survey
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http://gmod.org/wiki/Calendar
Satellites

• Birds of a Feather
• Wednesday, 9:30am, Part II Room
• Can still sign up!
• Topics:
  – Post Reference Genome Tools
  – You've got two days to come up with other topics
  – Rare opportunity to meet with others facing similar issues

http://gmod.org/wiki/Satellite_Meetings_-_GMOD_Europe_2010
Summer Schools

• 2010: 4th school, 3rd year
  – In May @ NESCent, North Carolina, US
  – 62 applicants for 25 slots

• 2011
  – During Summer @ NESCent
  – Will charge tuition; seeking sponsors

• Summer school sessions become online tutorials:
  – Starting and ending VMware images
  – Step by step instructions
  – Example datasets
    – Apollo, Artemis-Chado Integration, BioMart, Chado, CMap, Galaxy, GBrowse, GBrowse_syn, JBrowse, MAKER, Tripal

http://gmod.org/wiki/GMOD_Summer_School
Upcoming Events of Note

• Biocuration 2010
  – October, Tokyo, Japan

• Pathway Tools Workshop
  – October, Menlo Park, California, US

• GMOD Evo Hackathon
  – November, Durham, North Carolina, US

• Computational and Comparative Genomics
  – November, Cold Spring Harbor, New York, US

• Plant and Animal Genome
  – January, San Diego, California, US

• Workshop on Molecular Evolution
  – January, Cesky Krumlov, Czech Republic

• Galaxy Developers Conference
  – 2011, Europe

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Grant Proposal

• **Enhancing the GMOD Suite of Genome Annotation and Visualization Tools**
  – JBrowse, GBrowse → JBrowse, Help Desk
  – Submitted Summer 2010
  – If approved, will start early 2011

• **Help Desk**
  – JBrowse, GBrowse → JBrowse, NGS data, transcriptomics, developmental atlases, population genomic and natural diversity data, workflow and pipeline tools for processing large data sets, and software interoperability
  – Continue with documentation, user support, gmod.org, training, (longer) summer schools, outreach, annual survey
1.1 just released
   - Scalability: very large data sets, including NGS reads, human EST/SNP tracks
   - Extensibility: custom tracks
   - Backward incompatible JSON format

1.2 Release (December 2010)
   - improved NGS display (paired-end reads, possibly read-to-genome alignments)
   - reduced memory usage for NGS
   - minor UI enhancements including y-axis labels for wiggle tracks

http://gmod.org/wiki/JBrowse
JBrowse Grant Proposal

• **GBrowse → JBrowse**
  – JBrowse concepts have proven themselves
  – Scalable to coming data set sizes
  – GBrowse development will wind down during the grant.

• **New Features:**
  – JBrowse ecosystem on par with what GBrowse has
  – DAS and web services support
  – Scalability and NGS
  – Large numbers of tracks
  – Community annotation (upload/publish, tagging, comment, …)
  – Mobile device support?

• **GBrowse → JBrowse Migration Support**
  – Migration Scripts: Config files, data (data is easy)
  – Simultaneous GBrowse and JBrowse support
  – JBrowse running on top of GBrowse config and data

http://gmod.org/wiki/JBrowse
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New Components

- **ISGA**: Chris Hemmerich *et al.* at Indiana U.
  - Bioinformatics pipeline service software built on Ergatis
  - Newest GMOD component

- **WebGBrowse**: Ram Podicheti *et al.* at Indiana U
  - Hosted GBrowse and GUI for GBrowse configuration
  - Nominated and approved, almost in.

- **SOBA**: Ginger Fan *et al.* U of Utah
  - GFF3 file analysis and reporting
  - Tabular and graphical reports
  - Nominated and approved, code being refactored

- **GMOD-DBSF, genes4all, …**: Alexie Papanicolaou at CSIRO
  - Drupal based toolkit for building organism web sites
  - Submitted for publication; not yet nominated
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Some Interesting Documents

• How to load a Chado Database into BioMart
  – AO Keliet, J Amselem, S Derozie, and D Steinbach, all @ INRA URGI

• Choosing a genome browser for a Model Organism Database: surveying the Maize community
  – TZ Sen, LC Harper, ML Schaeffer, CM. Andorf, TE Seigfried, DA Campbell, and CJ. Lawrence
  – How and why MaizeGDB picked GBrowse
  – Appeared in Database,
    http://database.oxfordjournals.org/
Nature Methods Supplement on visualizing biological data, March 2010

- Visualizing biological data - now and in the future
  - SI O'Donoghue, et al.

- Visualizing genomes: techniques and challenges
  - CB Nielsen, et al.

- Visualization of multiple alignments, phylogenies and gene family evolution
  - JB Proctor, et al.

- Visualization of image data from cells to organisms
  - T Walker, et al.

- Visualization of macromolecular structures
  - SI O'Donoghue, et al.

- Visualization of omics data for systems biology
  - N Gehlenborg, et al.
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GMOD.org

• Moving from CSHL to OICR
  – In Jan/Feb 2010 Real soon now
  – MediaWiki upgrade
  – Probably lots of new extensions
  – Maybe a modified skin

• Look into adding
  – User log section
  – Scrapbook for contributed code
  – Membership directory (TableEdit based)
  – Semi-automated publication listing/linking
Should GMOD have a social presence?

GMOD already has mailing lists, wiki, GMOD News (RSS), IRC

What should the goals be?
- Community building / forums?
- Social bookmarking?
  - ISB uses Connotea to bookmark biocuration, text mining, and semantic annotation papers
- Outreach?

Which tools?
- Twitter, Facebook, Connotea, StumbleUpon, Technorati, …

http://www.connotea.org/tag/biocuration

http://www.mediawiki.org/wiki/Extension:ShareThis
Textpresso Update

• Textpresso
  – Stand-alone tool for text analysis.
  – Hard to tightly interface with external website
  – Dated user interface
  – Nathan Liles of Jim Hu's group at Texas A&M is working with CalTech on these issues

• Textpresso developers also have plans for a community website and mailing list.
Odds and Ends

• Get a name tag at next break!
• Hang on to it.

• Upload your talk, or just send it to me:
  • clements@nescent.org
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Steve Heller
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Robert Buels
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Nicole Washington
Suzi Lewis
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Thank You!

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