

GMOD in the Cloud and GMOD in a Box: instant virtual servers for genomics data

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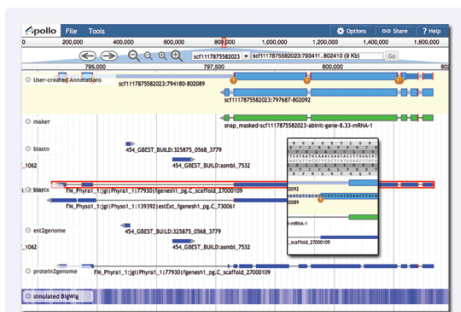
Setting up a server can be difficult and time-consuming. The Generic Model Organism Database (GMOD) project provides ready-to-go virtual servers equipped with GMOD software, including a Chado database, genome browsers GBrowse and JBrowse, annotation editor WebApollo, and website creator and Chado interface Tripal. Users just need to add data. GMOD virtual servers are easy to set up, can be scaled according to need, and keep user data separate to allow easy upgrading. All GMOD software is free, open-source, and fully supported by developers.



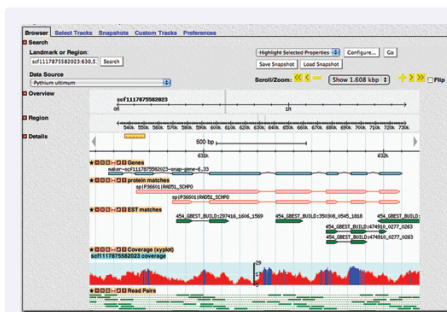
GMOD in the Cloud
<http://gmod.org/wiki/Cloud>
 Amazon machine image
 available at Amazon Web Services



GMOD in a Box
<http://gmod.org/wiki/Box>
 VirtualBox virtual machine
 download from the GMOD website



Browser-based genome editor for distributed community annotation
 Drag-and-drop feature editing with exon-level zoom
 Real time updating enables concurrent usage by multiple editors
 JBrowse-based interface



Popular, widely-used genome browser
 Supports many formats, including GFF3, SAM/BAM, Wiggle, BigWig, DAS
 and reading directly from Chado databases
 Google Maps-style side scrolling



Organism-agnostic database schema
 covers many biological data types



Drupal-based web front end for Chado databases
 Easy creation of a slick, powerful interface for viewing and editing data
 Integrate GO, InterPro, KEGG, UniGene, BLAST results
 Send data directly to embedded GMOD tools, such as GBrowse and Galaxy



Super-speedy, next-gen genome browser
 Javascript-based rendering for smooth, responsive scrolling and zooming
 Supports GFF3, BED, FASTA, Wiggle, BigWig, BAM, and data from a Chado database