Intro to Data QA and Release

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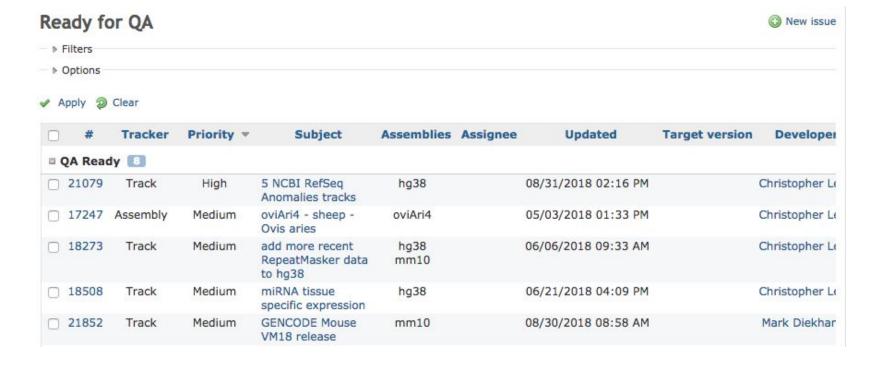
Routes to the RR

5 different routes to release data

- 1. **CGI code, related .ra, .js and .css files:** stored in git, moved from dev to beta to the RR via the build process, which can take from one to three weeks.
- 2. **trackDb:** stored in git, sent to dev/beta/beta-public via makes, pushed to the RR, happens all the time
- 3. **htdocs static html files:** similar to trackDb, pushed from hgwbeta to the RR all the time
- /gbdb: pushed straight from hgwdev to the RR (because hgwbeta and the RR share their /gbdb)
- 5. **mysql tables:** pushed from hgwdev to hgwbeta and then from hgwbeta to the RR

Let's start with Assembly/Track QA

Claiming the ticket in Redmine





Review ticket history

Assembly #20979



Setting up hive

```
/hive/users/jairo/tracks
Augustus ce11
                                               panPan2 phyloPna
UniProt chromAlias gorGor5 hgGene nanPar1 panTro6 rn6
aquChr2 criGri1 hq19 manPen1 nasLar1 petMar3 training
[10:39 AM] iairo@hawdev tracks/ $ cd panTro6/
 [10:39 AM] jairo@hawdev panTro6/ $ [
total 233K
-rw-rw-r-- 1 jairo protein 70K Aug 8 16:39 all.details
-rw-rw-r-- 1 jairo protein 18 Aug 3 15:02 all oras
drwxrwxr-x 2 jairo protein 4.0K Aug 13 09:57 chainNetQA/
drwxrwxr-x 2 jairo protein 4.0K Aug 10 12:54 genbank/
-rw-rw-r-- 1 jairo protein 41 Aug 3 14:54 hg38.tables
drwxrwxr-x 2 jairo protein 4.0K Aug 8 14:17 joinerCheck/
-rw-rw-r-- 1 jairo protein 41 Aug 3 14:52 mm10.tables
-rw-rw-r-- 1 jairo protein 391 Aug 8 09:47 panTro5.chrom.sizes
-rw-rw-r-- 1 jairo protein 390 Aug 8 09:48 panTro6.chrom.sizes
<u>-rw-rw-r-- 1 jairo</u> protein 74K Aug 3 15:28 panTro6.qaGbTracks.out.log
-rw-rw-r-- 1 jairo protein 3.9K Aug  3 15:28 panTro6.qaGbTracks.out.summary
-rw-rw-r-- 1 jairo protein 589 Aug 3 15:06 panTro6.tables
drwxrwxr-x 2 jairo protein 4.0K Aug 3 15:22 qaGbTracks/
-rw-rw-r-- 1 jairo protein 2.2K Aug 3 15:26 redmine.panTro6.file.list
-rw-rw-r-- 1 jairo protein 424 Aug 3 14:32 redmine.panTro6.releaseLog.txt
-rw-rw-r-- 1 jairo protein 1.1K Aug 3 14:31 redmine.panTro6.table.list
[10:39 AM] jairo@hawdev panTro6/ $
```



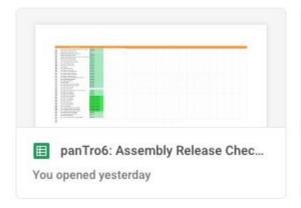
Copy the "Template: Assembly checklist"

My Drive 👻





Quick Access



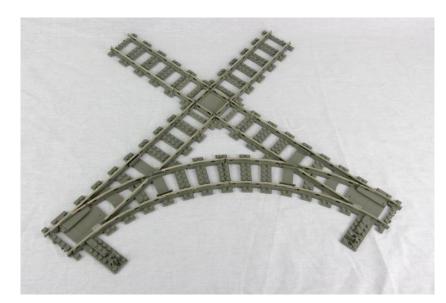




What is the type of release?

- Three types of data releases
 - Assembly release
 - New track for an existing assembly
 - Update to an existing track

- Read the track type description page,
 i.e., bigBed help page
 - o Is this a new track type?
 - Is it a binary indexed track type?



Review data on hgwdev (command line)

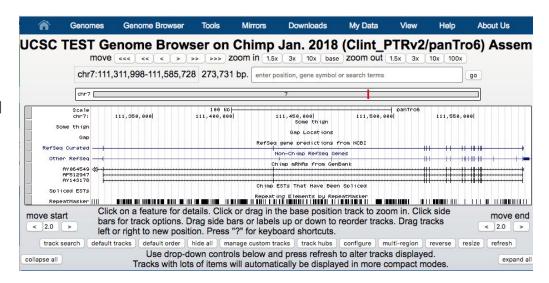
- The bread & butter:
 - qaGbTracks

- big* track QA
 - bigBedInfo
 - bigWigInfo
 - bigBedSummary
 - bigWigSummary
 - bigBedToBed
 - bigWigToWig

```
[[12:55 PM] jairo@hgwdev trackDb/ $ qaGbTracks
usage: qaGbTracks [-h] [-f TABLEFILE] db [table [table ...]] outFile
qaGbTracks: error: too few arguments
[01:04 PM] jairo@hgwdev trackDb/ $ |
```

Review data on hgwdev (website)

- Review gateway page (if a new assembly)
- Review long/short labels
- Make sure data is properly displayed (All metadata is on the details page)
- Review data using our tools (if applicable)
- Check track description pages for HTML styling and typos



HTML styling review!

- Do not underline implies hyperlink
- The style in h2 and h3 headers:
 - Capitalize the first word and any proper nouns
 - Everything else should be in lowercase
- Limit lines to a maximum of 100 characters
- Indentation: Indent every child element 2 spaces
- "Genome Browser" should be capitalized whenever it's referring to the application itself.
 - o If you're generically referring to genome browsers, no caps are needed.

Push to hgwbeta

Thanks, Jairo Navarro

Tools to use:

- copyHgcentral
- bigPush.sh
- Cluster-admin :)



TrackDb release tags

When the data is stored inside a big* file, a "release tag" is needed so the data does not prematurely appear on the RR.

```
track netDm1
release beta,public
shortLabel D. mel. Net
longLabel $0_Organism ($0_date) Alignment Net
group compGeno
priority 134
visibility dense
spectrum on
type netAlign dm1 chainDm1
otherDb dm1
```

```
track xenoClinvar
shortLabel Human Variants
longLabel ClinVar Variants mapped to Mouse
type bigBed 9 +
itemRgb on
bigDataUrl /gbdb/mm10/bbi/xenoClinvar.bb
group x
mouseOverField _mouseOver
urls rcvAcc="https://www.ncbi.nlm.nih.gov/clinvar/$$/" geneId="https://www.ncbi.nlm.nih.gov/gene/$$"
release alpha
```

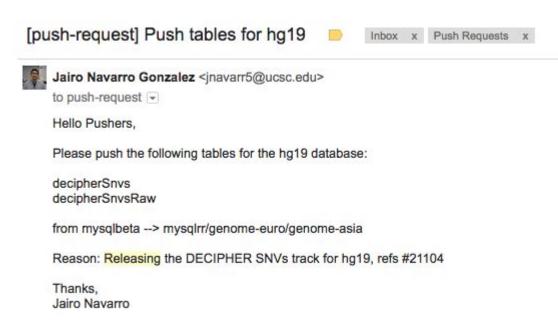
Review on hgwbeta

- Make sure everything is now on the hgwbeta machine
- Review using our tools again
- Check details pages to make sure no supporting tables are missing



- Ask cluster-admin to move the data to the RR and our official mirror sites
- Validate that all of the data is displayed properly on all three sites

 Finally.... Announce the release on Facebook, Twitter, and genome-announce



Questions?