

Revision-controlled collaborative terminology authoring



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Goals of Snow Owl

- **Real-time collaborative authoring support**
 - Not an afterthought, the repository IS the store
- **Workflow support**
 - Externalized therefore replaceable
- Cover the entire domain of healthcare terminology development
 - All terminologies and all terminology components
 - Including local terminologies, value domains and mapping sets
 - Information models and terminology bindings
- Modular and extensible
 - Capabilities are readily available for extensions
- Multiple deployment modes
 - Stand-alone, thick client-server, thin client-server via REST

Collaborative authoring

- Multiple authors can work simultaneously on their tasks in their dedicated and isolated 'sandboxes'
- Completed work can be promoted to main repository
- Sandboxes can be synchronized to reflect relevant changes in the main repository
- Potential conflicts are handled
- Authors receive notification about relevant changes immediately

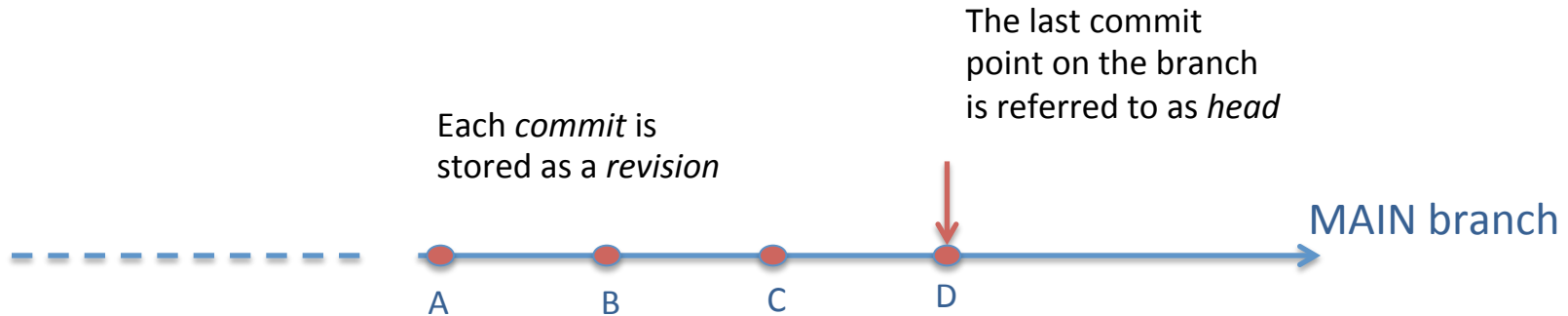
Workflow support

- External, managed by an issue tracking system
 - Loosely integrated with ‘hooks’
 - Currently Bugzilla, can be replaced with most widely used systems (JIRA for example)
- Terminology authoring is only a part of the overall enterprise workflow

Snow Owl – revision control features

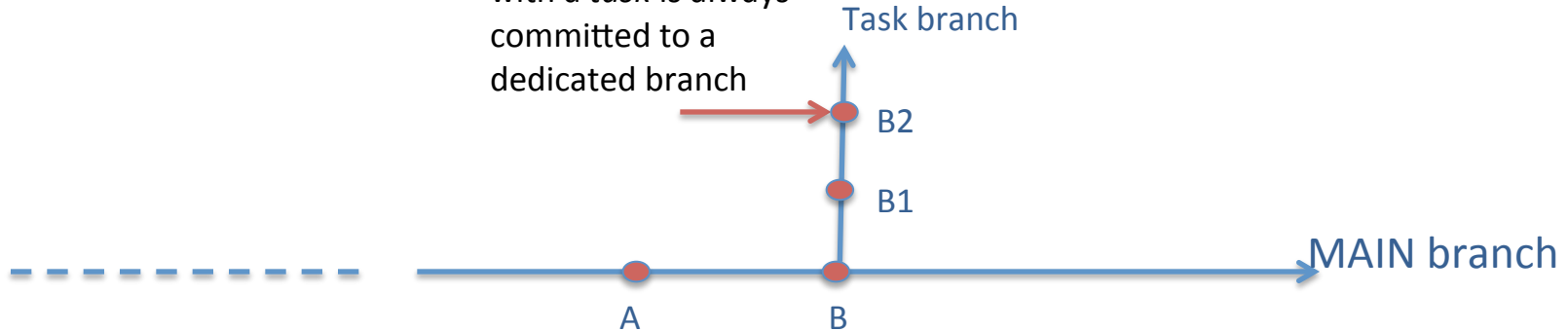
- Terminology **repository**
 - Just like a source code repository for terminology artifacts
 - Each terminology has a dedicated repository
 - Each commit becomes a revision
 - Revision history is maintained
 - Changes between two revisions can be compared
 - Commits can be reverted
 - Supports branching (patch), merging, versioning

Revisions on a branch



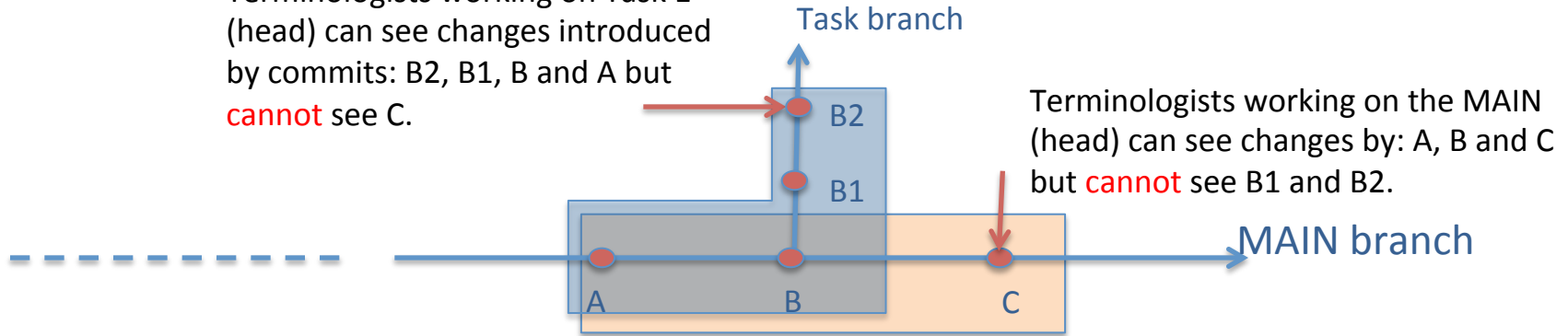
Tasks

Work associated with a *task* is always committed to a dedicated branch



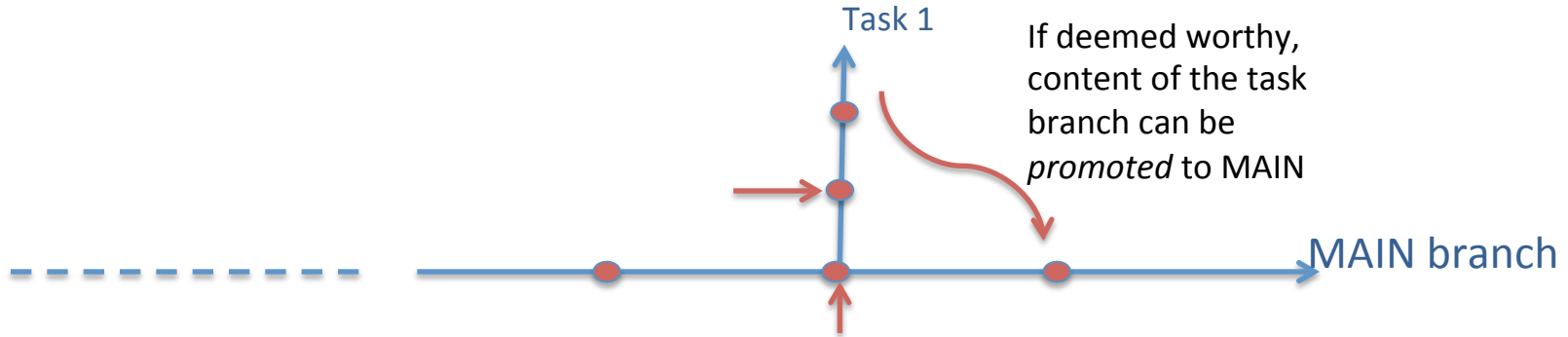
Isolation

Terminologists working on Task 1 (head) can see changes introduced by commits: B2, B1, B and A but **cannot** see C.



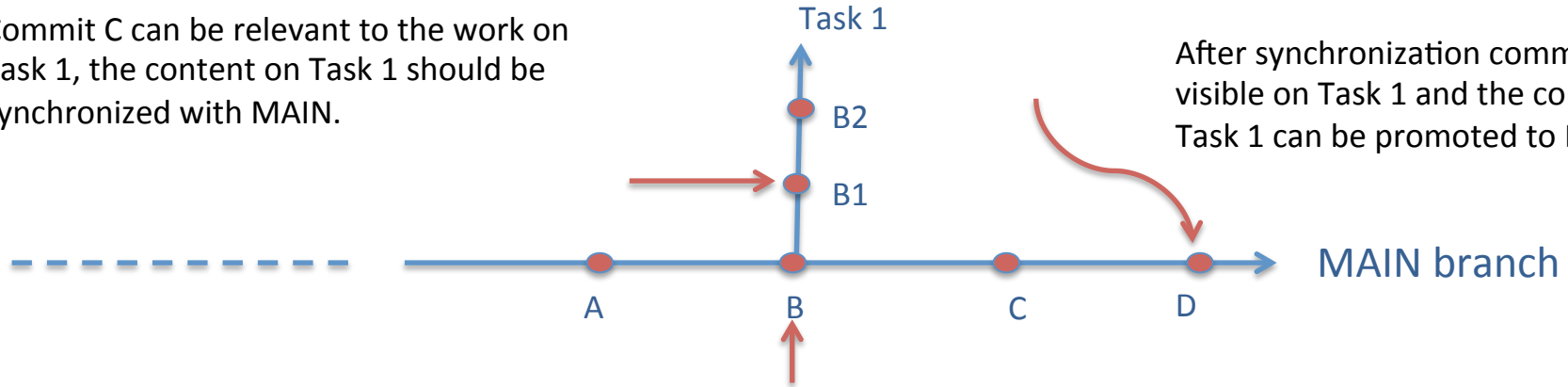
Terminologists working on the MAIN (head) can see changes by: A, B and C but **cannot** see B1 and B2.

Promoting



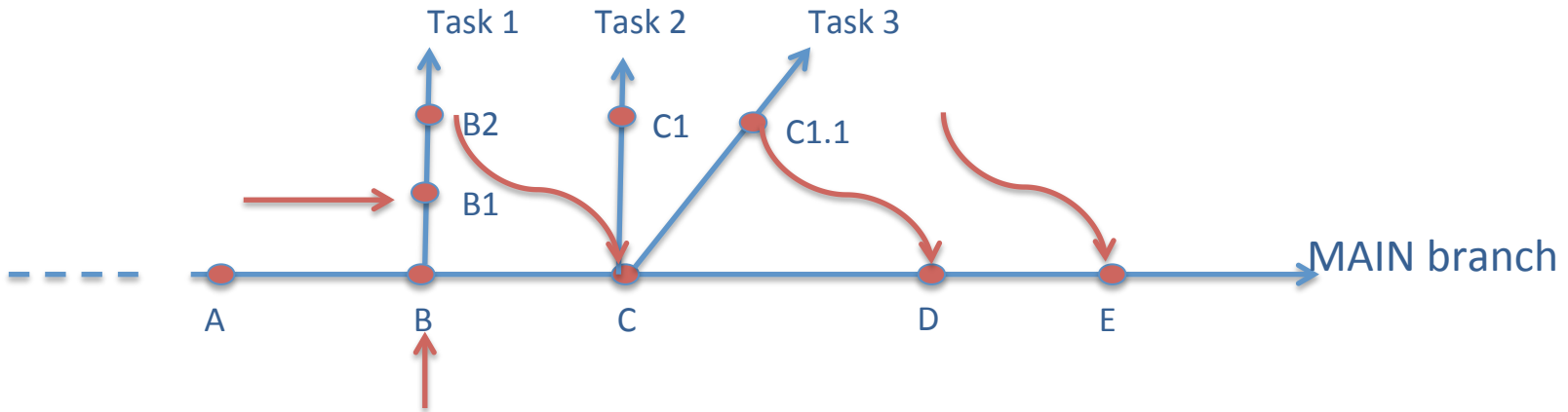
Synchronizing tasks with MAIN

Commit C can be relevant to the work on Task 1, the content on Task 1 should be synchronized with MAIN.

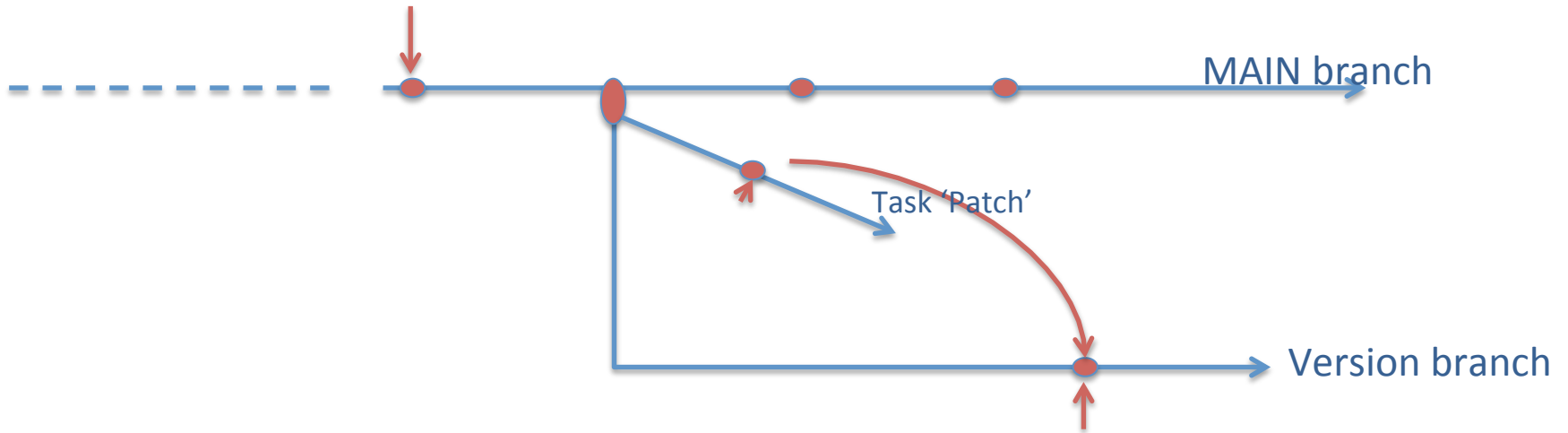


After synchronization commit C is visible on Task 1 and the content on Task 1 can be promoted to MAIN.

Typical scenario

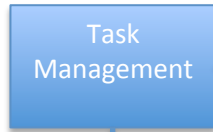


Versions

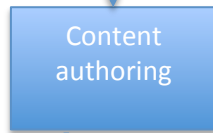


Admin

Task created for
1A&1R scenario



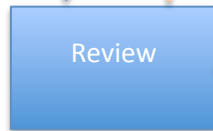
Author



Authoring completed
Task is set to *Resolved*

Reviewer rejected changes
Task is set to *Reopened*

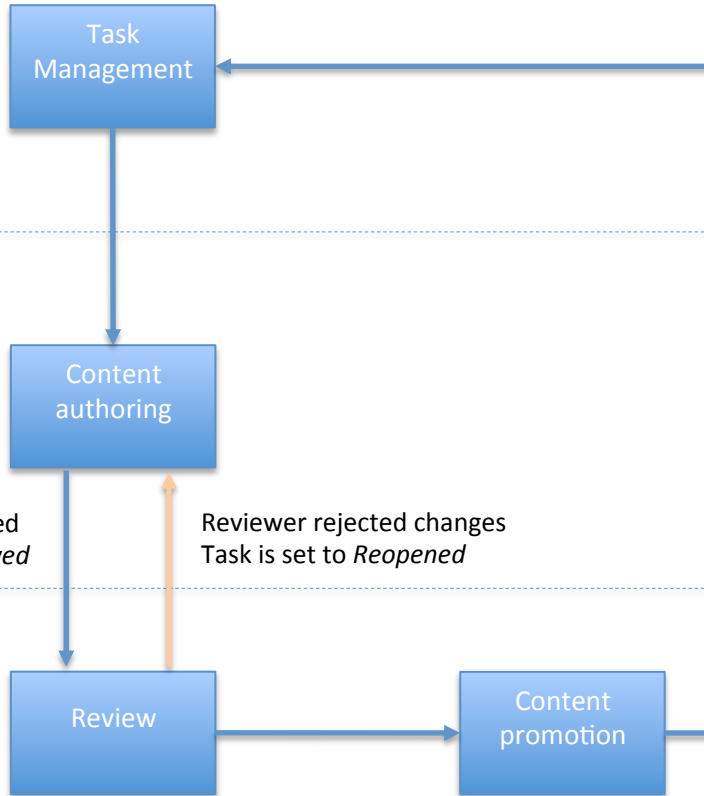
Reviewer



Reviewer accepted changes
Task is set to *Verified*



Content is promoted to
MAIN repository
Task is set to *Closed*



Admin

Dual author and dual reviewers
Dual independent authoring

Tasks are created for
2A&2R DBA scenario



Author

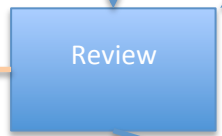


Authoring completed
Tasks are set to
Resolved



Reviewer

Changes rejected
Task is set to
Reopened



Reviews completed



Changes rejected
Task is set to
Reopened

Adjudicator

Final review completed
Tasks are set to *Reopened*



Final review completed
Task is set to *Verified*



Content is promoted
to MAIN repository
Task is set to *Closed*

Demo scenario 1

- Create Task (Single author, single reviewer authoring)
- Create new child concept under Tetralogy of Fallot
 - Change to MAIN to show that concept is not there
 - Change to Task to show that concept is there
- Review concept
- Promote concept
 - Show history view
 - Show commit info

Demo scenario cont.

- Version content
 - version: *IHTSDO_Showcase_Version*
- Compare with last SNOMED CT version to see changes

Questions?



Revision control

History

Tetralogy of Fallot

Version	Date	Changes	Author	Comments
9	2014-08-27 17:37:14	6	info@b2international.com	Imported SNOMED CT 2013-01-31 from full release.
8.1	2014-08-27 17:22:28	2	info@b2international.com	Imported SNOMED CT 2009-07-31 from full release.
8	2014-08-27 17:05:23	30	info@b2international.com	Imported SNOMED CT 2008-07-31 from full release.
7.2	2014-08-27 16:56:41	22	info@b2international.com	Imported SNOMED CT 2007-07-31 from full release.
7.1	2014-08-27 16:43:42	16	info@b2international.com	Imported SNOMED CT 2006-01-31 from full release.
7	2014-08-27 16:39:46	27	info@b2international.com	Imported SNOMED CT 2005-07-31 from full release.
6	2014-08-27 16:34:06	21	info@b2international.com	Imported SNOMED CT 2005-01-31 from full release.
5	2014-08-27 16:28:23	18	info@b2international.com	Imported SNOMED CT 2004-07-31 from full release.
4	2014-08-27 16:25:12	19	info@b2international.com	Imported SNOMED CT 2004-01-31 from full release.
3	2014-08-27 16:20:04	28	info@b2international.com	Imported SNOMED CT 2003-07-31 from full release.
2.1	2014-08-27 16:14:57	20	info@b2international.com	Imported SNOMED CT 2003-01-31 from full release.
2	2014-08-27 16:08:50	33	info@b2international.com	Imported SNOMED CT 2002-07-31 from full release.

Component	Changes
SNOMED CT Description	Attribute 'case significance' changed to Case sensitive on "Fallot's tetralogy".
SNOMED CT Description	Attribute 'effective time' changed to Jul 31, 2007 on Fallot's tetralogy.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Associated morphology Congenital anomaly.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Associated morphology Defect.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Associated morphology Hypertrophy.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Associated morphology Overriding structures.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Associated morphology Stenosis.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Finding site Cardiac ventricular structure.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Finding site Interventricular septum structure.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Finding site Pulmonary valve structure.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Finding site Right ventricular structure.
SNOMED CT Relationship	Attribute 'effective time' changed to Jul 31, 2007 on Tetralogy of Fallot Finding site Thoracic aorta structure.

Project Explorer | History | Search | Problems | Bookmarks | Commit Information | Graph Visualization

Results 1-20 of 75

Date	User ID	Commit comment	Terminology	Branch
2014-02-04 11:22:31	rsulrich@b2international.com	Create new code	Local Code System	MAIN/3537
2014-02-04 11:21:59	rsulrich@b2international.com	Create new code	Local Code System	MAIN/3537
2014-02-04 10:36:06	apeteri@b2international.com	Promoted task #3531: Edit existing value domain title	Value Domain	MAIN
2014-02-04 10:28:50	gnagy@b2international.com	Promoted task #3532: atc test	SNOMED CT	MAIN
2014-02-04 10:27:06	bbanfai@b2international.com	Imported local code system NHDD from excel file Local_Code_Systems_replace...	Local Code System	MAIN
2014-02-04 10:22:54	bbanfai@b2international.com	Imported local code system NHDD from excel file Local_Code_Systems_test_file...	Local Code System	MAIN
2014-02-04 10:22:53	bbanfai@b2international.com	Imported local code system SSOC from excel file Local_Code_Systems_test_file...	Local Code System	MAIN
2014-02-04 10:19:22	gnagy@b2international.com	Promoted task #3529: discard test	SNOMED CT	MAIN
2014-02-04 10:18:56	apeteri@b2international.com	Promoted task #3521: Value domain authoring title	Value Domain	MAIN
2014-02-04 10:09:41	info@b2international.com	Imported LOINC concepts from release archive.	LOINC	MAIN

Workflow

The screenshot displays a workflow management interface with three main components:

- Task List (Left):** A sidebar showing a calendar view of tasks. The current task is '2814: Create new drug products'.
- Task Detail (Top Right):** A window for task '3679: Add synonym to Hantaan virus'. It shows a 'Reviewer' dropdown set to 'Accept' and a tree view of SNOMED CT concepts. The selected concept is 'Hantaan virus' (SNOMED CT Model Component), with a change log showing a 'New Synonym: "Hantavirus"'.
- Bug 1783 (Bottom):** A window titled 'Bug 1783' from the 'Snow Owl task repository'. It contains a table for 'Reference set authoring' with columns for Member, Member by, Acceptance, and other status fields.

Member	Member by	Acceptance	Com...	Acceptance [reviewer ...	Com...	Acce...	Com...
Repair of shoulder	Member by bulrich@b2internati...	Accepted [Repair ...					
Arthrodesis of shoulder	Member by bulrich@b2internati...	Denied					
Shoulder region structure	Member by bulrich@b2internati...	Accepted [Should...					
Arthroplasty of shoulder	Member by bulrich@b2internati...	Accepted [Arthro...					
Furuncle of shoulder	Member by bulrich@b2internati...	Denied					
Structure of medial border of scapula	Member by bulrich@b2internati...	Accepted [Structu...					
Blade of scapula	Member by bulrich@b2internati...						
Structure of acromial facet of clavicle	Member by bulrich@b2internati...						

Versioning and Compare

Version

Version configuration page

Please specify a new version name for SNOMED CT.

Version name: IHTSDO_Showcase_version

Version description:
IHTSDO_Showcase_version

Existing SNOMED CT versions

Version name	Version creation date
2013-07-31	2013-07-31 00:00:00
2013-01-31	2013-01-31 00:00:00
2012-07-31	2012-07-31 00:00:00
2012-01-31	2012-01-31 00:00:00
2011-10-01	2011-10-01 00:00:00
2011-07-31	2011-07-31 00:00:00

< Back **Next >** Finish Cancel

SNOMED CT: 2013-07-31* - 2014-01-31*

SNOMED CT: 2013-07-31* - 2014-01-31*

Change summary

- New components: 2 225
- Modified components: 16 284
- Deleted components: 0

Change details

Component	Changes
SNOMED CT Description	New Synonym 'Cyst form of Genus Acant
SNOMED CT Description	Effective time changed on description 'Ac
SNOMED CT Description	Case significance changed on description
SNOMED CT Description	Case significance changed on description
SNOMED CT Description	Effective time changed on description 'Ac

Changed components

- Organism
 - A.S.C.O.B. cocker spaniel
 - Acanthamoeba cyst
 - Acanthamoeba trophozoite
 - Achromobacter marplatensis
 - Acinetobacter pittii
 - Acremonium blochii
 - Acrophialophora
 - Africanus cattle breed
 - Amaranthaceae
 - Bacillus aerophilus