

# Lingo – a SNOMED Authoring Tool

IHTSDO Showcase presentation October 2014  
Dion McMurtrie

# Presentation Overview

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1. Key business drivers
2. What is Lingo?
3. Technology and context
4. Current Product Capabilities
5. Overview of the project
6. Demonstration
7. Current state and future plans

- The need for a single effective tool to develop and release SNOMED CT based clinical terminology in Australia, and
- To support the use and adoption of clinical terminologies in health information exchange improving clinical safety, and creating healthcare delivery efficiencies.

A market scan was completed to investigate alternatives to the NEHTA Workbench and AMT v2 tools – both of which were considered cumbersome, costly and not fit for purpose given our focus on efficiency and implementation.

NEHTA decided to leverage terminology and technical capabilities in the business, to partner with CSIRO, and develop a purpose built solution, with the future in mind.

# What is **lingo** ?

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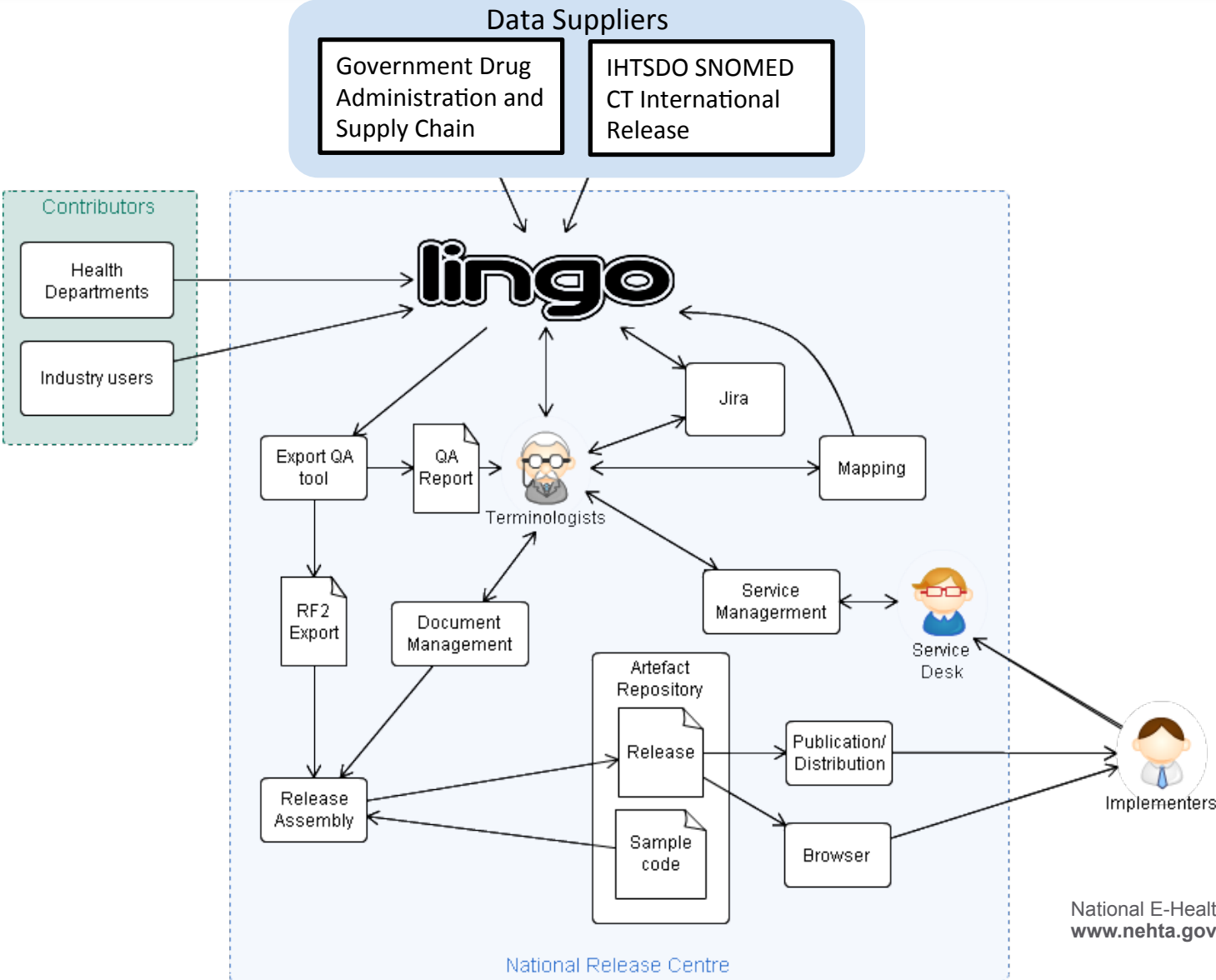
“**Lingo**” is the Australian NRC’s authoring, maintenance, release and integration tool. It supports the development and release of SNOMED CT AU and the Australian Medicines Terminology.

It is:

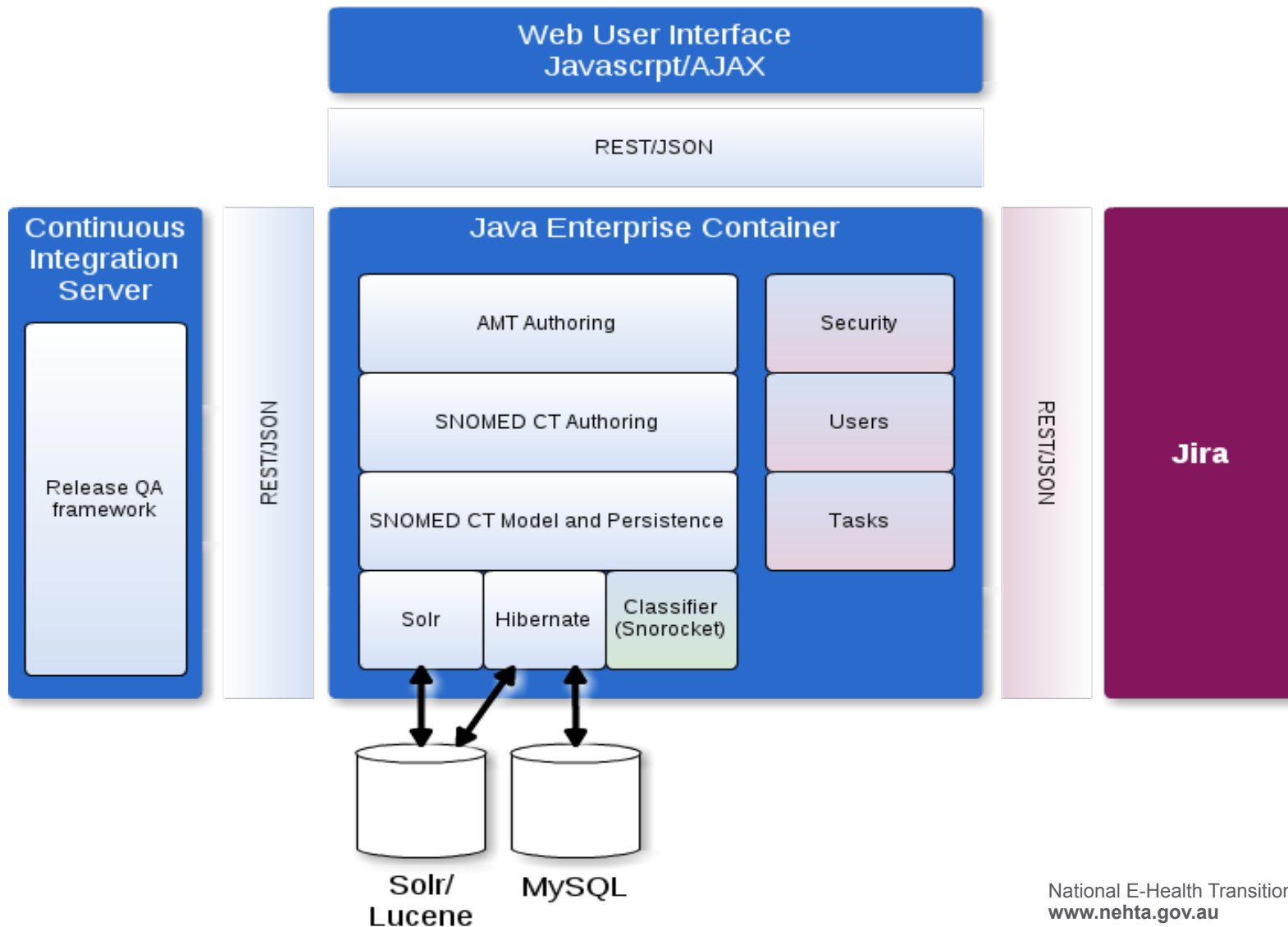
- Standards based with a central server architecture and rich web client.
- SNOMED CT focussed with a SNOMED CT centric data model (not RF2,OWL)
- Always ready to use, with fast, continuous export QA results and an integrated classifier (using CSIRO’s Snorocket).
- Designed to integrate:
  - “upstream” with suppliers of data like IHTSDO and Government drug administration, and
  - “downstream” with clinical terminology implementers and users.

**Importantly – it does what we need it to do, the way we want to do it**

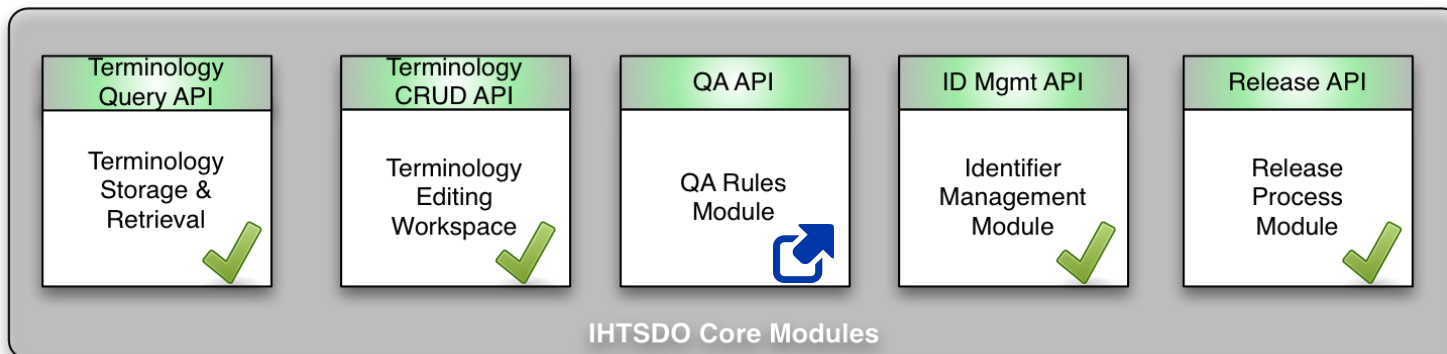
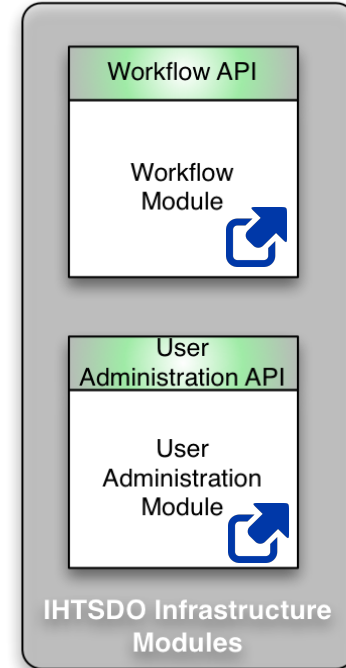
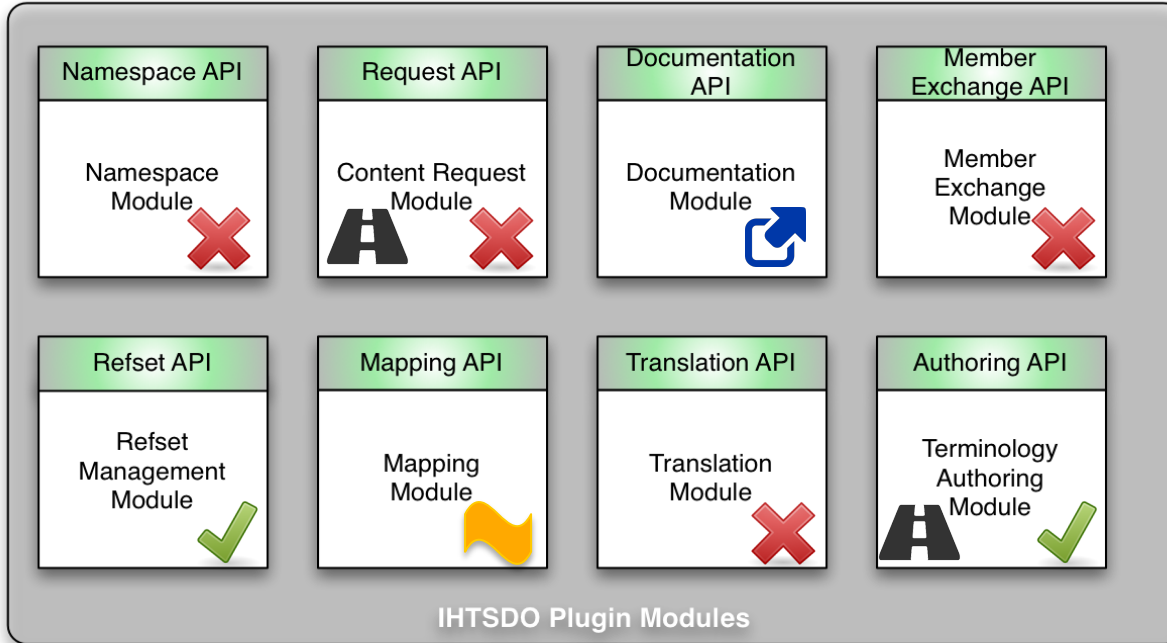
# Lingo in an NRC context



# Lingo Technology Architecture










# Mapped to the IHTSDO's Open Tooling Framework



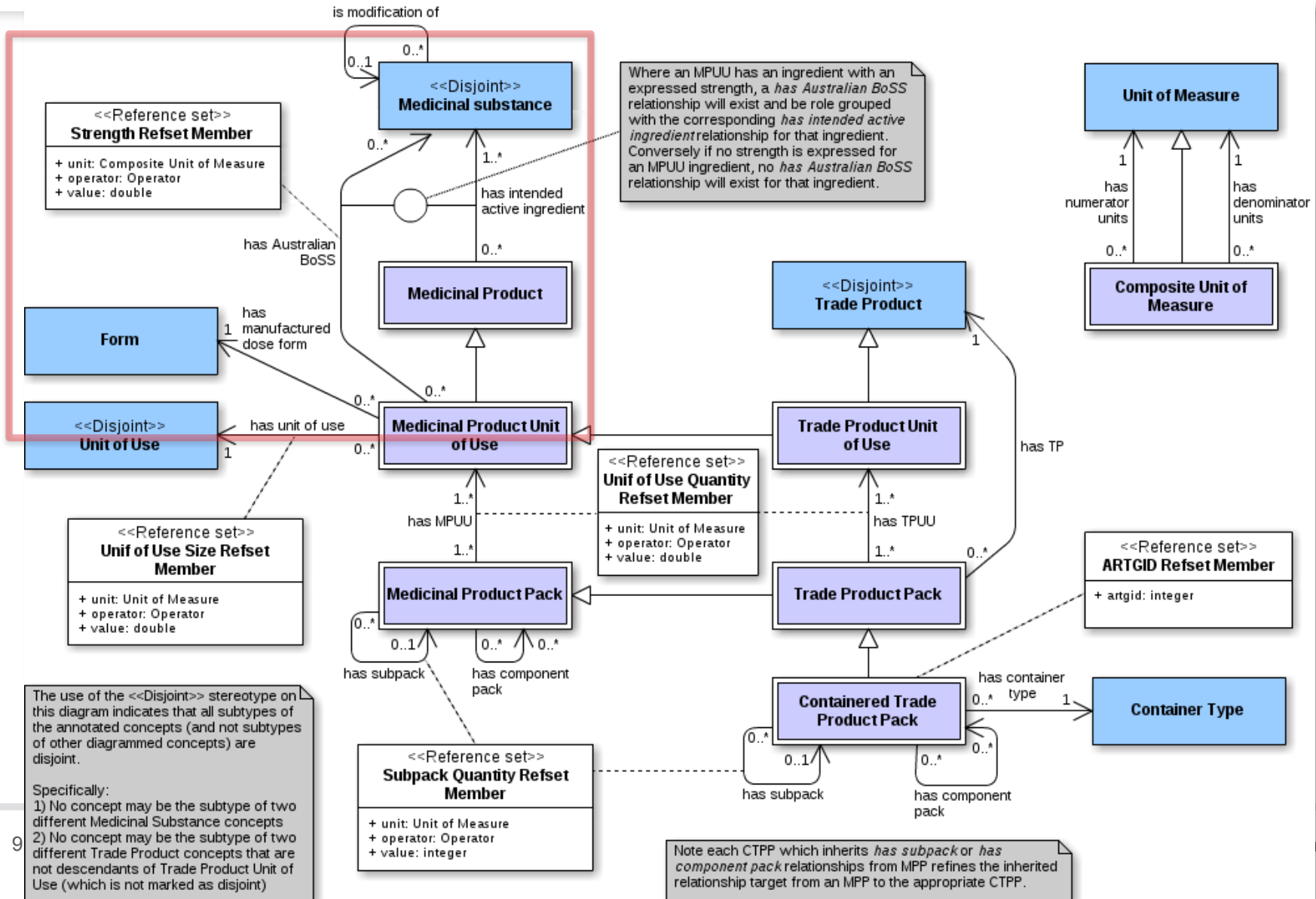
# What is NOT in the BOX (yet)

What does it **NOT** do?

-  Document management
-  Licensing
-  Request submission
-  Mapping (other than substance mapping for AMT)
-  Translation
-  Member exchange
-  Namespace management



# AMT v3 model



## SNOMED CT National Extension

- Language reference set automation
- Language reference set editing/  
review
- Simple reference set authoring
  - Query based
  - File import
  - Individual concept selection
- Concept authoring/editing
  - Including language refset  
handling

## Medicines Terminology

- Form based product data entry
- Form based product editing
- Automated name generation
- Automated refset and language  
refset handling
- Substance mapping integrated in  
process
- Bulk product editing

## Common needs

- Classification
  - Duplicate concept reporting
  - Concrete domain implementation
  - Stated and inferred view
- Workflow via Jira integration
  - Edits tracked against user/ticket
- Description editing/authoring
- Review functionality
  - Single expert authoring with dual independent review
  - Records “assertions” about “statements” about concepts
  - Assertions remembered – immediate alert on recurrence
- Release and automated testing
  - 982 AMT tests
  - 1284 SNOMED CT-AU tests

# How Lingo was delivered

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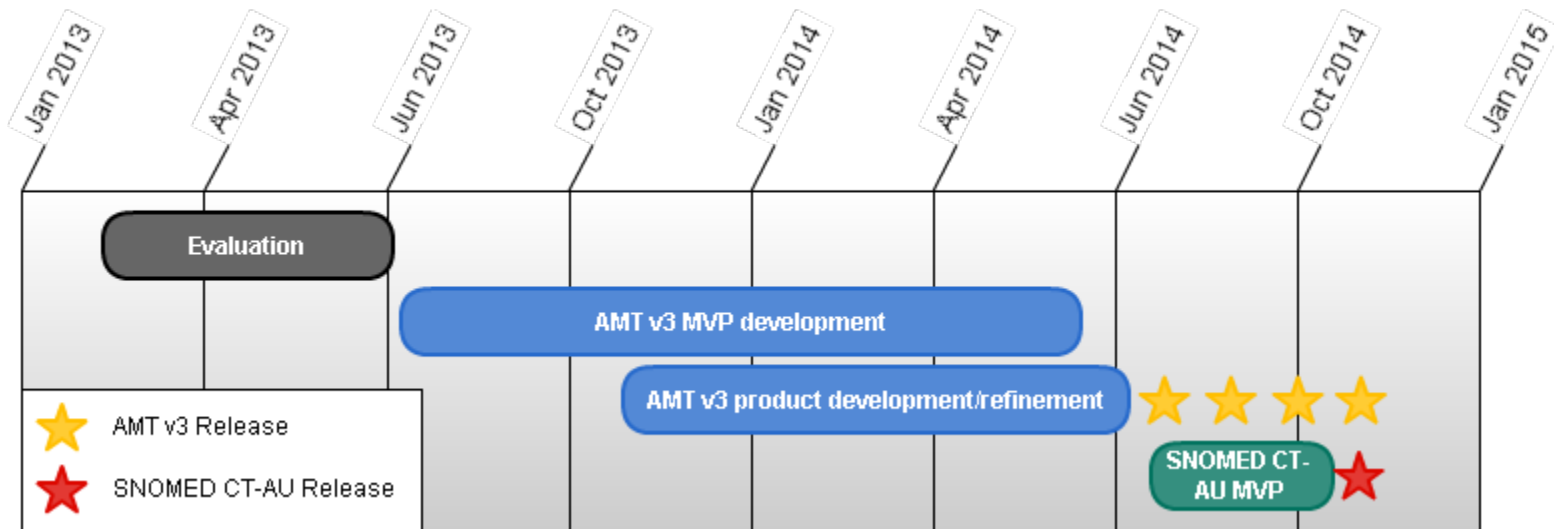


## Project Driver:

- Deliver AMT to market **ASAP**, then **SNOMED CT-AU**

## Goals:

- AMT v3 model, documentation and initial release (classified DNF)
- Authoring tool to enable AMT v3 production releases
- A single platform for AMT and SNOMED CT-AU development



# How Lingo was delivered

## Methodology:

- Scrum adopted – supported at all project levels
- 2 week sprints – delivery and review every 2 weeks

Developers	5
Product Owners	2
Testers	2
Business Analyst/ Scrum Master	1
Project Manager	1
CSIRO AEHRC collaborators	3



# Demonstration

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## Current state

- Production use for AMT and SNOMED CT-AU (MVP)
  - Monthly AMT releases (initial plus 4 since)
  - November SNOMED CT-AU release
- Old systems ***decommissioned***

## Future stages

- Refactoring - look and feel
- “Release 2” for AMT and SNOMED CT-AU
- Integration with TGA/PBS for AMT product data
- Collaboration on AMT content with jurisdictions
- Integration/services for implementers



# Questions?

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# ingo

## **Thanks to the project team:**

**Project Sponsors** – Kate Ebrill and David Bunker

**Product Owners** – Trang Tran, Matt Cordell and Liam Barnes

**Project Managers** – Manuel Aponte and Damien Cunningham

**CSIRO collaboration** – Michael Lawley, Alejandro Metke and Ming Zhang

**Business Analyst/Scrum Master** – Hamish Martin

**Testers** – David Mudge and Chris Stanbridge

**Developers** – Michael Trudgian, Attila Edelenyi, Stephen Crow, Luke Swindale and Dion McMurtrie