



SNOMED CT Release Format 2

John Gutai,
Chief Technical Architect, IHTSDO

April 2010
IHTSDO Conference



SNOMED CT Release Format 2

This talk will cover:

- An overview of the benefits of RF2.
- Documents within the RF2 specification.
- Elements of the RF2 release structure.
- Timescales for migration of the International Release.
- What this means for National Release Centres, and next steps.



Examples of Benefits resulting from RF2

Benefits of RF2 include:

- Consistent history representation across all components in RF2.
- Consistent representation of allowable values for component characteristics
- Consistent means of extending component data structures to meet future requirements without modification to the existing table structures.



Consistent History Representation

Three types of releases will be produced:

A “**full**” release of each file containing every version of every component ever released

A “**snapshot**” release, containing only the most recent version of every component ever released.

A “**delta**” release, containing only component versions created since the last release. These component versions may represent a new component or a change to an existing component.

Example Concept file records from a “**full**” release are shown below:

Id	effectiveTime	Active	moduleId	definitionStatusId
101291009	20070731	1	Module 1	Primitive
101291009	20080131	1	Module 2	Primitive
101291009	20080731	1	Module 2	Fully defined
101291009	20090131	0	Module 2	Fully defined



Consistent representation of values

- Concept enumerations have been used across RF2 to replace integer enumerations that can only be understood by referencing external documentation.
- For example, the values in the RF1 `DefinitionStateId` and `DescriptionType` fields have been changed as shown.
- This improves readability and enables greater automation.

DefinitionStateId

RF1 values	RF2 values
0	Defined
1	Primitive

DescriptionType

RF1 values	RF2 values
3	Fully Specified Name
2	Synonym



The RF2 extensibility mechanism

- Reference sets provide the foundation for RF2's generic extensibility mechanism.
- They allow extension owners to build on SNOMED CT.
- They enable the release format to support changing requirements.
- Each member within a reference set refers to a SNOMED CT component, but may also include one or more additional user-defined fields.
- Each reference set follows a pattern, which provides a level of consistency and enables easier definition.
- The format of data fields held within references sets is held in a machine readable form within a Descriptor.



Other benefits of RF2

- Consistent non-centralized means of loosely coupled identifier assignment for components.
- Addition of a module identifier field to all components, enabling the source module in which each component is maintained to be identified, facilitating configuration management.
- Addition of a description logic modifier concept enumeration to the Relationship file to represent different Description Logic relationship types, for example - some, all, all-some, not-some etc.
- Greater flexibility in meeting future requirements.
- More explicit and comprehensive version control.
- New features for configuration management.
- Reduced complexity of file structures – no need for separate references file, or cross map files.
- Reduced need for further fundamental change to the file structures in the foreseeable future.



Documents in the specification

Three core documents:

- Data Structures Specification
- Reference set Specifications
- Update Guide

Two auxiliary documents

- Quality Review Plan
- Feedback log



Elements in an RF2 Release

The following files are included in an RF2 release:

- Concept file
- Relationship file
- Description file
- Identifier file
- Reference set files



Timescales for migration

Timescales for the migration of the International Release are as follows:

- **January 2010 release** – RF1 released; RF2 issued as DFTU (Draft for Trial use).
- **July 2010 release** – RF1 and RF2 released.
- **January 2011 release** – RF1 and RF2 released.
- **July 2011 onwards** – RF2 only released.



Next Steps

- IHTSDO has written to all MF members, providing information about RF2 migration plans together with likely implications for NRCs, asking about each NRCs migration plans and requirements.
- We need to understand whether:
 - The timelines for migration of the International release may cause NRCs and/or their Affiliates issues.
 - Whether tools are required to assist with migration, and if so, should these tools be provided centrally.
- It is important an indicative response be returned early (7th May), with an updated response returned during June/July, if necessary.



Timelines for Next Steps

- IHTSDO letter to NRCs – April 2010
- NRC discussions with affiliates – during 2010
- NRC initial response to questions – 7th May, 2010
- Complete RF2 post-DFTU review – May, 2010
- Issue RF2 as approved standard – June, 2010
- NRC updated responses to questions – June/July 2010
- NRC has defined plans to migrate to RF2 – July 2010