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CLÍNICAS EM PORTUGAL

*Clinical Terminologies Centre in Portugal*

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## RF2 – *RELEASE FORMAT 2*

- RF2 passou a ser a *Standard release* desde julho 2011
- Atualmente os ficheiros RF1 já derivam dos ficheiros RF2

## RF2 – *RELEASE FORMAT 2*

### **No RF2 está padronizado:**

- Tipo de dados
- Atributos usados e seu significado
- Tipo de ficheiros e sua nomenclatura

# FICHEIROS CORE RF2

## Ficheiros de conceitos - *Concept*

Field	Data type	Inmutable	Purpose
id	ICTD	Y	Uniquely identifies the concept.
effectiveTime	Time	N	Specifies the inclusive date at which the component version state became the then current valid state of the component.
active	Boolean	N	Specifies whether the concept is state inactive or inactive from the nominal release date specified by the effectiveTime.
module	ICTD	N	Identifies the concept version's module. Set to a descendant of 00000000000000000000 (Module) in the metadata hierarchy.
definitionSource	ICTD	N	Specifies the concept version's primitive or fully defined. Set to a descendant of 00000000000000000000 (Definition status) in the metadata hierarchy.

## Ficheiros de relações – *Relationship*

Field	Data type	Inmutable	Purpose
id	ICTD	Y	Uniquely identifies the relationship.
effectiveTime	Time	N	Specifies the inclusive date at which the relationship component version state became the then current valid state of the relationship. Set to a descendant of 00000000000000000000 (Relationship status) in the metadata hierarchy.
active	Boolean	N	Specifies whether the relationship is state inactive or inactive from the nominal release date specified by the effectiveTime.
source	ICTD	N	Identifies the relationship's source concept. Set to a descendant of 00000000000000000000 (Concept) in the metadata hierarchy.
target	ICTD	N	Identifies the relationship's target concept. Set to a descendant of 00000000000000000000 (Concept) in the metadata hierarchy.
relationshipType	ICTD	N	Identifies the relationship's type. Set to a descendant of 00000000000000000000 (Relationship type) in the metadata hierarchy.
module	ICTD	N	Identifies the relationship version's module. Set to a descendant of 00000000000000000000 (Module) in the metadata hierarchy.

## Ficheiros de descrições – *Description*

Field	Data type	Inmutable	Purpose
id	ICTD	Y	Uniquely identifies the description.
effectiveTime	Time	N	Specifies the inclusive date at which the description component version state became the then current valid state of the description. Set to a descendant of 00000000000000000000 (Description status) in the metadata hierarchy.
active	Boolean	N	Specifies whether the description is state inactive or inactive from the nominal release date specified by the effectiveTime.
module	ICTD	N	Identifies the description version's module. Set to a descendant of 00000000000000000000 (Module) in the metadata hierarchy.
conceptId	ICTD	Y	Identifies the concept to which this description applies. Set to an identifier of a concept in the metadata hierarchy. Set to a descendant of 00000000000000000000 (Concept) in the metadata hierarchy.
languageCode	String	Y	Specifies the language of the description text using the form language (ISO 639-1). Set to a descendant of 00000000000000000000 (Language code) in the metadata hierarchy.
text	Text	Y	Specifies the text of the description. Set to a descendant of 00000000000000000000 (Text) in the metadata hierarchy.
status	Text	N	Specifies the status of the description. Set to a descendant of 00000000000000000000 (Status) in the metadata hierarchy.
definitionSource	ICTD	N	Identifies the concept version's primitive or fully defined. Set to a descendant of 00000000000000000000 (Definition status) in the metadata hierarchy.

# IDENTIFICAÇÃO DOS COMPONENTES

Todos os componentes do RF2 têm:



Identificador do componente;



Tempo em que a versão do componente “x” suplantou a sua versão anterior;



Caso o componente esteja “ativo” (disponível) para uso;



Identifica módulo da versão de extensão (suporta o desenvolvimento das ramificações)

# RF2 – FICHEIROS INCLUÍDOS

## RF2

-  *Concept*
-  *Description*
-  *Relationship*
-  *Identifier*
-  *Refset*

# RF2 – Exemplo

Windows Explorer window titled "Folders in WinZip File" showing the contents of a zip file named "[SnomedCT\_RF2Release\_US1000124\_20150901.zip]".

The left pane shows the folder structure:

- SnomedCT\_RF2Release\_US1000124\_20150901
  - Delta
  - Documentation
  - Full
  - Resources
  - Snapshot
    - Refset
      - Content
      - Language
      - Map
      - Metadata
      - Terminology**

The right pane shows the list of files under the selected "Terminology" folder:

Name
sct2_TextDefinition_Snapshot-en_US1000124_20150901.txt
sct2_StatedRelationship_Snapshot_US1000124_20150901.txt
sct2_Relationship_Snapshot_US1000124_20150901.txt
sct2_Identifier_Snapshot_US1000124_20150901.txt
sct2_Description_Snapshot-en_US1000124_20150901.txt
sct2_Concept_Snapshot_US1000124_20150901.txt

# TIPOS DE *RELEASE* DO RF2

<i>Release</i>	Características
<i>“Full” release</i>	Contém cada versão de todos os componentes já integrados no SNOMED CT
<i>“Snapshot” release</i>	Contém apenas a versão mais recente de todos os componentes já integrados no SNOMED CT. (ativos e inativos) <sup>2</sup>
<i>“Delta” release</i>	Contém apenas versões dos componentes desde a última <i>release</i>

<sup>2</sup>Um único *snapshot* fornece acesso a uma única versão, o que é similar à vista fornecida pela RF1



# ESCOLHA DE *RELEASES*

A escolha a fazer será entre os ficheiros *Snapshot* (atuais) e os ficheiros *Full* (atuais), dependendo das necessidades:

<i>Release</i>	<i>Features/aplicabilidade</i>
<i>Full (Baseline)</i>	<ul style="list-style-type: none"> <li>+ Acesso ao histórico</li> <li>+ Atualizado através da <i>Delta Release</i></li> </ul>
<i>Snapshot</i>	<ul style="list-style-type: none"> <li>- Estático</li> <li>+ Menos pesado</li> <li>- Sem acesso a histórico</li> <li>+ Determinados <i>Use Cases</i> (informação necessária bem delimitada – <i>Scope of use</i>)</li> </ul>

## EXEMPLO

*FULL RELEASE*  
exemplo de aparência do  
ficheiro

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

## RF2 - *PREFERED TERMS*

- A edição RF2 não identifica um “*Preferred Term*” por cada conceito
- A edição RF2 apenas identifica as descrições para “*Fully Specified Name*” e Sinónimos
- A descrição de sinónimo pode ser posteriormente refinada para “*Preferred Term*” ou Sinónimo dentro de um *Refset* de linguagem
- **É necessário combinar informação de um *Reference Set* de Linguagem com a informação das tabelas *core* do SNOMED CT**

# RF2

## 1. Mecanismo de extensibilidade

A estrutura da informação em *RefSets* serve de base para o mecanismo de extensibilidade da RF2.

- Permite que os *owners* das extensões **possam construir conteúdos** no SNOMED CT;
- Possibilita ainda que a RF2 suporte requisitos de mudança/ alterações.

Field	Data type	Immutable	Purpose
<i>id</i>	<i>UUID</i>	Y	A 128 bit unsigned <i>integer</i> , uniquely identifying the <i>reference set</i> member.
<i>effectiveTime</i>	<i>Time</i>	N	Specifies the inclusive date at which this change becomes effective.
<i>active</i>	<i>Boolean</i>	N	Specifies whether the member's state was <i>active</i> or <i>inactive</i> from the nominal release date specified by the <i>effectiveTime</i> field.
<i>moduleId</i>	<i>SCTID</i>	N	Identifies the member version's module. Set to a <i>child</i> of 900000000000443000   Module   within the metadata <i>hierarchy</i> .
<i>refsetId</i>	<i>SCTID</i>	Y	Uniquely identifies the <i>reference set</i> that this <i>extension</i> row is part of. Set to a <i>descendant</i> of 900000000000455006   Reference set   within the metadata <i>hierarchy</i> .
<i>referencedComponentId</i>	<i>SCTID</i> or <i>UUID</i>	Y	Uniquely identifies the component that this row relates to, thus defining membership of this component in the <i>Reference Set</i> . This field can be set to the <i>Identifier</i> of a record within the <i>Concept</i> , <i>Description</i> , <i>Relationship</i> or <i>Reference Set</i> member file. However, the content of this field can be further restricted for each <i>reference set</i> by the <i>reference set</i> descriptor (see the "SNOMED CT Release Format 2 - Reference Set Specifications" document for more details).
Zero or more other fields	<i>SCTID</i> , <i>String</i> , or <i>Integer</i>	N	Optional field
...	<i>SCTID</i> , <i>String</i> , or <i>Integer</i>	N	Optional field

# RF2

## 2. Mecanismo de Histórico (*Log*)

O *effectiveTime* e o campo *active*, permitem a rastreabilidade de cada componente. A RF2 fornece todo o histórico, desde a primeira *release* do RF1 (formato prévio de distribuição do SNOMED CT).

Id	<i>effectiveTime</i>	<i>active</i>	<i>moduleId</i>	<i>definitionStatusId</i>
101291009	20070701	1	Module 1	9000000000000074008   Primitive

Fig. 2 – Exemplo do mecanismo de histórico no Ficheiro de Conceitos (*ConceptFile*) - adição de conceito

Fonte: *Technical Implementation Guide* – IHTSDO

### 3. Campo de *Status* “Active”

*True* (1)

*False* (0)

Component Type	active value	Description of behavior when most recent row representing a component has the specified active value
Concept	True	<ul style="list-style-type: none"> <li>The <i>Concept</i> is intended for active use.</li> <li>All active <i>Descriptions</i> for which the <i>conceptId</i> refers to this <i>Concept</i> are valid. Visibility of these active <i>Descriptions</i> depends on information contained in applicable <i>ResetMembers</i> (for example, whether the <i>Description</i> is in a <i>language dialect reference set</i> that is currently enabled in the vendor's system).</li> <li>All active <i>Relationships</i> of which it is the <i>sourceId</i> or <i>destinationId</i> are applicable.</li> </ul>
Concept	False	<ul style="list-style-type: none"> <li>The <i>Concept</i> is not intended for active use. However, it remains a valid <i>concept</i> for historical purposes as part of the <i>SNOMED CT</i> commitment to the principle of 'concept permanence'.</li> <li>Valid <i>Descriptions</i> of the <i>Concept</i> remain active allowing it to be appropriately viewed in human-readable form.</li> <li>An <i>inactive Concept</i> cannot be the <i>sourceId</i>, <i>destinationId</i> or <i>typeId</i> of an active <i>Relationship</i>.</li> </ul>
Description	True	<ul style="list-style-type: none"> <li>The <i>Description</i> contains a <i>Term</i> that is a valid <i>description</i> of the <i>Concept</i> referred to by the <i>conceptId</i>.</li> <li>An active <i>Description</i> may refer to an <i>inactive Concept</i>, in which case the <i>Term</i> provides a valid <i>description</i> of that <i>inactive Concept</i>. Text based searches should (by default) include only active <i>Descriptions</i> that refer to active <i>Concepts</i>.</li> </ul>
Description	False	<ul style="list-style-type: none"> <li>The <i>Description</i> is not a valid and the associated <i>Term</i> should no longer be regarded as being associated with the <i>Concept</i> referred to by <i>conceptId</i>.</li> </ul>
Relationship	True	<ul style="list-style-type: none"> <li>The <i>Relationship</i> represents a valid association of the type specified by the <i>typeId</i>, between two <i>Concepts</i> referred to by the <i>sourceId</i> and <i>destinationId</i>;</li> <li>An <i>inactive Concept</i> cannot be the <i>sourceId</i>, <i>destinationId</i> or <i>typeId</i> of an active <i>Relationship</i>.</li> </ul>
Relationship	False	<ul style="list-style-type: none"> <li>The <i>Relationship</i> is not valid. An <i>inactive Relationship</i> should be ignored as it does not apply.</li> <li>This does not necessarily mean that the association indicated by the <i>Relationship</i> does not apply. The <i>Relationship</i> may be <i>inactive</i> because it is redundant and inferable based on other active <i>Relationships</i>.</li> <li>An <i>inactive Relationship</i> may refer to either active or inactive components.</li> </ul>
ResetMember	True	<ul style="list-style-type: none"> <li>The <i>ResetMember</i> contains valid information applicable to the <i>component</i> referred to by the <i>referencedComponentId</i>.</li> <li>The <i>component</i> referred to by the <i>referencedComponentId</i> may be active or inactive. An active <i>ResetMember</i> cannot make an <i>inactive component</i> active but may provide related information that continues to be relevant (e.g. the reason for inactivation).</li> </ul>

# RF2

## 4. Introdução do conceito de *ModuleId*

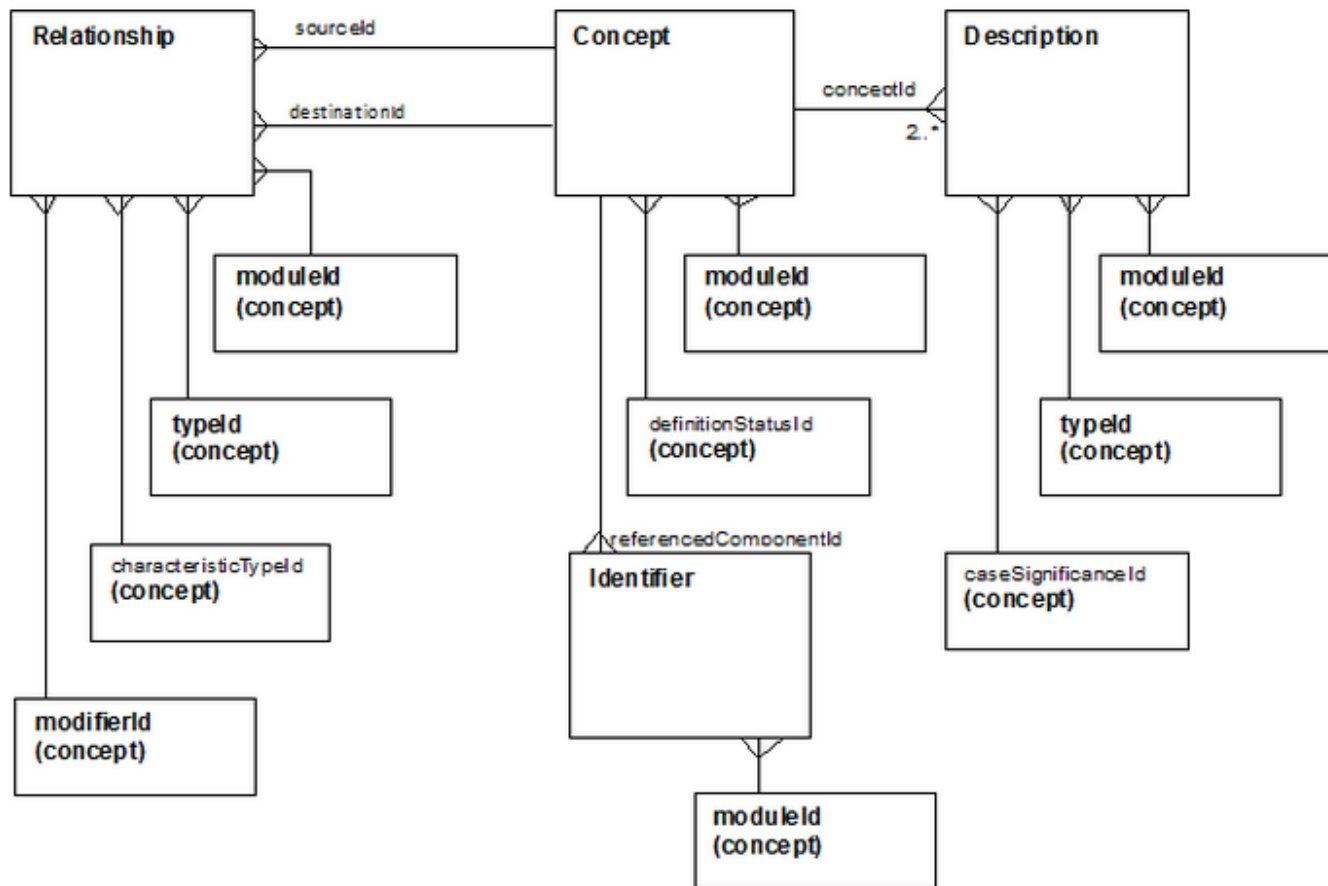
O campo *moduleId*, atribuído a cada componente ajuda na identificação da origem do conteúdo e as suas dependências dentro de uma *release*.

Id	effectiveTime	active	moduleId	definitionStatusId
101291009	20070701	1	Module 1	900000000000074008   Primitive
101291009	20080101	1	Module 2	900000000000074008   Primitive

Fig.4 *ModuleId* field

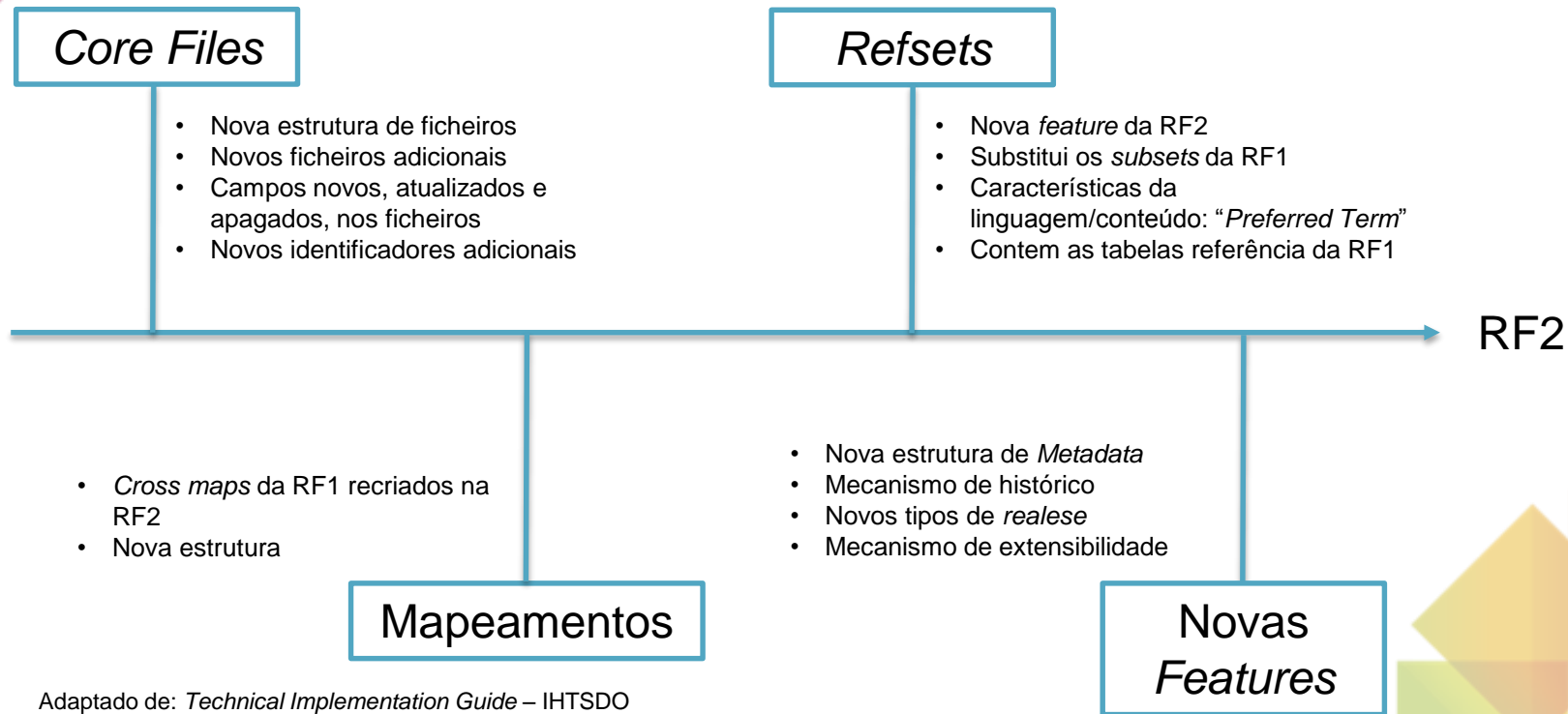
Fonte: *Technical Implementation Guide* – IHTSDO

# RELAÇÃO ENTRE FICHEIROS





# SINOPSE



Adaptado de: *Technical Implementation Guide* – IHTSDO

# RECURSOS PARA CONSULTA

- *[SNOMED CT Release Format 2 Value Proposition](#)*
- *[IHTSDO RF2 Conversion Tool User Guide](#)*
- *[Technical Implementation Guide](#)*
- IHTSDO Customer Support - [info@ihtsdo.org](mailto:info@ihtsdo.org)