



APELON

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DTS 4: Ontylog Namespaces and Namespace Classification Guide

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Introduction

Overview

An **Ontylog** terminology (referred to as a **Namespace** in DTS, and throughout this guide) is one developed using formal, structured Description Logic (DL) principles. Ontylog Namespaces can be created and maintained using Apelon's Distributed Terminology Service (DTS) suite of tools, or other compatible DL modeling applications. Ontylog Namespaces are distinguished by having a principled Concept hierarchy based on formal DL subsumption incorporating superconcepts (Parents) and subconcepts (Children). The **DTS Editor** supports authoring, and viewing of the Concept hierarchy for Ontylog Namespaces. It is also possible to view attribute details for any Concept in the Ontylog Namespace in a manner similar to that for non-Ontylog Namespaces.

Ontylog Extension Namespaces

Many publicly available Ontylog Namespaces are provided by Apelon's subscription update process and are inherently read-only. While users also have the ability to create their own Local Ontylog Namespaces through the DTS Editor tools, you cannot perform edits directly to a *Subscription* Ontylog Namespace using the DTS Editor. However, the DTS Editor allows you to create and maintain new local content (concepts and concept relationships) that extend (add to) a Subscription Ontylog Namespace. You do this by creating a special type of Namespace called an **Ontylog Extension** Namespace. Concepts in an Extension Namespace, aka "Extension Concepts", take advantage of the DL principles of their extended (or linked/base) Ontylog Namespace and follow the same formal subsumption rules. See [Ontylog Extension Namespace Classification](#) below for more information.

Each Ontylog Extension Namespace extends, or "is linked to", a specific Subscription Ontylog Namespace. An Ontylog Extension Namespace can extend only one Subscription Ontylog Namespace, but a Subscription Ontylog Namespace can be extended by any number of (independent) Extension Namespaces. There are no interdependencies between Extension Namespaces that extend a given Subscription Ontylog namespace.

An Extension Namespace is created for the purpose of maintaining the new local content to be associated with the linked Subscription Ontylog Namespace. This guide describes the procedures for creating and maintaining an Ontylog Extension namespace.

Ontylog Namespace Classification

Each Extension and Local Ontylog Namespace is comprised of supplemental content that you create locally. As mentioned above, in an Ontylog Namespace, concepts are organized into a formal hierarchy. This hierarchy is built programmatically by a process called *classification*. DTS includes a DL-based Classification tool that supports the placement of Ontylog Concepts within the subsumption hierarchy of the Local Ontylog or linked Ontylog Namespace. The classifier tool is used both for the classification of Ontylog Extension Namespaces, as well as user-defined Local Ontylog Namespaces

When viewing an Extension Namespace, the hierarchy shown is the "integrated" hierarchy consisting of Concepts from both the Ontylog Namespace and the Extension Namespace. The base Subscription Ontylog Namespace can always be viewed independently of any Extension Namespace. The details of DL classification are beyond the scope of this document, the reader is referred to any of the excellent texts on the subject, but a few basic principles can be provided.

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The details of Concepts in both Local Ontylog and Ontylog Extension Namespaces can be displayed in two ways, generally called “views”: the **Defined View** and the **Inferred View**. The DTS Editor supports the display of both these views in the Concept Details tab of the Details panel. The Defined View shows certain hierarchy-defining attributes of the Concept. These attributes include:

- **Kind** – an overall “type” or class of a Concept. Kind is used to mark Concepts for use in relationships, e.g., an “Organism Kind” could be required as the target of an “is caused by” relationship. For Ontylog Extension Namespaces Kinds are defined in the Subscription Ontylog Namespace and cannot be changed. For Local Ontylog Namespaces Kinds can be added and modified. Some Subscription Ontylog Namespaces such as SNOMED CT only consist of one Kind.
- **Primitive/Defined** – A Concept flag that specifies whether classification should be performed on the Concept using the defining attributes (Defined state) or whether the Defining Concepts should be taken as the explicit parents (Primitive state) and classification should not be performed.
- **Defining Concept** – a specific parent, or ancestor, of a Concept. Defining Concepts can be from both the base Subscription Ontylog Namespace and the Extension Namespace. In the case of Local Ontylog Namespaces, all Defining Concepts must exist in the Local Ontylog Namespace.
- **Defining Role** – a stated, defining relationship between one Concept and another. For example, Concept A “is caused by” Concept B. In DTS, This relationship is called a **Role**. A Role consists of a **Role Modifier**, **Role Type**, and the value of the relationship (**Role value**) which is another Concept. The Role Type associated with a defining Role can be from either the base Subscription Ontylog Namespace or the Extension Namespace and the target (value) Concept of the Defining Role can be from either the base Subscription Ontylog Namespace or the Extension Namespace. In the case of Local Ontylog Namespaces, all Role Type associations and target (value) Concepts of the Defining Role must exist in the Local Ontylog Namespace.

The Primitive/Defined designation, the Defining Concept(s), and the Defining Role(s) can only be modified when viewing the Extension Concept or Local Ontylog Concept in the Defined View. In the case of Local Ontylog Namespace, the Kind of Ontylog Root Concepts can also be chosen/modified in the Defined View. Otherwise, for both Local Ontylog and Extension Namespace Concepts, their Kind is assigned the Kind value of the first specified Defining Concept.

The classification process examines the Defined View attributes (Kind, Primitive/Defined, Defining Concepts and Defining Roles) of the Local Ontylog or Extension Concepts and applies a DL algorithm to create the computed or *Inferred View*. Local Ontylog and Extension Namespace Concepts derive their Kind (automatically) from their Defining Concept(s). The Local Ontylog or Extension Concepts are positioned in the Namespace hierarchy based on these defining attributes. This classification process creates the Superconcepts (parents) and Subconcepts (children) of every Local Ontylog or Extension Concept. Superconcepts and Subconcepts are displayed in the Inferred View.

See [Classifying an Ontylog Namespace](#) for procedures on running the Modular Classifier.

Creating and Maintaining Ontylog or Ontylog Extension Namespaces

Introduction

Ontylog Namespaces

The DTS Editor provides authoring and viewing capabilities for Ontylog Namespaces. The concept hierarchy tree in any selected Ontylog Namespace can be displayed along with additional attribute details (e.g., Properties, Roles, etc.) for any Concept in the Namespace.

While users can author their own Local Ontylog Namespaces, it is not possible to use the DTS Editor to perform edits directly to a *Subscription* Ontylog Namespace, as these are read-only and distributed by Apelon's Subscription Content Distribution process, via the Distribution Client. As outlined in the Introduction, the DTS Editor does provide capabilities to create and maintain new content that extends (adds to) an Ontylog Namespace through the use of Extension Namespaces. The DTS Editor also provides the ability to create "stand-alone" Local Ontylog Namespaces that do not extend Subscription Ontylog namespaces. Refer to the [DTS Editor Users Guide](#) for further information regarding creating and editing Namespaces.

- Some Notes regarding Local Ontylog and Ontylog Extension Namespaces
 - A Local Ontylog Namespace is a "stand-alone" namespace unrelated to Apelon's distributed Subscription Ontylog namespaces, and can be set as Read-Write or Read-Only. An Ontylog Extension Namespace is an extension of a specific Subscription Ontylog Namespace, created for the purpose of adding to or maintaining new local Concepts and/or Terms on the linked Subscription Ontylog Namespace, as Subscription Namespaces are by definition Read-Only.
 - In an Ontylog Extension Namespace, new Concepts, new Terms, new concept hierarchy relationships (i.e., Defining Concepts), Role relationships, and new Associations can be added to extend the Subscription Ontylog Namespace.
 - The Ontylog Extension Namespace can then be classified against the linked Subscription Ontylog Namespace, resulting in the Extension Concepts being integrated into the linked Namespace's Concept hierarchy. The displayed hierarchy for the Ontylog Extension Namespace reflects both the linked Subscription Ontylog Namespace Concepts, and Concepts from the Extension Namespace. Local Ontylog Namespaces can also be classified in order to create the *Inferred View* for the namespace.
 - Refer to the [Classifying an Ontylog Namespace](#) discussions for more information on Local Ontylog and Ontylog Extension Namespace classification.

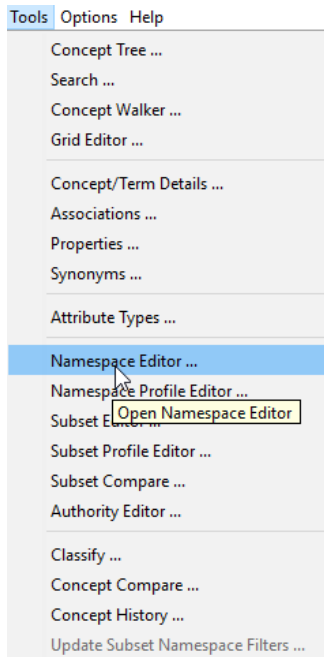
Creating an Ontylog Extension Namespace Using the DTS Editor

Each Ontylog Extension Namespace extends a linked Subscription Ontylog Namespace with concepts that you define locally. A given Extension Namespace can be linked to only a single Subscription Ontylog Namespace (and this link cannot be modified once this link is established). Multiple Extension Namespaces can, on the other hand, be linked to the same Subscription Ontylog Namespace.

After content has been added to the Extension Namespace, the DTS Modular Classifier is used to classify new and/or modified content in the Extension Namespace. Classification is performed on the content in the Extension Namespace, using the DL-derived information in the linked Subscription Ontylog Namespace.

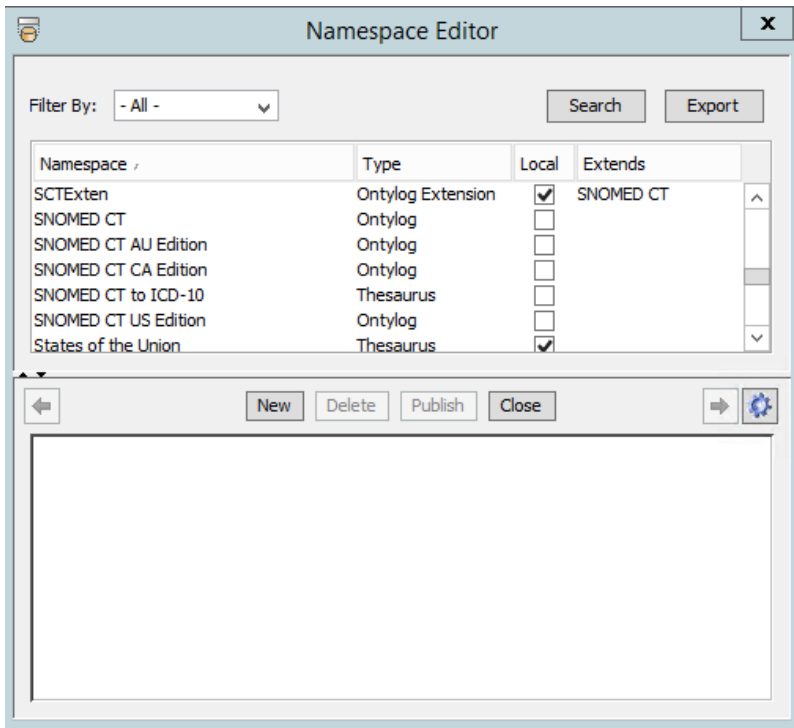
Create a new Ontylog Extension or Local Ontylog Namespace:

1. Prior to creating an Ontylog Extension or Local Ontylog namespace you will need to ensure you are logged into the DTS Editor with a user who has the *Namespace Admin* role.
2. From the Menu select **Tools > Namespace Editor**.

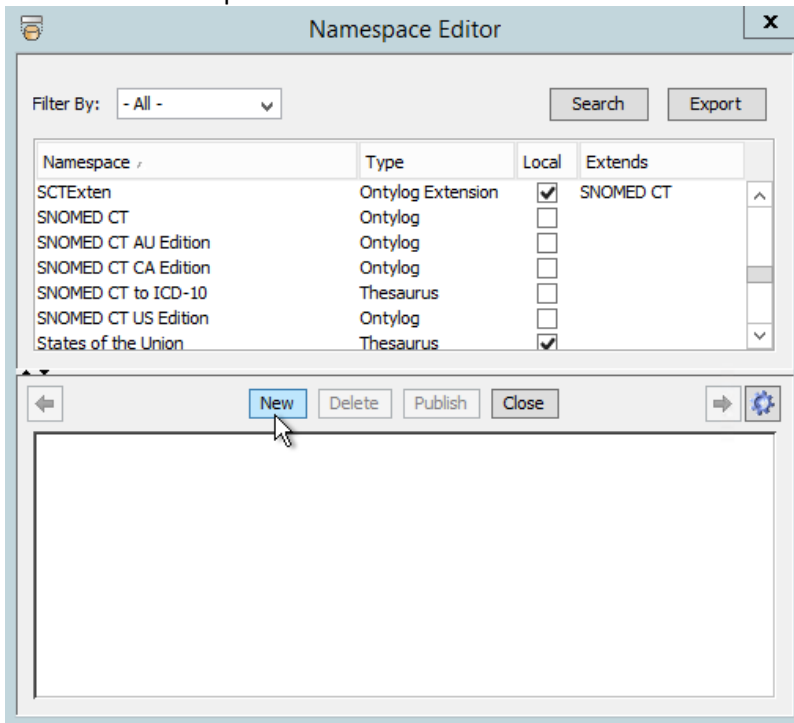


3. The *Namespace Editor* window displays.

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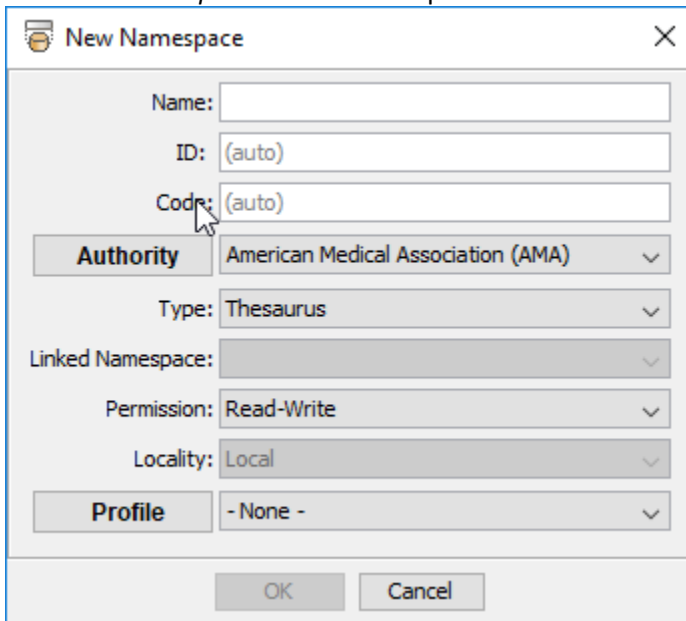


4. To create a namespace click **New**.



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5. The *New Namespace* window will open.



The screenshot shows a 'New Namespace' dialog box with the following fields and values:

Name:	
ID:	(auto)
Code:	(auto)
Authority:	American Medical Association (AMA)
Type:	Thesaurus
Linked Namespace:	
Permission:	Read-Write
Locality:	Local
Profile:	- None -

Buttons: OK, Cancel

6. In the *Name* field, specify the name of the Local Ontylog or Ontylog Extension namespace you are creating, i.e., **LocalNS**.



Name: LocalNS

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7. If you want to assign a specific ID for the Namespace, enter it in the *ID* field. If you do not enter an ID, one will be assigned by the DTS Server.

ID:

Note: If you specify a number less than **32768**, DTS adds the number 32768 to the *ID* number you specify to create an **internal** namespace ID. The calculated *ID*, as well as the ID number you entered (referred to as the **relative ID**) display for your reference. If the calculated number is in use already, a message displays to indicate the duplication; enter an alternate ID number.

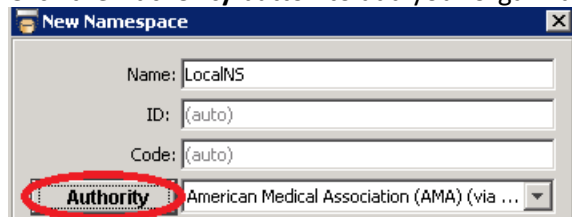
8. If you want to assign a specific Code for the Namespace, enter it in the *Code* field. If you do not enter a Code, one will be assigned by the DTS Server.

Code:

9. An Authority indicates the organization (e.g., **U.S. National Library of Medicine**) that approved and/or certified a vocabulary. From the *Authority* field dropdown list, select the established authority for the new Namespace. Click on the *Authority* button if you want to create a new, local, Authority.

Note: Refer to the **Authority View and Maintenance** section in the *DTS Editor Users Guide* for detailed procedures on viewing and creating authorities. The below steps will provide an overview.

- a. Click the **Authority** button to add your organization as an Authority.



New Namespace

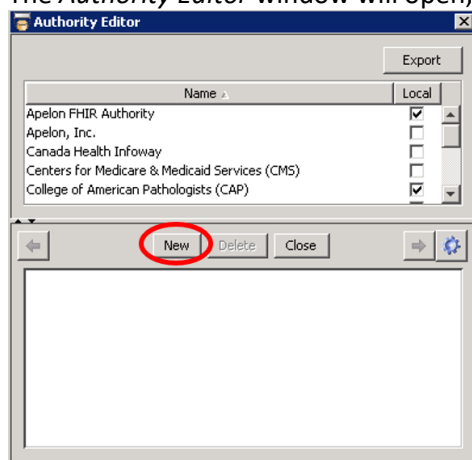
Name: LocalMS

ID: (auto)

Code: (auto)

Authority: American Medical Association (AMA) (via ...)

- b. The *Authority Editor* window will open, click **New**.



Authority Editor

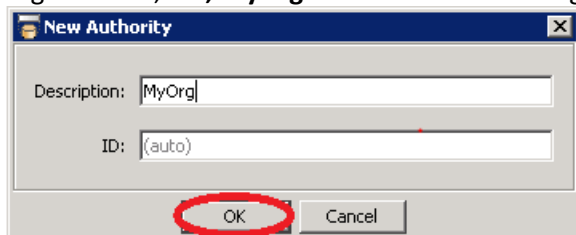
Export

Name	Local
Apelon FHIR Authority	<input checked="" type="checkbox"/>
Apelon, Inc.	<input type="checkbox"/>
Canada Health Infoway	<input type="checkbox"/>
Centers for Medicare & Medicaid Services (CMS)	<input type="checkbox"/>
College of American Pathologists (CAP)	<input checked="" type="checkbox"/>

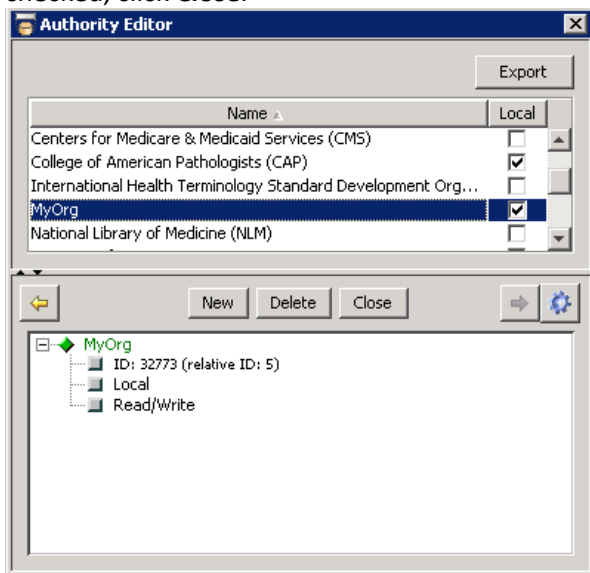
New Delete Close

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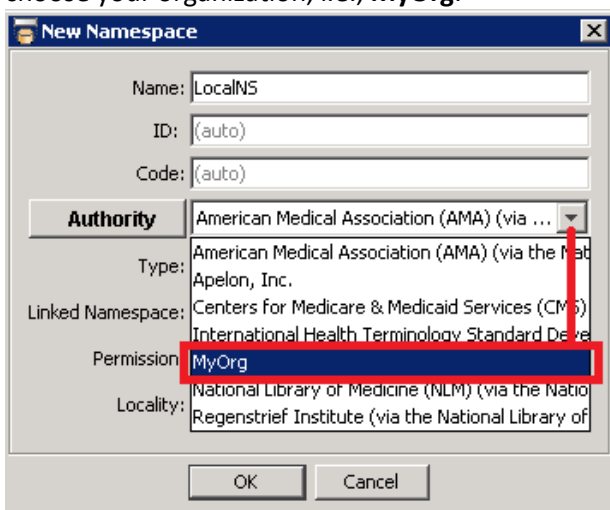
- c. The *New Authority* window will open. In the **Description** field enter the name of your organization, i.e., **MyOrg**. The ID field will auto generate so leave it as is and click **OK**.



- d. The authority you created will now be listed and the Local authority field will be checked, click **Close**.

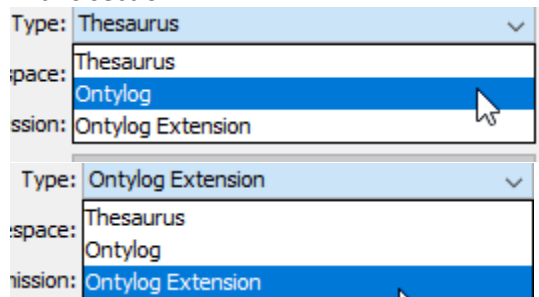


- e. In the *New Namespace* window, click the dropdown next to the **Authority** field and choose your organization, i.e., **MyOrg**.



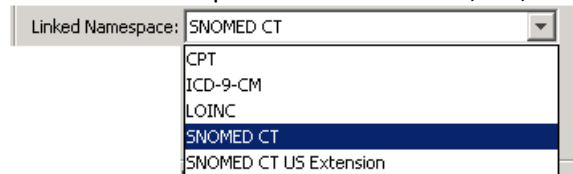
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- From the *Type* field dropdown list, select either **Local Ontylog** or **Ontylog Extension** as the namespace type. For additional information refer to the [Ontylog Namespaces](#) discussion earlier in this section.



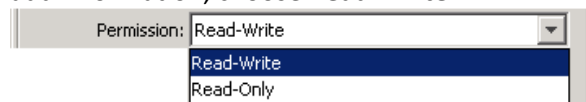
The image shows two screenshots of a dropdown menu for the 'Type' field. In the first screenshot, 'Thesaurus' is selected, and the dropdown list shows 'Thesaurus', 'Ontylog', and 'Ontylog Extension', with 'Ontylog' highlighted. In the second screenshot, 'Ontylog Extension' is selected, and the dropdown list shows 'Thesaurus', 'Ontylog', and 'Ontylog Extension', with 'Ontylog Extension' highlighted.

- The *Linked Namespace* field is enabled only if you are creating an Ontylog Extension namespace (i.e., the value in the *Type* field is **Ontylog Extension**); the field is disabled for other namespace types. The dropdown list includes only Subscription Ontylog Namespaces which have been previously loaded into DTS. From the *Linked Namespace* field dropdown list, select the Subscription Ontylog Namespace to which this new Extension Namespace should be linked, i.e., **SNOMED CT**.



The image shows a dropdown menu for the 'Linked Namespace' field. The dropdown list includes 'CPT', 'ICD-9-CM', 'LOINC', 'SNOMED CT', and 'SNOMED CT US Extension', with 'SNOMED CT' highlighted.

- The Namespace *Permission* field indicates whether or not the Local Ontylog or Ontylog Extension namespace is editable. From the dropdown list, select the level of permission (**Read-Only** or **Read-Write**) a user will have in this namespace. If you want users to be able to edit and add information, choose **Read-Write**.



The image shows a dropdown menu for the 'Permission' field. The dropdown list includes 'Read-Write' and 'Read-Only', with 'Read-Write' highlighted.

- The Namespace *Locality* field indicates how the Namespace data was acquired. **Local** is the default value for any namespace you create using the DTS Editor, including Local Ontylog and Ontylog Extension namespaces, and the field is not editable.

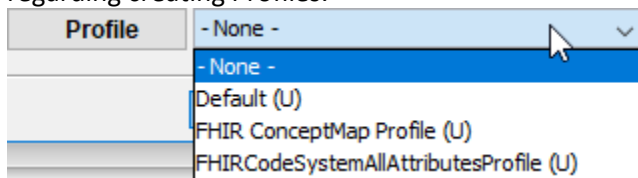


The image shows a dropdown menu for the 'Locality' field. The dropdown list includes 'Local'.

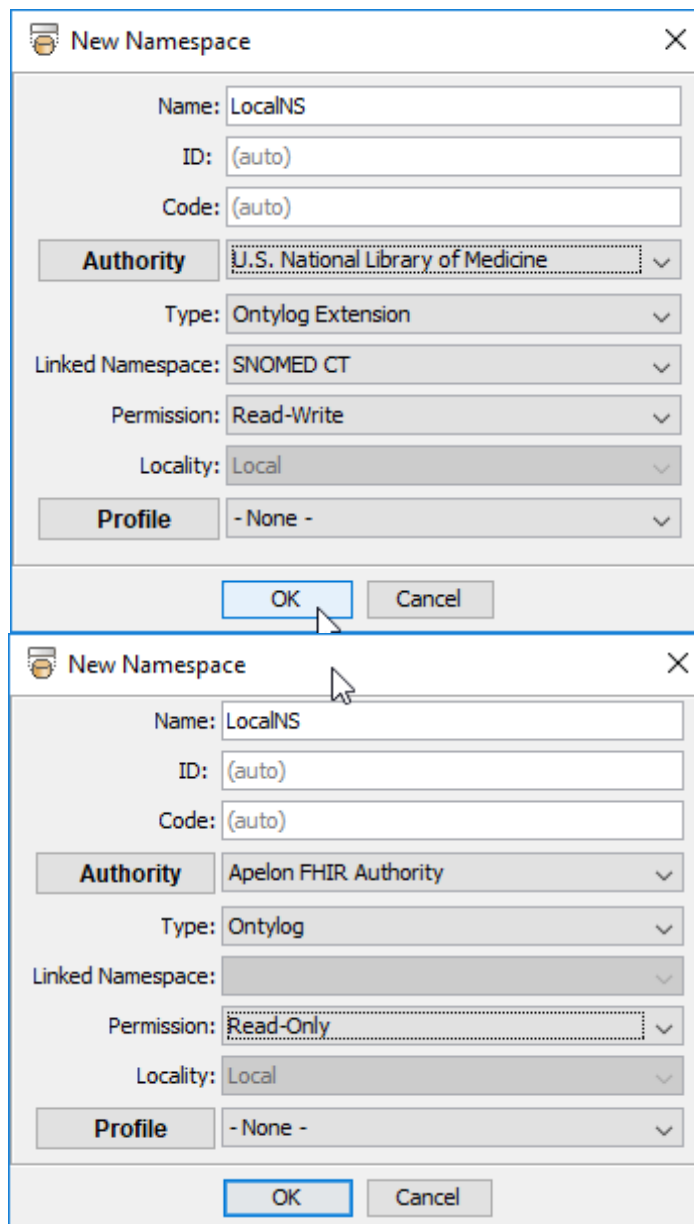
- If you are creating this Namespace using a pre-defined Profile, select it from the dropdown. Otherwise leave this value to “-None-“. See the DTS Editor Users Guide for more information

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regarding creating Profiles.

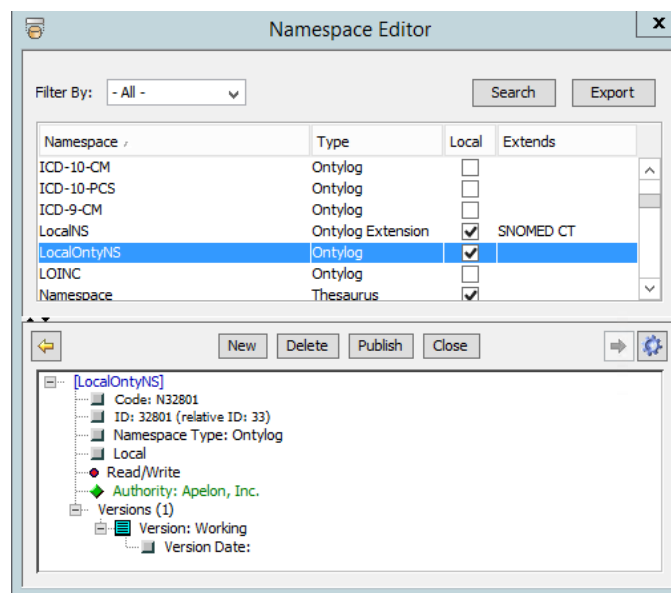
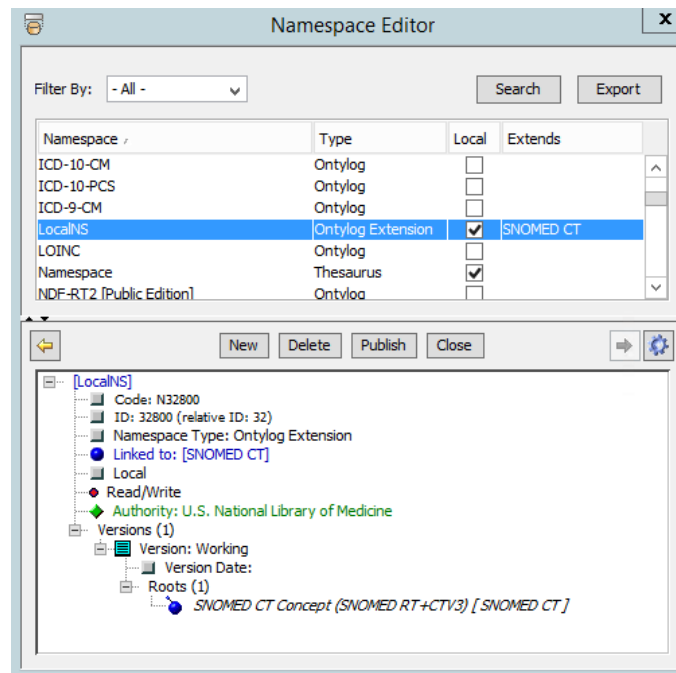


14. After all information has been entered for the new Namespace, click **OK** to add the namespace to the DTS knowledgebase. The following are two examples, one of a Local Ontylog Namespace, and the other as an Ontylog Extension.

Two screenshots of the 'New Namespace' dialog box. The top screenshot shows a namespace named 'LocalNS' with 'Type: Ontylog Extension', 'Authority: U.S. National Library of Medicine', 'Linked Namespace: SNOMED CT', and 'Permission: Read-Write'. The bottom screenshot shows a namespace named 'LocalNS' with 'Type: Ontylog', 'Authority: Apelon FHIR Authority', 'Linked Namespace: (empty)', and 'Permission: Read-Only'. Both screenshots have 'Name: LocalNS', 'ID: (auto)', and 'Code: (auto)' fields. The 'OK' button is highlighted in both.

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- The Namespace is now added to the table on the *Namespace Editor* window. A **Working Version** is created for the new Namespace.

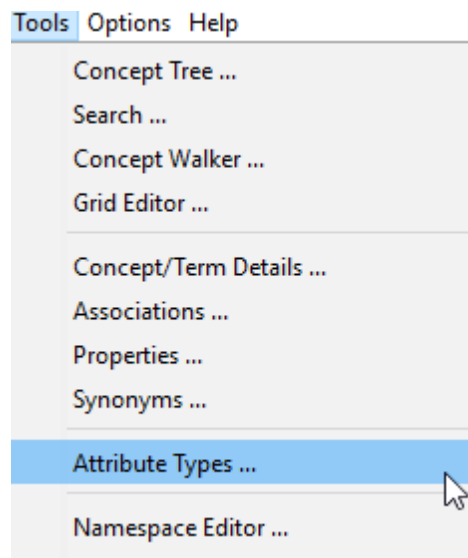


- When you finish creating, viewing, and editing the Namespace(s), click **Close** to close the *Namespace Editor* window.
- After you create a new namespace you will need to open the **User Manager** module to grant permissions to each user that you want to have **Write** or **Manage** permissions. By default, all

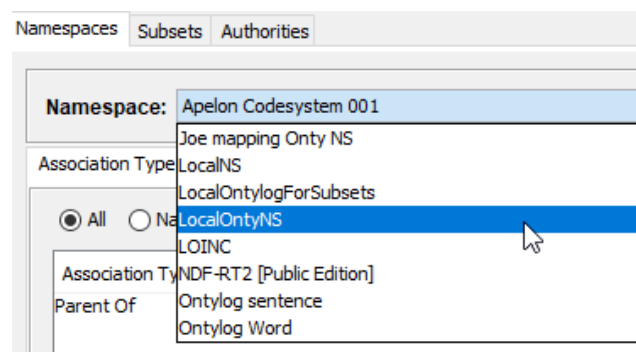
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users receive **Read** access. The exception to this is the user who creates the Namespace, who will by default have Manage permissions for that Namespace.

18. For **Local Ontylog** namespaces, however, the job is not yet completed. While an Ontylog Extension namespace will inherit the **Role Types** and **Kinds** of the extended Ontylog Namespace, those elements must be created for the Local Ontylog Namespace. Also, new **Role Types** can optionally be created for Ontylog Extension namespaces.
 - a. First launch the Attribute Type Editor from the Tools menu



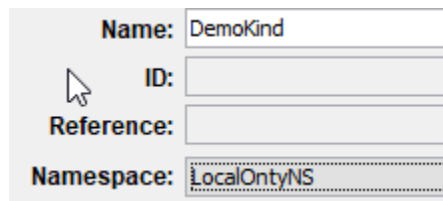
- b. Next navigate to the Namespaces tab and select the Local Ontylog Namespace from the list.



- c. Like any other local namespace, here you can create Association Types, Property Types, and Qualifier Types, and Validators, but specific to Ontylog Namespaces is the ability to create **Kinds** and **Role Types**. (Note, the namespace must be Read-Write to make these changes). Select the Kind tab and click "New".

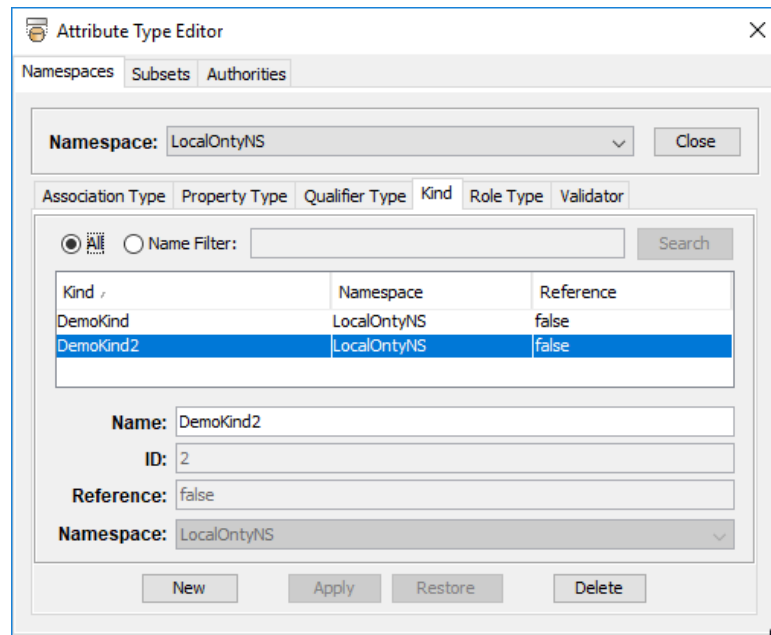
You can then assign the new Kind a Name. The ID and Reference fields are not editable, neither is the Namespace dropdown field, which should be populated by default with your selected Namespace.

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Name: DemoKind
ID:
Reference:
Namespace: LocalOntyNS

- d. You can click “Apply” to save this Kind, and “New” to create any number of Kinds for the Namespace.



Attribute Type Editor

Namespaces Subsets Authorities

Namespace: LocalOntyNS Close

Association Type Property Type Qualifier Type Kind Role Type Validator

Name Filter: Search

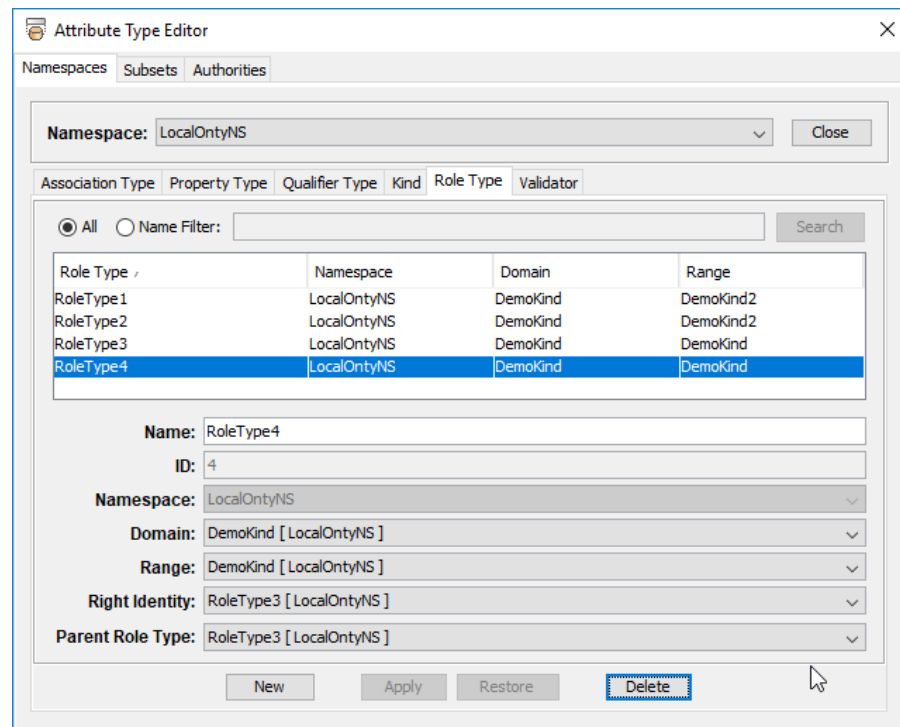
Kind	Namespace	Reference
DemoKind	LocalOntyNS	false
DemoKind2	LocalOntyNS	false

Name: DemoKind2
ID: 2
Reference: false
Namespace: LocalOntyNS

New Apply Restore Delete

- e. Next, for either Ontylog Extension or Local Ontylog namespaces, click the “Role Type” tab. From here you can click “new” and define any number of different Role Types. Each Role Type must be assigned a Name, must have the Domain and Range defined by selecting previously created Kinds for the Namespace from the provided dropdown lists, and optionally have Right Identities and Parent Role Types defined from previously created Role Types for the Namespace. (Note, the first Role Type you create cannot have its Right Identity or Parent Role Type defined, until other Role Types have been created).

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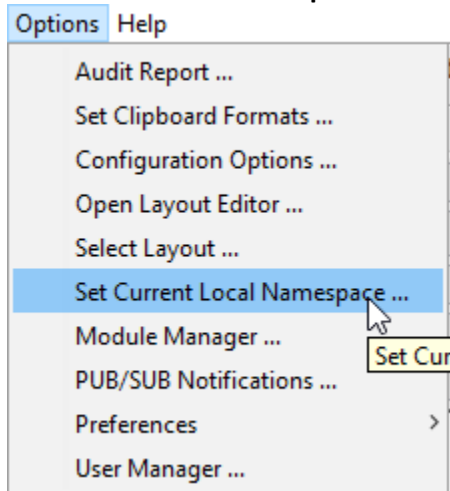
- f. Once you have created the desired Kinds and Role Types, your Local Ontylog or Ontylog Extension Namespaces have been successfully created and are ready to be populated with Concepts. For more information regarding the creation of Role Types, see [Creating an Ontylog Role Type](#) below

Creating a New Concept in the Local Ontylog or Ontylog Extension Namespace

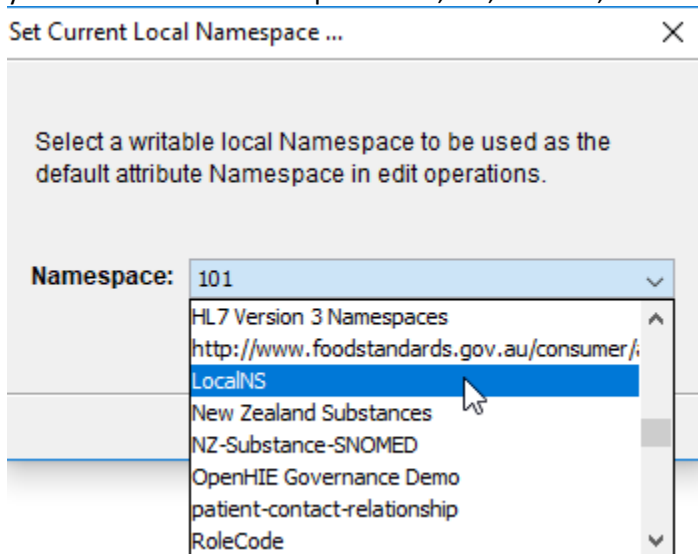
Follow this procedure to add a new concept to a Local Ontylog or Ontylog Extension namespace.

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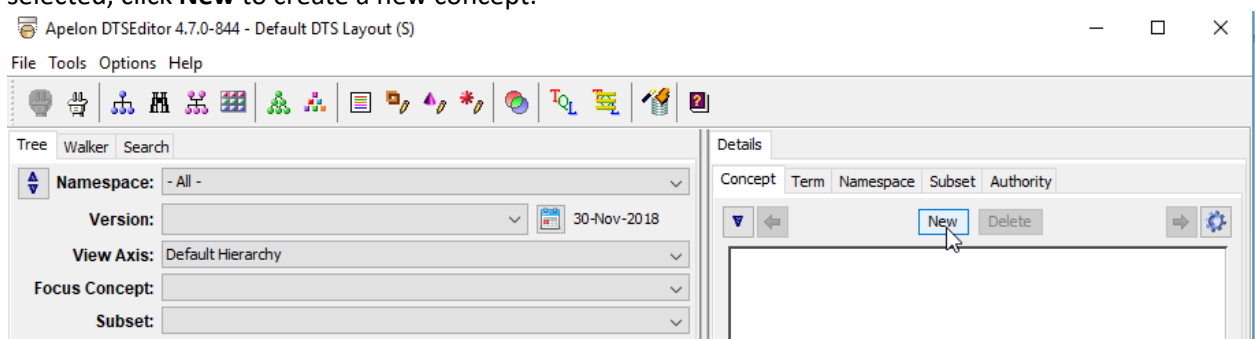
1. From the menu choose **Options > Set Current Local Namespace**.



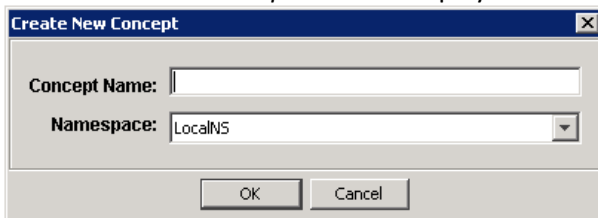
2. The *Set Current Local Namespace* window displays. Choose the namespace you want to perform your edits in from the dropdown list, i.e., **LocalNS**, and click **OK**.



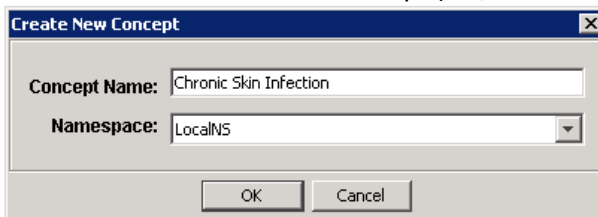
3. In the DTS Editor *Details* pane in the right panel of the *DTS Main* window with the *Concept* tab selected, click **New** to create a new concept.



4. The *Create New Concept* window displays.

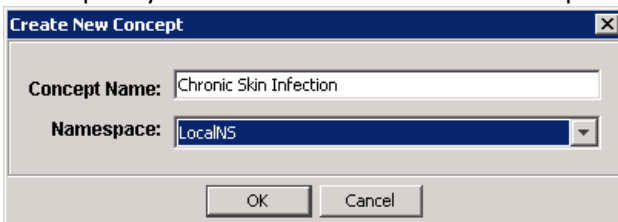


5. Enter the name of the new Concept (i.e., **Chronic Skin Infection**) in the *Name* field.



Note: The DTS Editor will not allow you to create a Concept with a name that is already in use in the Local Ontylog Namespace. Also, a Concept with a name that is already in use in the Ontylog Extension Namespaces or that is used by a Concept in the linked Subscription Ontylog Namespace will not be allowed. If the Concept name is identical to an existing Concept name, a message window displays to indicate this; click **OK**, then specify a different name for the new Concept.

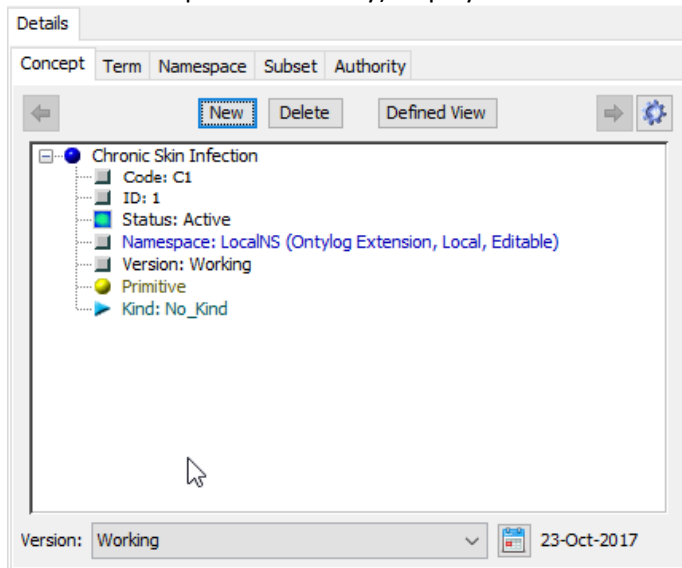
6. From the *Namespace* field dropdown list, select the Local Ontylog or Ontylog Extension Namespace (i.e., **LocalNS**) to which the new concept will be added. Only local, writable namespaces are included in the Namespace list. By default this should be populated with the namespace you set as the Current Local Namespace.



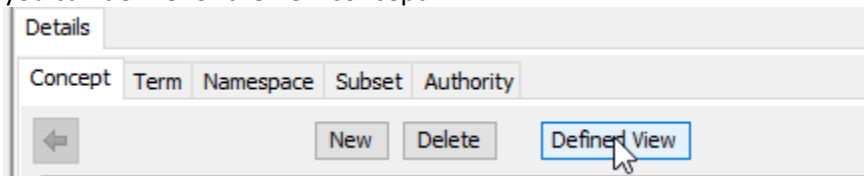
7. To cancel the addition of the Concept to the Namespace, click **Cancel**. The *Create New Concept* window closes. Click **OK** to add the Concept to the selected Namespace.

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- The new Concept displays in the *Concept* tab in the **Defined** view, and references the Namespace in which you created the Concept. The Concept **Code** and **ID** (which are assigned to the new Concept automatically) display as well.



- The Defined view permits the broadest range of options for defining concept attributes: **Primitive/Defined, Kind, Defining Superconcept, Defining Role, Synonym, Property, and Association** (in the inferred view, **Synonym, Property, and Association**) are the only attributes you can define for the new concept.

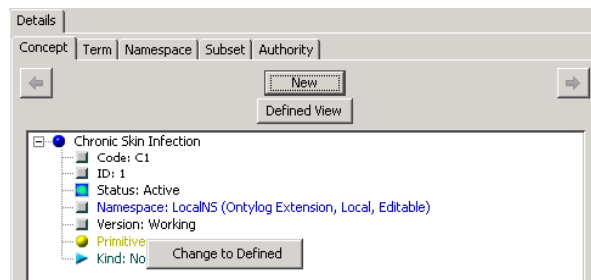


Note: The display in the *Concept* tab remains in the Defined view until you click on the **Defined** button to change it to the Inferred view. If you subsequently drag another concept into the *Concept* tab (from any Ontylog Namespace) that Concept will display in the currently active view.

Change a New Concept from “Primitive” to “Defined”

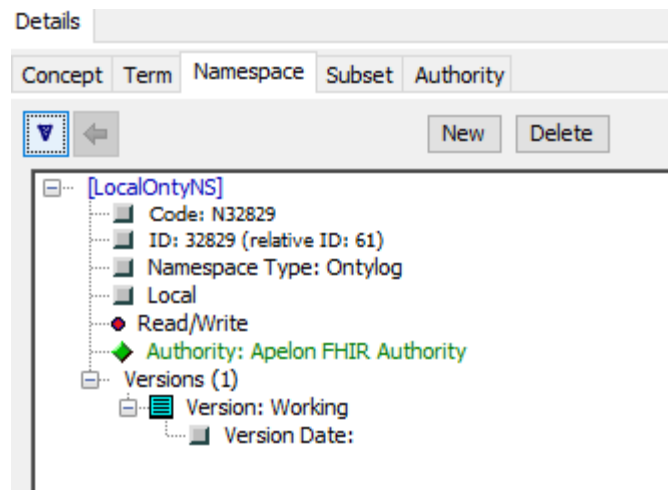
As described in the Introduction, Local Ontylog and Ontylog Extension Concepts are either **primitive** or **defined**. The difference between a primitive and defined concept is a matter of completeness of the definition; primitive definitions are not complete. Primitive concepts usually appear higher up in the namespace hierarchy than defined concepts. The designation of a concept as **primitive** or **defined** has an effect on the way classification is performed. The Classifier will not infer that a **primitive** concept subsumes another concept.

To change a **primitive** Concept to **defined**, right click the new Concept’s **Primitive** attribute on the *Concept/Term Details* panel, then click the displayed **Change to Defined** option. New concepts are created as **Primitive** by default in the Ontylog namespace.



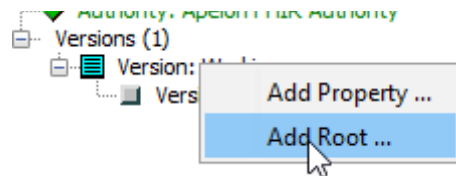
Add a Root concept to a Local Ontylog Namespace

For the case of a Local Ontylog Namespace, you must define one or more root concepts. First in the Namespace Editor panel, select the Local Ontylog Namespace.

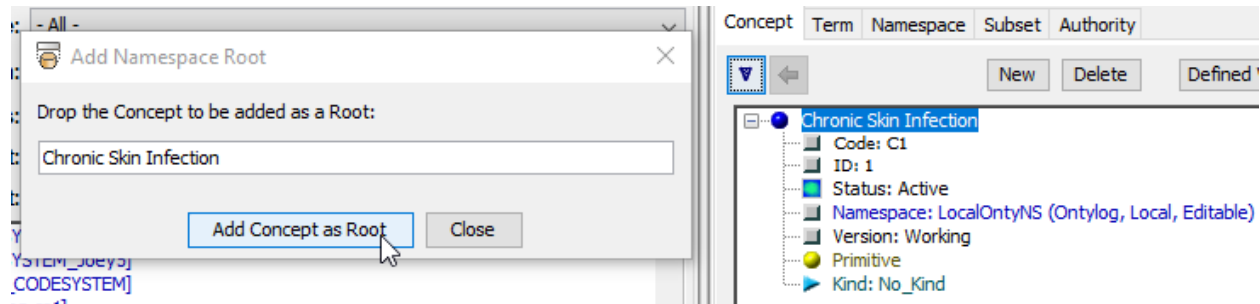


Next, right click on the “Version: Working” row and select “Add Root”.

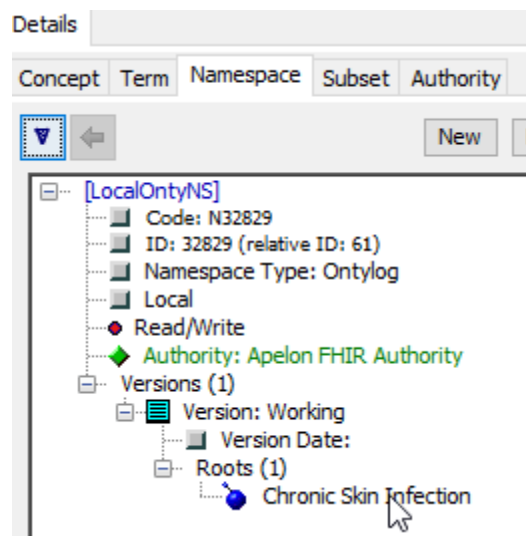
DTS 4: Ontylog Namespaces and Namespace Classification Guide



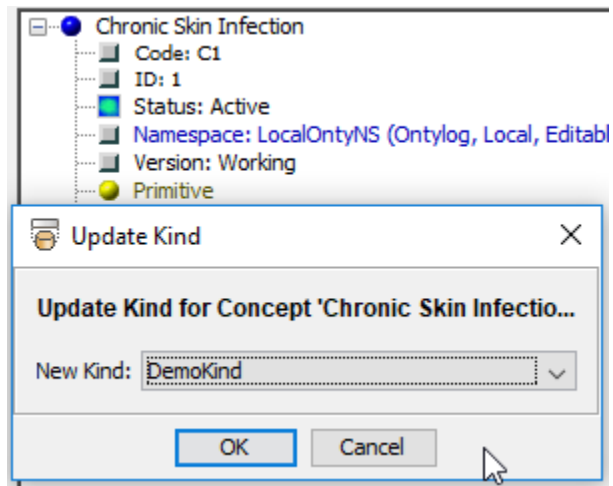
Now drag the desired Local Ontylog concept from either the search results window or the concept Details Panel window into the open dialog box, and click “Add Concept as Root”.



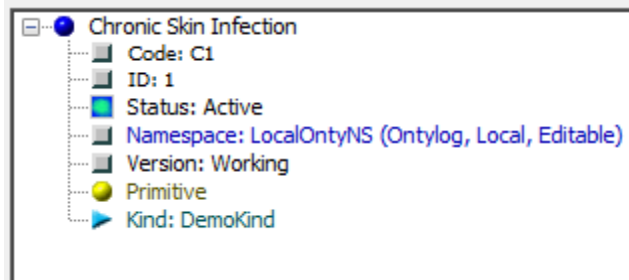
The Local Ontylog Namespace now has a defined Root Concept, shown in the details panel.



Finally you must define the Root concept by assigning it a Kind. Right click on “Kind: no kind” and click “Set Kind”. Then select from the previously created Kinds for this Local Ontylog Namespace and click “OK”.



The Concept now has the selected Kind displayed as its Kind in the Defined view. You can also update the Kind of a Local Ontylog Root Concept, that does not have any Inverse Defining Concepts (child concepts), by right-clicking and choosing “Set Kind” again.



Add a Defining Concept for the New Concept

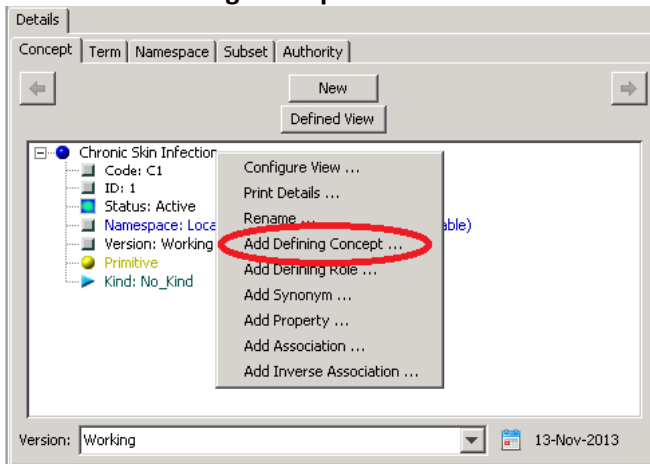
Each Concept in an Ontylog Namespace must have an assigned **Kind**, which identifies the concept’s type (specimen, procedure, etc.). The author of the Ontylog Namespace must have created the Kinds used in that Namespace.

With the exception of a Local Ontylog Namespace’s Root concept described above, for each Concept you create in the Ontylog Namespace you must assign a **Defining Concept**, or **parent** concept (i.e., the concept that is placed immediately above the new concept in the Ontylog namespace). The new Concept in the Ontylog Namespace always derives its Kind (automatically) from the Defining Concept. As such, the Concept chosen as the Defining Concept must first have its Kind defined.

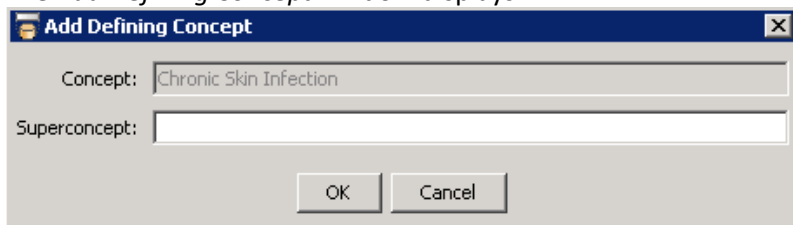
Follow this procedure to establish a Defining Concept for a Concept in an Ontylog Namespace.

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1. Right click on the concept name in the *Concept* tab. When the attribute edit menu displays, select **Add Defining Concept**.

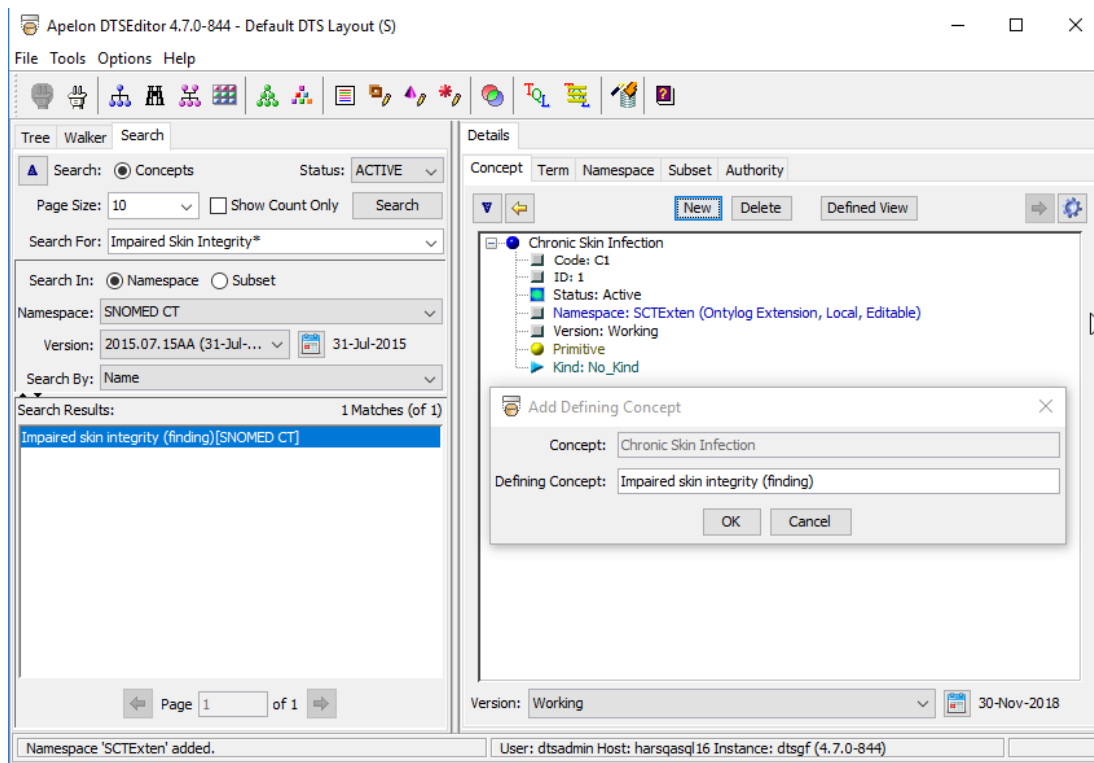


2. The *Add Defining Concept* window displays.

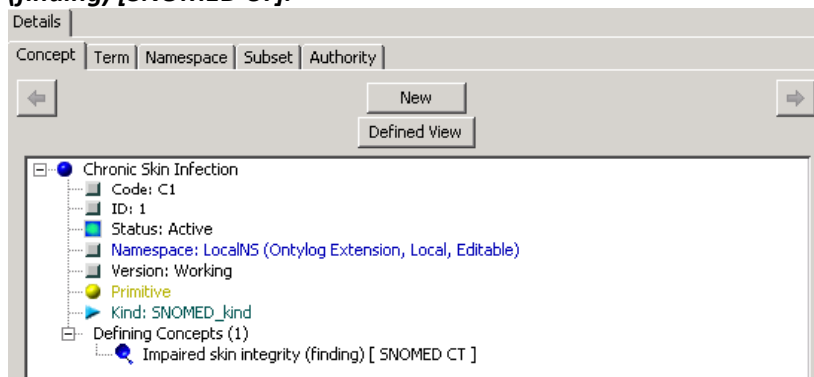


3. Identify the concept you want to add as the defining concept from another displayed panel (e.g., *Concept Tree*, *Concept Walker*, *Search*) and then drag the desired superconcept to the *Add Defining Concept* window. For example, from the *Search* panel, search for **Impaired Skin Integrity*** and drag and drop the results to the *Superconcept* field in the *Add Defining Concept* window. Note that the superconcept name, as well as its namespace, display in the *Superconcept* field. Click **OK**.
 - a. For Ontylog Extension Namespaces the defining concept can be from the Base/Extended Ontylog Namespace or the Ontylog Extension Namespace itself.
 - b. For Local Ontylog Namespaces the defining concept can only be from the same Local Ontylog Namespace.

DTS 4: Ontylog Namespaces and Namespace Classification Guide

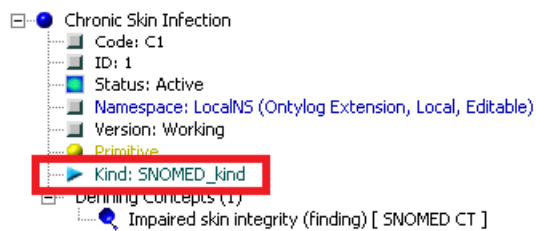


- In the Ontylog Namespace, the superconcept i.e., ***Impaired Skin Integrity (finding)***, is added as the Defining Concept of the Concept, i.e., ***Chronic Skin Infection***. If the Defining Concept is from a Namespace that differs from the one in which you are creating the new Concept (e.g., the linked Ontylog Namespace) that Namespace displays in brackets, i.e., ***Impaired Skin Integrity (finding) [SNOMED CT]***.



- The Kind from the superconcept, i.e., ***SNOMED_kind***, is assigned to the new Concept automatically (the new concept subsumes the Kind from the superconcept).
Note: After the first Defining Concept has been added to a Concept, any subsequent Defining

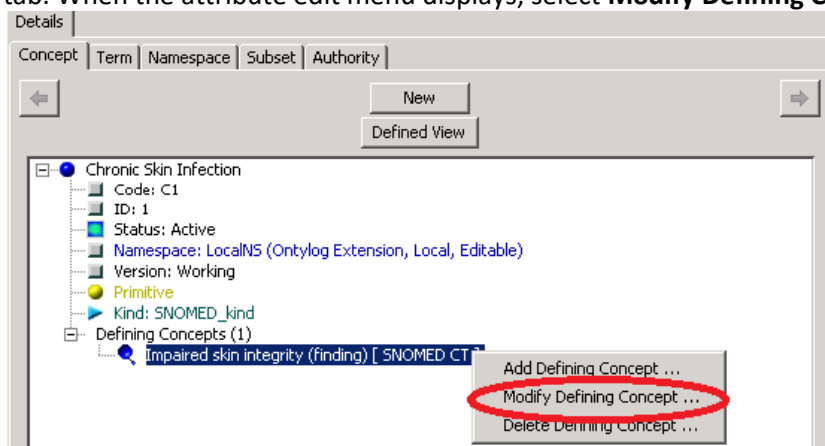
Concepts added must be of the same Kind as the first.



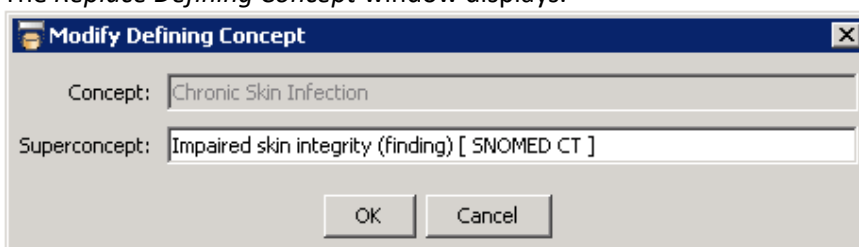
Replacing a Defining Concept for an Existing Concept

Follow this procedure to replace an Ontylog Namespace Concept’s Defining Concept with a different Concept. Note. Local Ontylog Namespace Root concepts, by definition, cannot have Defining Concepts.

1. Right click on the Defining Concept, i.e., **Impaired Skin Integrity (finding)**, name in the *Concept* tab. When the attribute edit menu displays, select **Modify Defining Concept**.

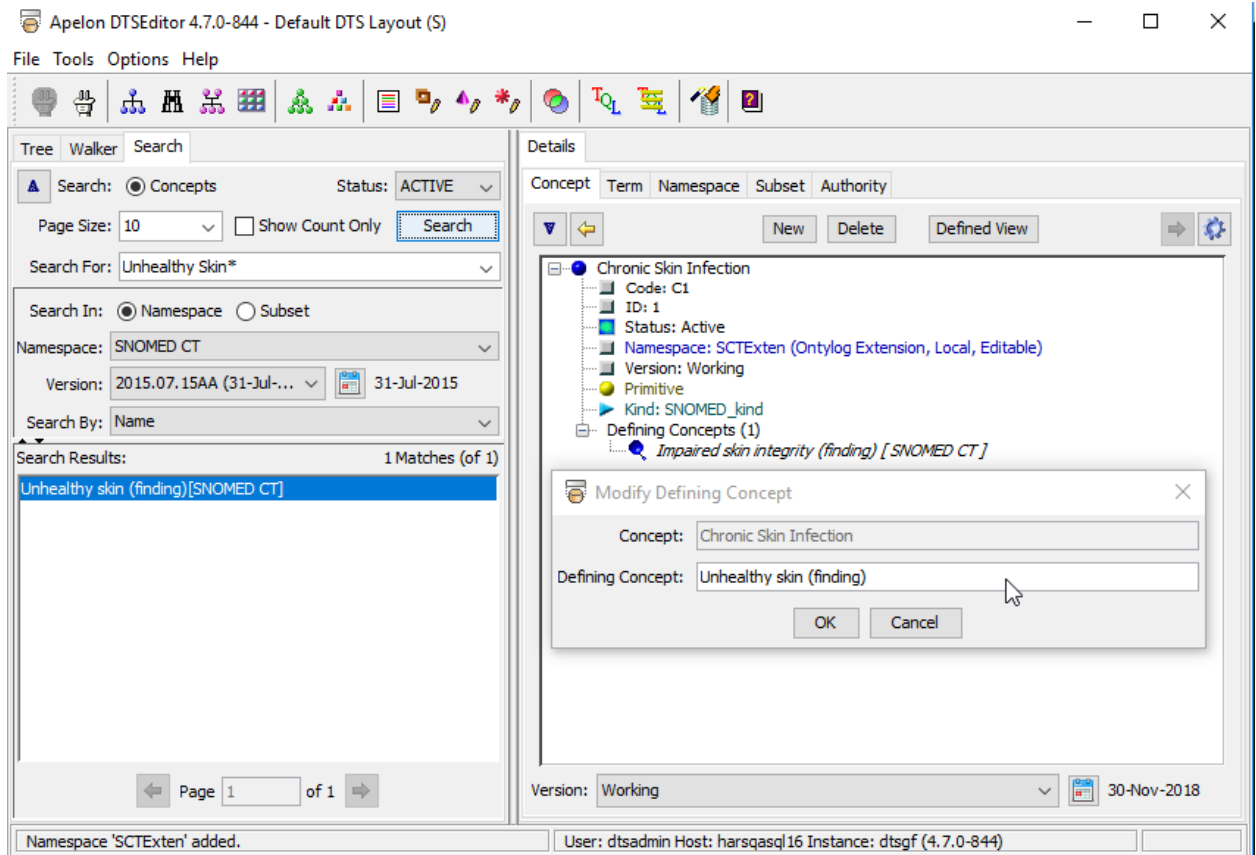


The *Replace Defining Concept* window displays.

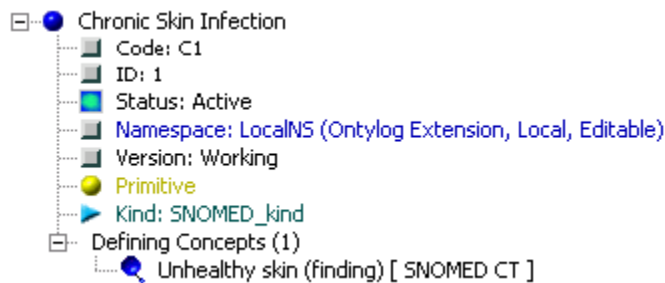


2. From another displayed panel (e.g., *Concept Tree*, *Concept Walker*, *Search*) drag the replacement superconcept from a linked Ontylog namespace, i.e., **Unhealthy Skin (finding)**, or the Ontylog namespace itself. Remember that the superconcept you select as the new Defining Concept must have the same Kind as that assigned to the superconcept you are replacing. Drop the replacement superconcept into the *Superconcept* field on the *Replace Defining Concept* window. The replacement superconcept name, as well as its Namespace, display in the *Superconcept* field, i.e., **Unhealthy Skin (finding)** {SNOMED CT} and click **OK**.

DTS 4: Ontylog Namespaces and Namespace Classification Guide



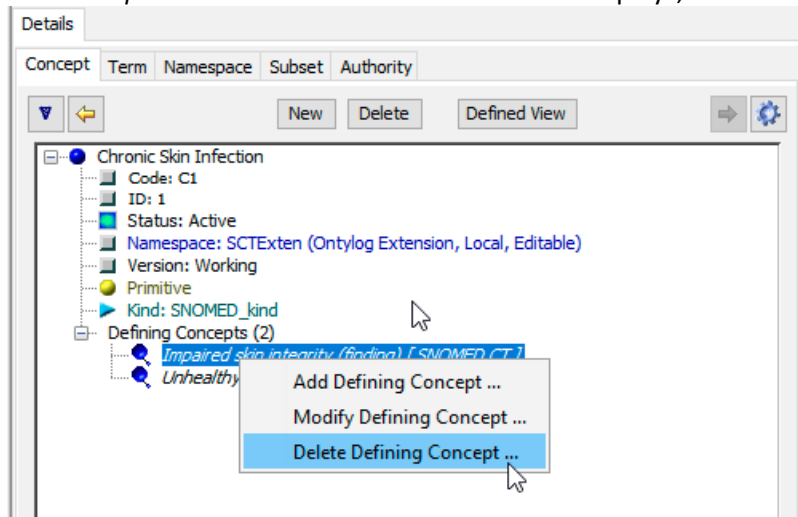
3. The selected superconcept, i.e., ***Unhealthy skin (finding) [SNOMED CT]***, now replaces the previous one. If the new Defining Concept is from a Namespace that differs from the one in which the Concept being modified that Namespace displays in brackets.



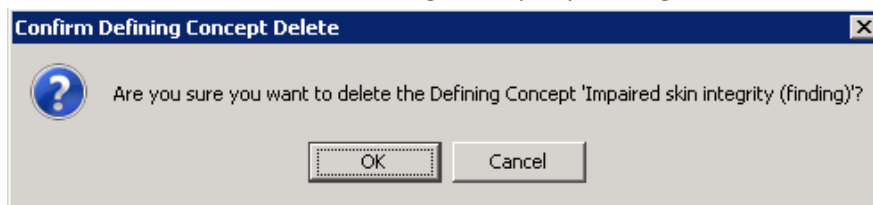
Removing a Defining Concept from an Existing Concept

Follow this procedure to remove a Defining Concept from an Ontylog Namespace Concept's attributes.

1. Right click the name of the Defining Concept, i.e., **Chronic Skin Infection**, you want to remove in the *Concept* tab. When the attribute edit menu displays, select **Delete Defining Concept**.

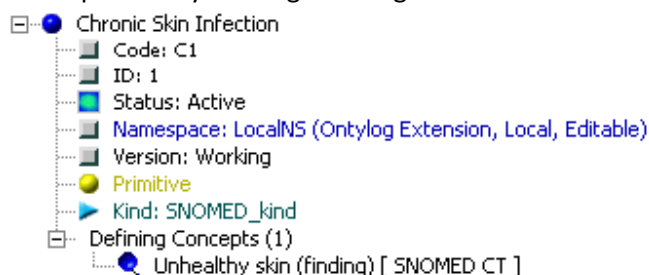


2. The following confirmation window displays, referencing the superconcept selected for removal. Confirm the removal of the Defining Concept by clicking **OK**, otherwise click **Cancel**.



3. The relationship between the Ontylog Namespace concept and the superconcept is removed immediately. The superconcept is removed immediately from the Ontylog Namespace Concept attributes in the *Concept* tab.

Note: The DTS Editor will not allow you to delete a Concept's last Defining Concept if that Concept has any existing Defining Roles.



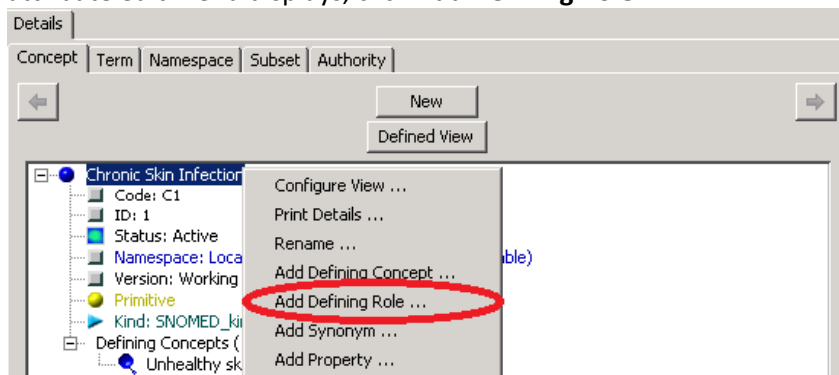
Adding a Defining Role for a New Concept

Each **Defining Role** describes a defining relationship between Concepts of specific Kinds. Each Role is defined by a **Role Type**, as well as a **Role value** that is the object Concept of the role relationship. For Local Ontylog Namespaces the author of the namespace creates Role Types. In the case of Ontylog Extension Namespaces, Role Types can be drawn from the Role Types created by the author of the linked Subscription Ontylog Namespace or from Role Types created in an Ontylog Extension Namespace. See [Creating Ontylog Role Types](#) later in this document for further information. One of two logical modifiers, **all** or **some**, can be attached to each concept role.

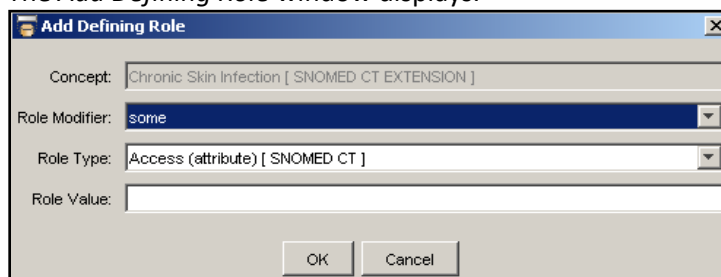
- The **all** modifier states that the relationship exists for **all instances** of the role value concept.
- The **some** modifier states that **at least one instance** of the role value concept has that relationship.

One or more Defining Roles can be specified for a Concept in an Ontylog Extension Namespace. Follow this procedure to add a Defining Role for a concept in the Ontylog Extension namespace.

1. Right click on the Concept name, i.e., **Chronic Skin Infection**, in the *Concept* tab. When the attribute edit menu displays, click **Add Defining Role**.

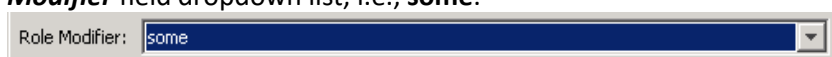


2. The *Add Defining Role* window displays.



Note: The *Concept* field (display only) references the new concept name, as well as the Ontylog Namespace, i.e., **Chronic Skin Infection [SNOMED CT]**.

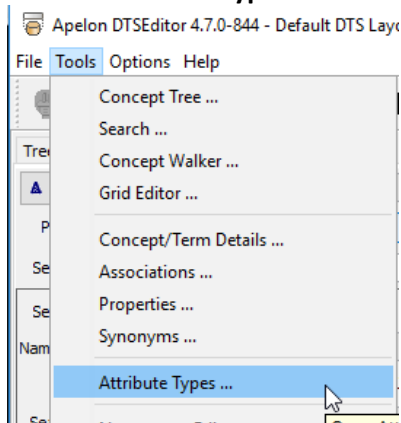
3. Attach one of the two logical modifiers, **all** or **some**, to each Role for the Concept. For example, **all** can imply that all tests conducted for that concept have a specimen, while **some** (the default) implies that at least one test has a specimen. Select the appropriate role modifier from the **Role Modifier** field dropdown list, i.e., **some**.



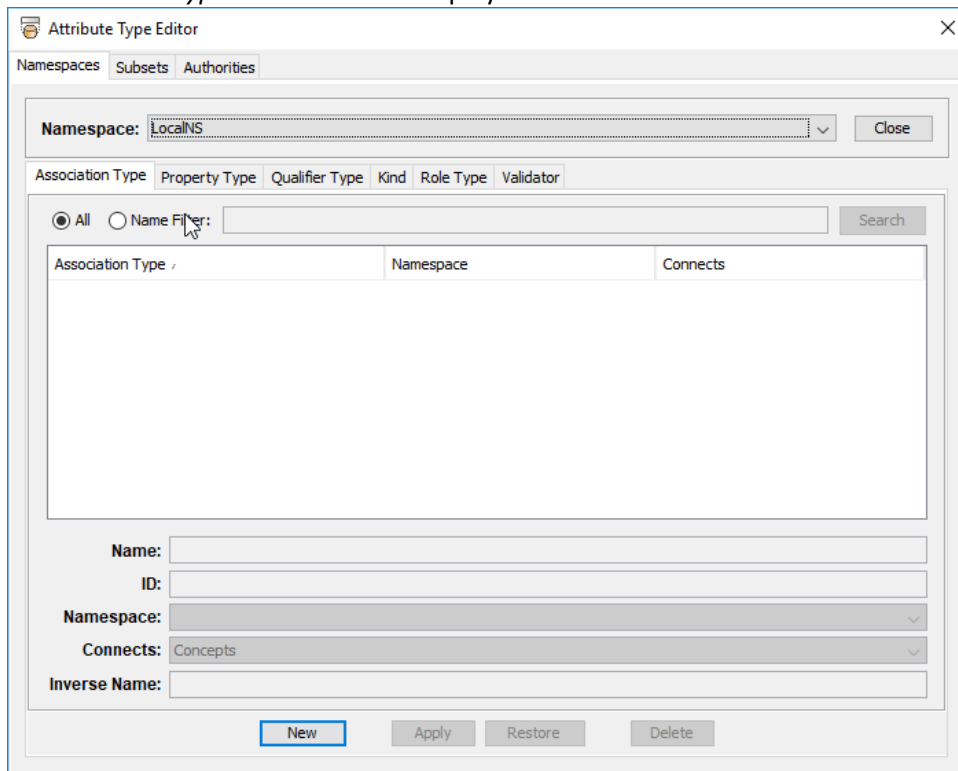
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- For Local Ontylog Namespaces, the concept selected as the Role Value can be any concept of the same **range** Kind as the concept you are defining. In the case of Ontylog Extension Namespaces the concept selected as the Role value for the Ontylog Namespace Concept **must** be from the linked Subscription Ontylog Namespace, or from the Extension Namespace itself. The Role value concept also must be of the **range** Kind of the Role Type chosen. An error window displays if you choose a Role value Concept of the wrong Kind (i.e., one that doesn't match the range Kind of the Role Type).

To help insure that you select the appropriate role type, an *Attribute Type Editor* window is available for you to view existing types. This can be accessed from the menu, to do this select **Tools > Attribute Types**.

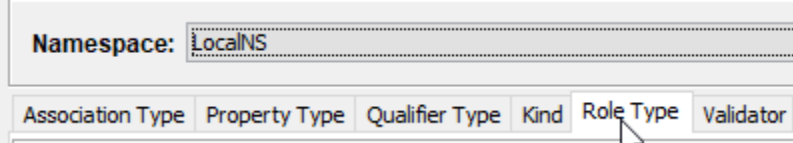


- The *Attribute Type Editor* window displays.

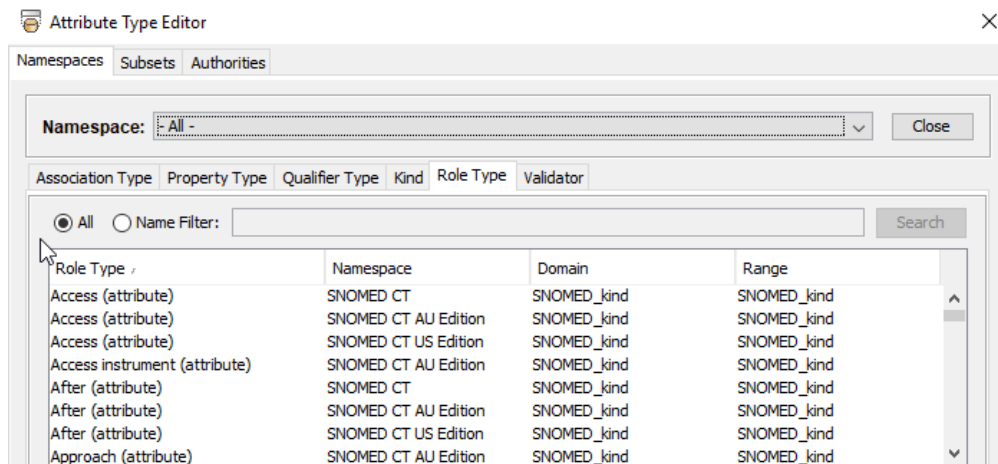


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- Click the **Role Type** tab in the *Attribute Type Editor* window to display the Role Types available in the knowledgebase.



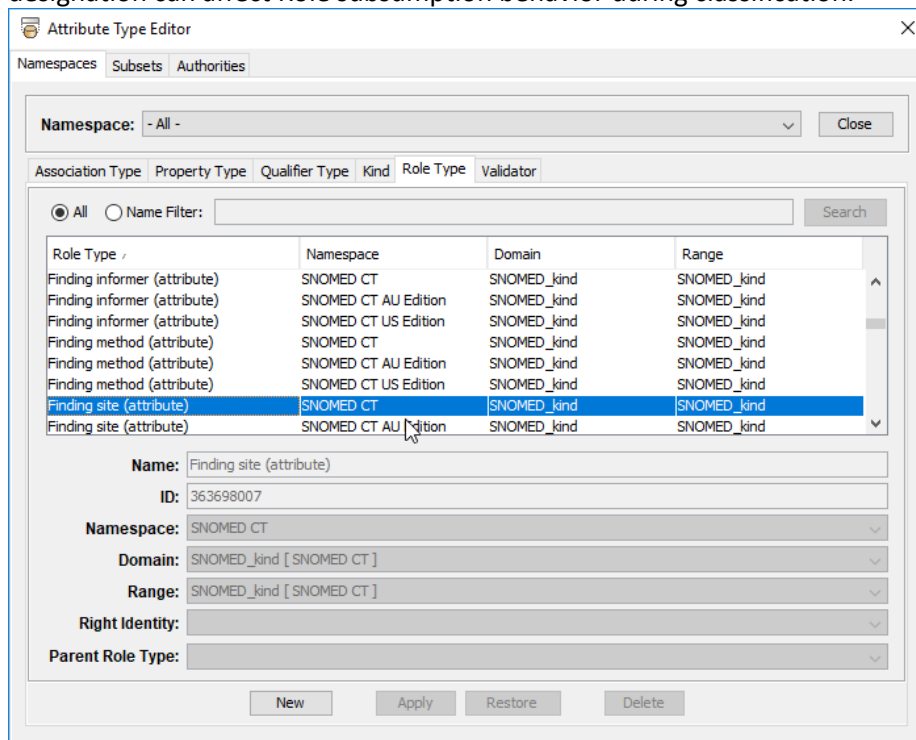
- From the **Namespace** dropdown menu you can view “All” **role types** that have been defined within the Ontylog namespaces in your knowledgebase.



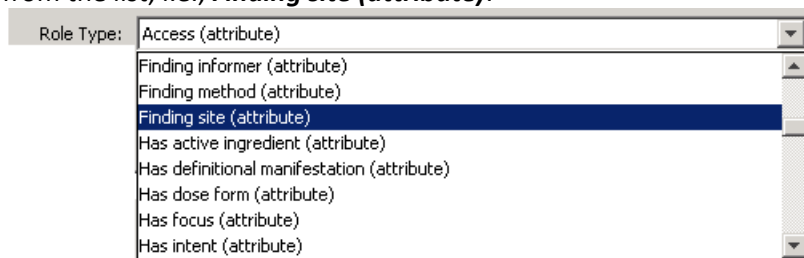
Modify the listing sort by clicking the desired column header. Click the role type name, i.e., **Finding site (attribute)**, to view details on that specific role type.

If the selected role is a **parent** role (established in the Ontylog Namespace) the Parent Role Type field indicates the type parent Role relationship that was established. This parent Role

designation can affect Role subsumption behavior during classification.

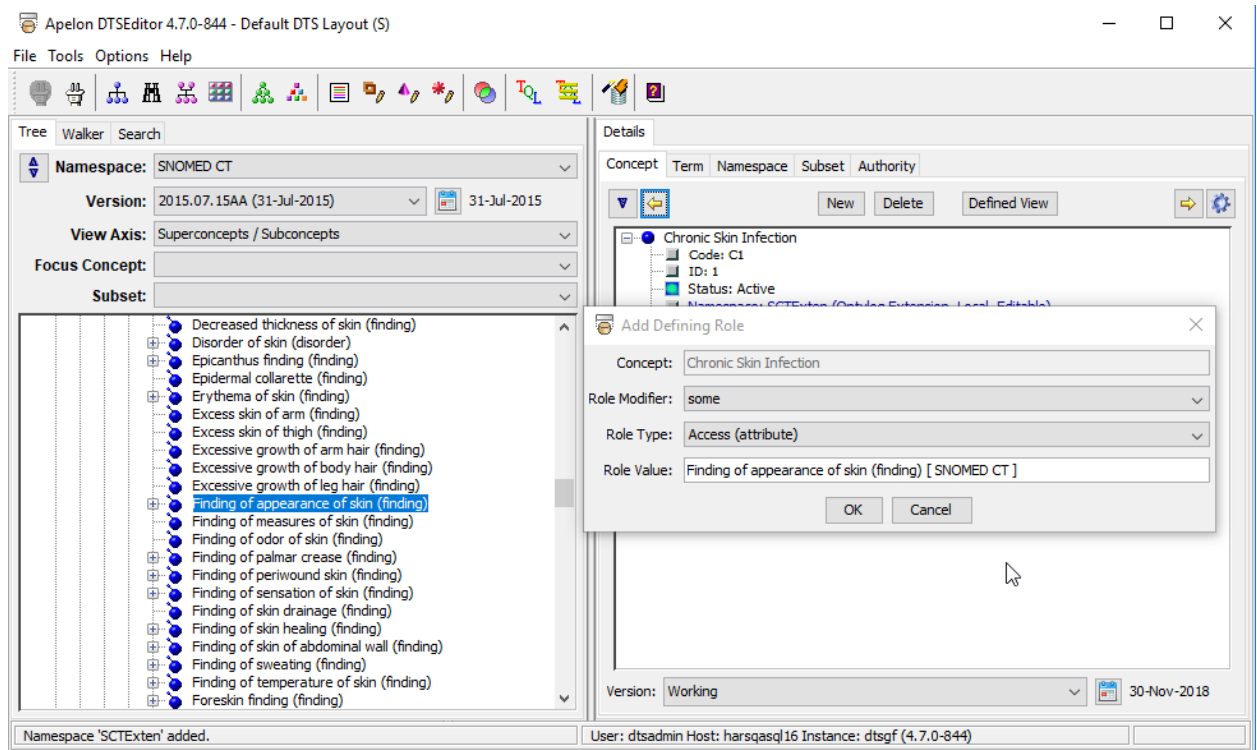


- In the *Add Defining Role* window the *Role Types* dropdown list includes all **Role Types** from the linked Subscription Ontylog Namespace and Extension Namespace with a domain Kind that matches the selected Concept (in the Extension Namespace). Select the appropriate **Role Type** from the list, i.e., **Finding site (attribute)**.

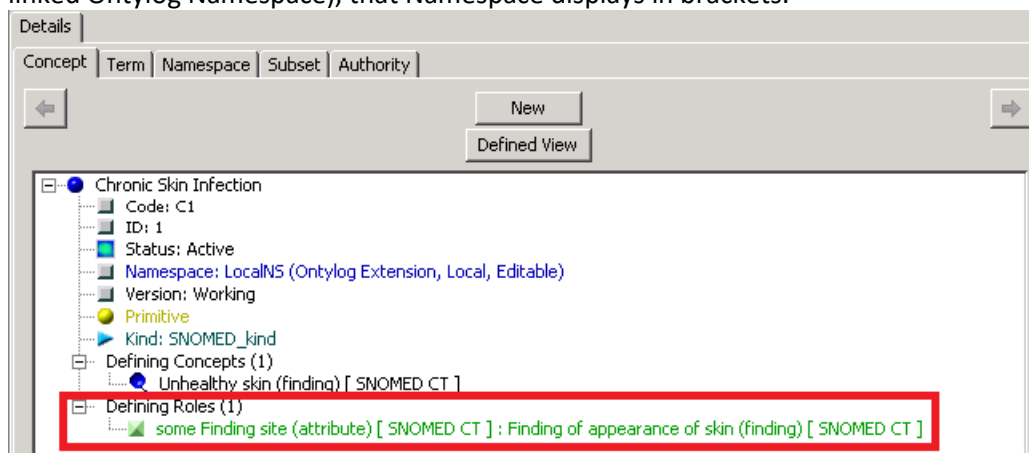


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- From another displayed panel (e.g., *Concept Tree*, *Concept Walker*, *Search*) drag the Concept from the relevant Ontylog or Ontylog Extension Namespace) that represents the Role value in the desired relationship, i.e., ***Finding of appearance of skin (finding)***, and drop it into the *Role Value* field and click **OK**.



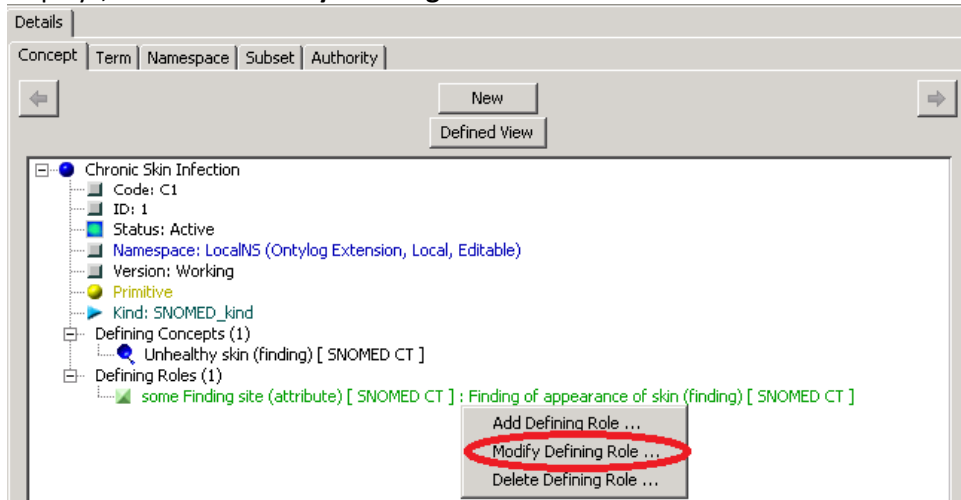
- The Role is added to the Concept in the Extension Namespace, and references the chosen Concept i.e., ***Finding of appearance of skin (finding)***, as the value in the Role relationship. If the Role value Concept Namespace differs from the Defining Role Concept Namespace (i.e., the linked Ontylog Namespace), that Namespace displays in brackets.



Modifying a Defining Role for an Existing Concept

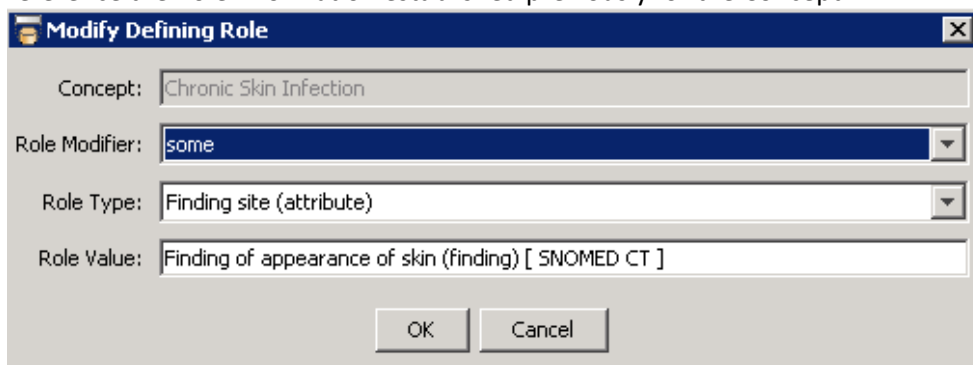
Follow this procedure to modify a Defining Role for an Ontylog Namespace Concept.

1. Right click on the established Defining Role in the *Concept* tab, from the attribute edit menu displays, and select **Modify Defining Role**.



2. The *Modify Defining Role* window displays.

Note: The *Concept* field (display only) references the selected Concept name. The other fields reference the Role information established previously for the Concept.

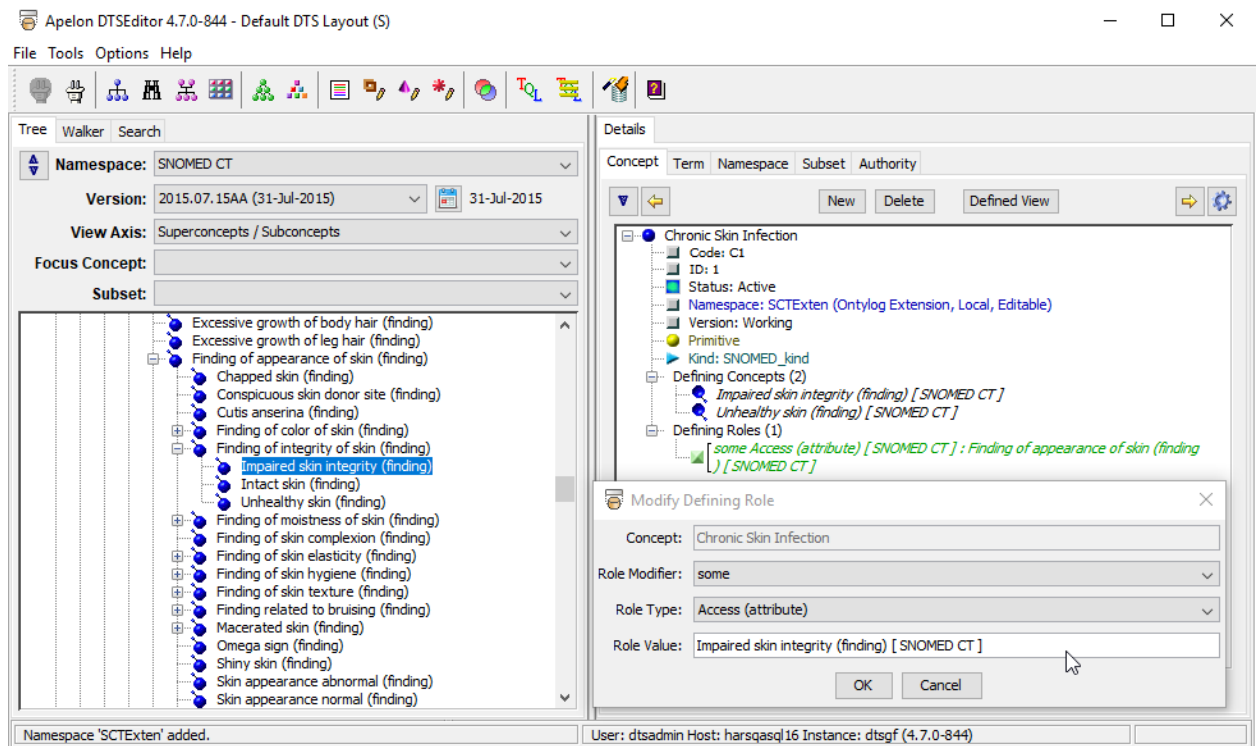


3. To change the logical modifier for the role, select the appropriate modifier (**all** or **some**) from the *Role Modifier* field dropdown list. If this is the only change to the defining role, click **OK** at this point to update the Role modifier for the concept.
4. The concept selected as the replacement Role value for the Ontylog Namespace **must** be of the same Kind as the range Kind Role Type you selected. For Ontylog Extension Namespaces, it must also be from the linked Subscription Ontylog Namespace, or from the Ontylog Extension Namespace itself.
5. From another displayed panel (e.g., *Concept Tree*, *Concept Walker*) drag the Concept that represents the Role value in the modified relationship, and drop it into the *Role Value* field.

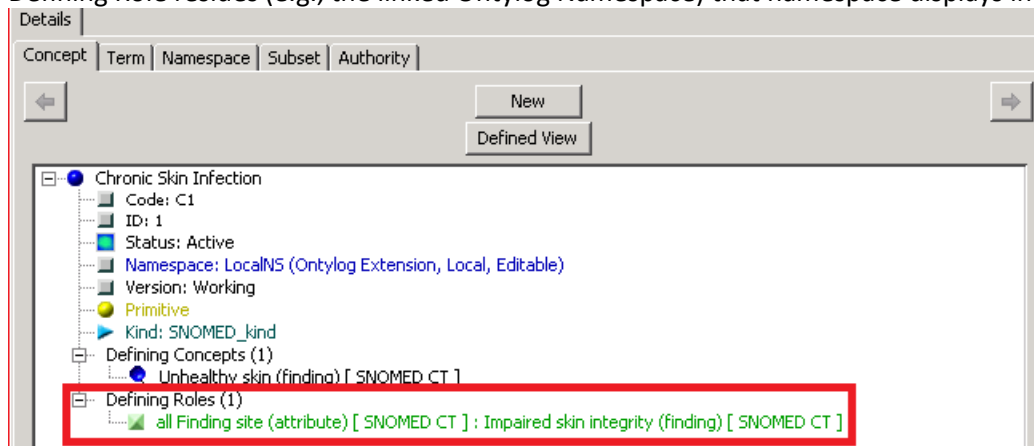
In the following illustration, the *Role Modifier* and *Role Value* are modified for the defining role.

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Click **OK**.



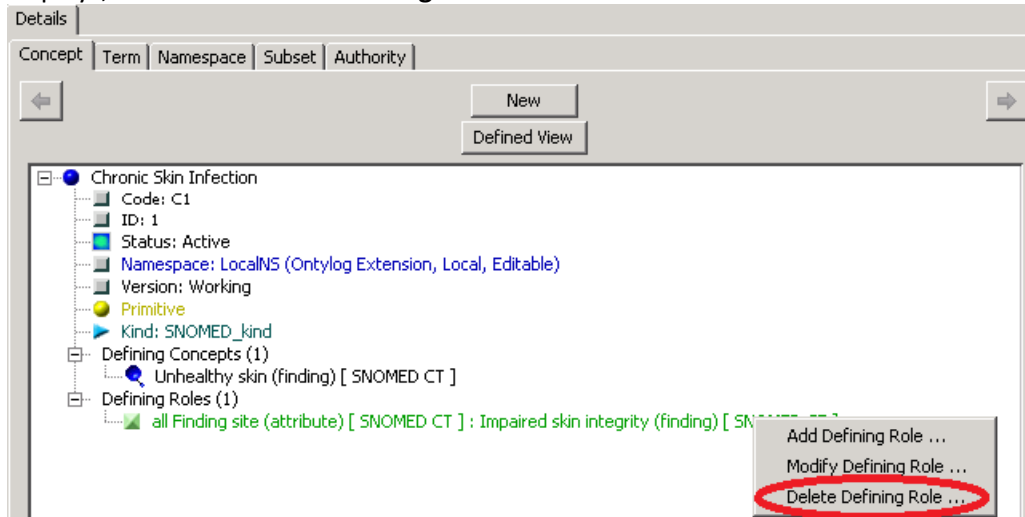
- The modifications to the Defining Role are updated for the Concept in the Ontylog Namespace, and are reflected in the *Concept* tab. If the replacement Role value Concept chosen is from a Namespace that differs from the one in which the Concept for which you are replacing a Defining Role resides (e.g., the linked Ontylog Namespace) that namespace displays in brackets.



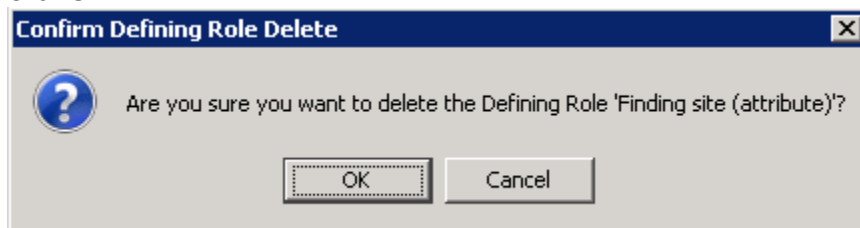
Delete a Defining Role for an Existing Concept

Follow this procedure to delete a Defining Role for an Ontylog Namespace Concept.

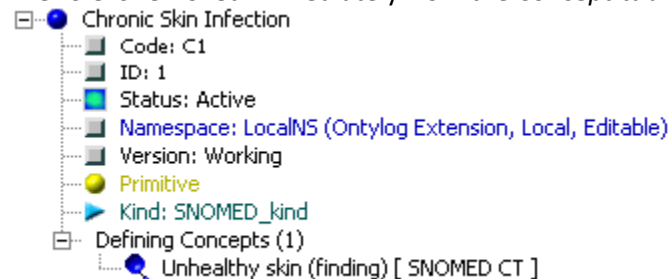
1. Right click on the established Defining Role in the *Concept* tab, from the attribute edit menu displays, and select **Delete Defining Role**.



2. The following confirmation window displays, referencing the Defining Role selected for deletion. Click **OK**.



3. The role is removed immediately from the *Concept* tab.

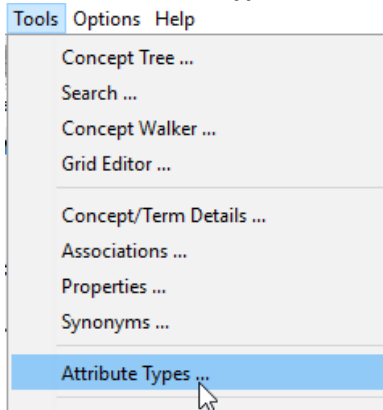


Creating an Ontylog Role Type

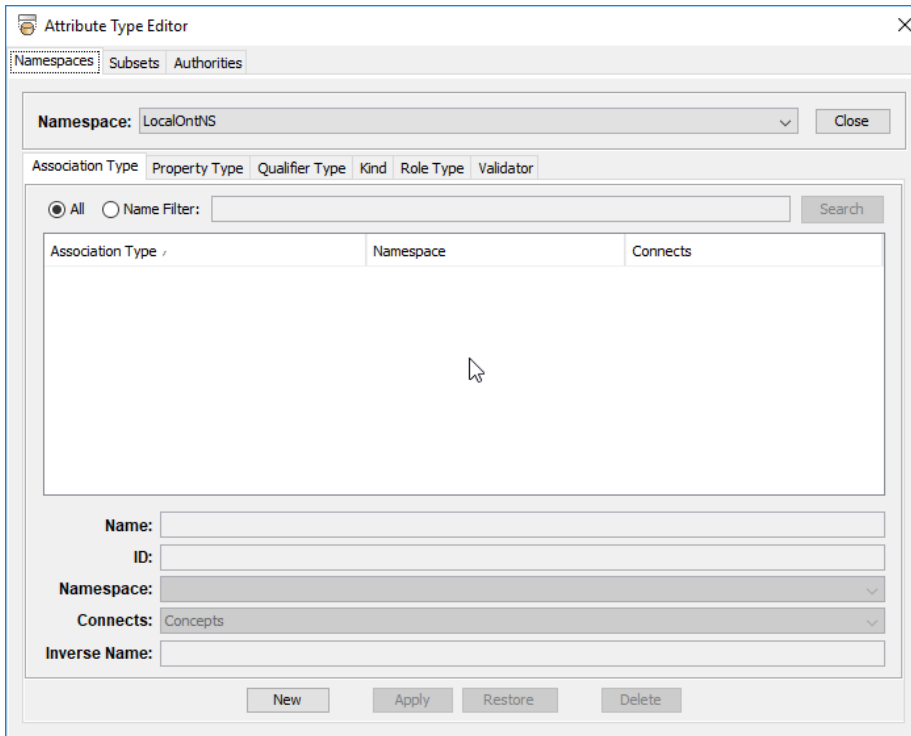
New Role Types can be added to Local Ontylog or Ontylog Extension Namespaces but not to Subscription Ontylog Namespaces. This allows the creation of new types of defining relationships (Roles) for use within the Ontylog Namespace. The Classifier takes these new types of Role relationships into account during classification.

Role Types are added in the Attribute Type Editor panel.

1. The *Attribute Type Editor* panel can be accessed from the menu, to do open the panel select **Tools > Attribute Types**.



2. The *Attribute Type Editor* window displays.



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3. Click the **Role Type** tab in the *Attribute Type Editor* window to display the Role Types available in the knowledgebase and click **New**.

The screenshot shows the 'Attribute Type Editor' window with the 'Role Type' tab selected. The 'Namespace' is set to 'LocalNS'. The 'Role Type' tab is active, showing a search bar and a table with columns for 'Role Type', 'Namespace', 'Domain', and 'Range'. Below the table are fields for 'Name', 'ID', 'Namespace', 'Domain', 'Range', 'Right Identity', and 'Parent Role Type'. A 'New' button is highlighted with a red dashed box and a mouse cursor.

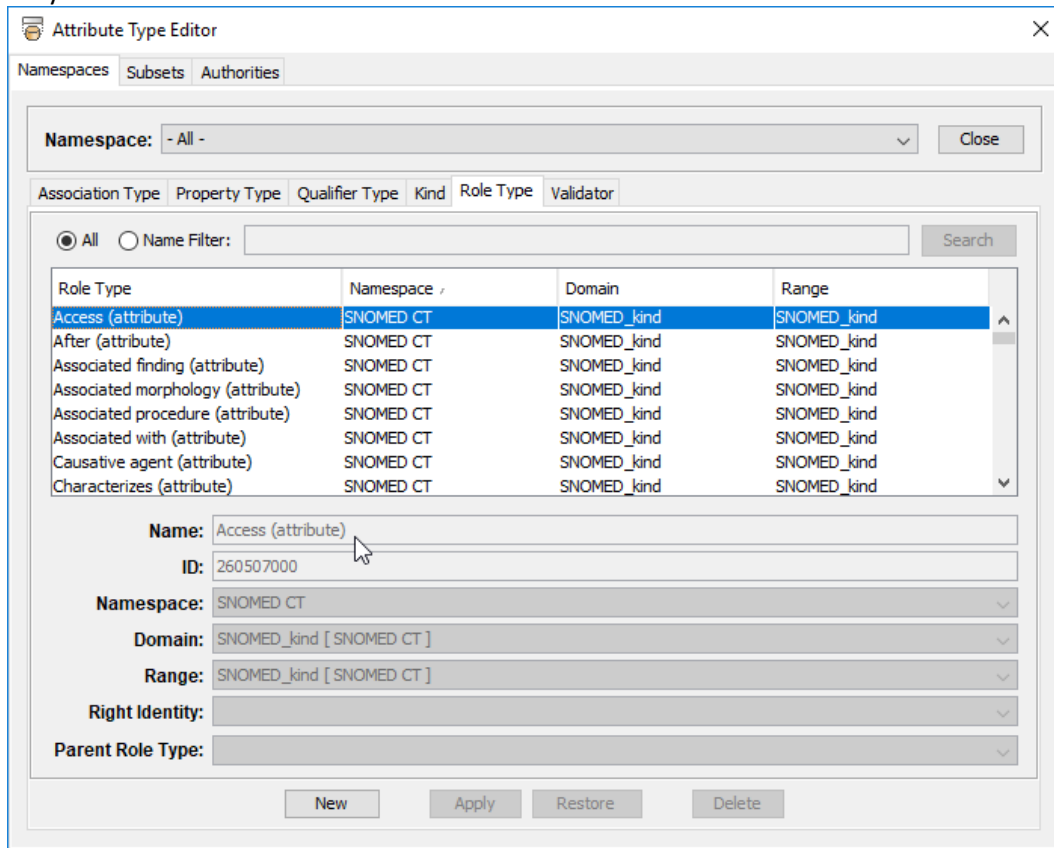
- In the *Name* field, enter a name that identifies the Role Type you are creating.
- Note that the *ID* and *Code* fields are disabled because those values will be generated automatically.
- Specify the Namespace for which you are creating the Role Type; click the dropdown icon to display the Namespace list (Ontylog Role Types can be created for **Local Ontylog** or **Ontylog Extension** Namespaces only).
- A Role Type acts as a “mapping” between two Kinds, i.e., from the “domain” Kind to the “range” Kind in the Domain field; click the dropdown icon to display the complete list of Kinds available in the specified Namespace, then click the appropriate domain Kind to select it for this Role Type.
- In the *Range* field, click the dropdown icon to display the complete list of kinds available in the specified namespace, then click the appropriate kind to select it for this Role Type.
- Right identities optionally allow subsumption inferences to be made across concepts in specialized cases by means of suitably connected roles. Leave the *Right Identity* field blank if you are not specifying a right identity. Alternatively, in the *Right Identity* field, click the dropdown icon to display the list of Role Types available to act as right identities for this new Role Type (i.e., Role Types defined in the base Subscription Ontylog Namespace, for Extension Namespaces only, or other Role Types defined in the same Ontylog Namespace).

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- Parent Role Types optionally allow Role Types themselves to be organized in a generalization hierarchy, in which case subsumption inferences will account for relationships between more general and more specific Roles. Leave the *Parent Role Type* field blank if you are not specifying a parent Role Type. Alternatively, in the *Parent Role Type* field, click the dropdown icon to display the list of Role Types available to act as parent Roles for this new Role Type (i.e., Role Types defined in the base Subscription Namespace, for Extension Namespaces only, or other Role Types defined in the same Ontylog Namespace).
- Click **Apply** to update the Ontylog namespace with the new Role Type
 - The new role type is added to the table in the upper portion of the *Role Type Editor* window
 - The *Role Type Editor* window remains displayed; you can optionally click **New** again to create additional extension Role Types
 - Click **Close** to close the *Role Type Editor* window

View a Role Type

The table in the upper portion of the *Attribute Type Editor* window on the **Role Type** tab lists all the role types defined in DTS, including base Subscription Ontylog namespaces, Local Ontylog and Ontylog Extension namespaces. To view the definition of a particular role type, click its row in the table. Note that the definitions of Role Types defined in *Subscription* Ontylog namespaces are grayed out, because they are not editable.



Update an Ontylog Role Type

To update the definition of a particular Ontylog Role Type, click its row in the table shown in the upper portion of the *Attribute Type Editor* window, change its details as desired, and then click **Apply** to update the Ontylog Namespace accordingly. Alternatively, click **Close** if you decide not to update the Ontylog Namespace.

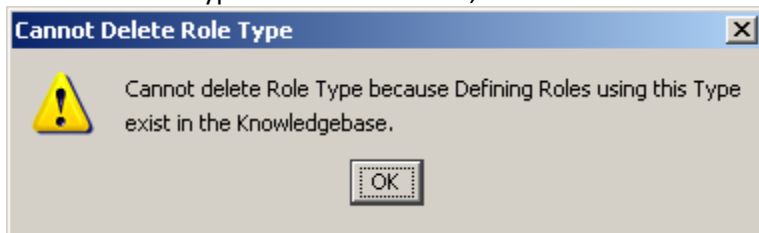
Note that the definitions of role types defined in base Subscription Ontylog Namespaces are grayed out; they cannot be updated.

Also note that the *Code*, *ID* and *Namespace* of Role Types cannot be changed. When a Role Type is used in one or more Roles (within Concept definitions), only the name of the Role Type can be modified. Fields which cannot be modified are grayed out.

Delete an Ontylog Role Type

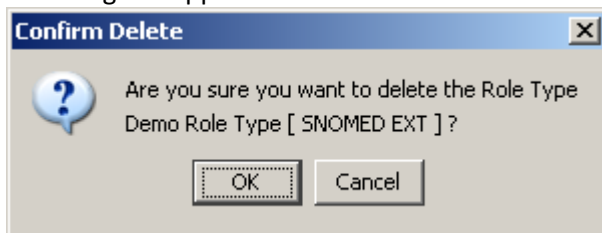
To delete a particular Ontylog Role Type, click its row in the table shown in the upper portion of the *Role Type Editor* window, then click **Delete**.

If the selected extension Role Type is currently being used by one or more defining Roles, then the extension Role Type cannot be deleted, and a window similar to the following will appear.



In that case, click **OK** to acknowledge the message.

Alternatively, if the selected Ontylog Role Type is not being used, a confirmation window similar to the following will appear:



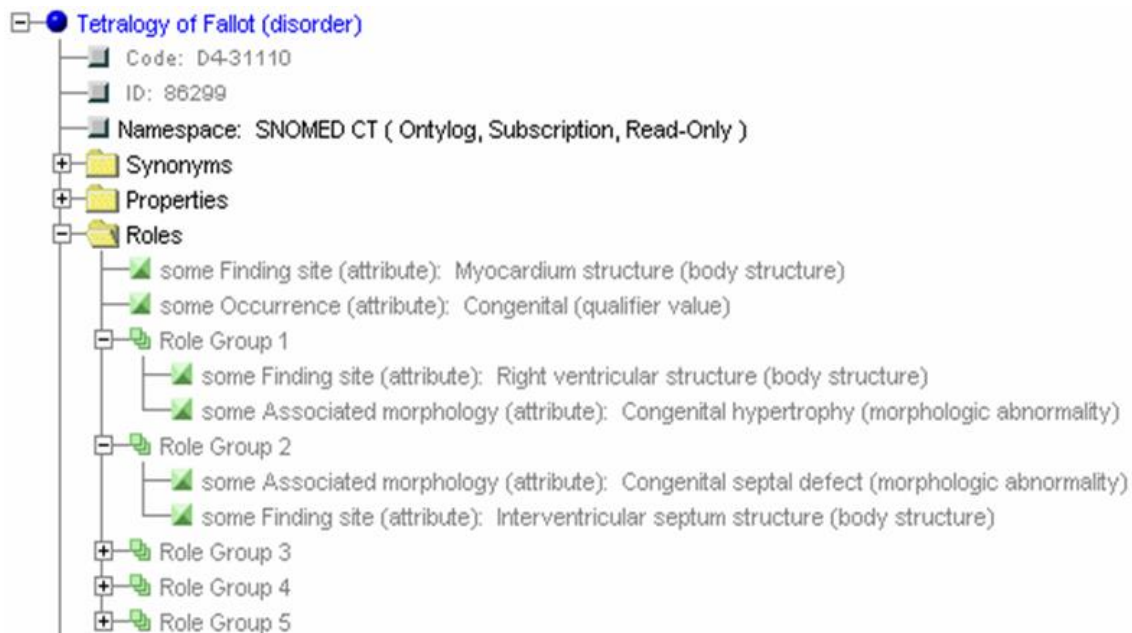
Click **OK** to proceed with deletion, or **Cancel** if you change your mind.

Note that the definitions of Role Types defined in *Subscription* Ontylog Namespaces are grayed out; they cannot be deleted.

Group Concept Roles

As discussed earlier, a **Defining Role** describes a defining relationship between Concepts of specific Kinds. Each Defining Role is defined by a **Role Type** and a **Role value** that is the target Concept of the Role relationship.

A **Role Group**, in turn, describes a higher-level relationship between two or more established Roles that is required to make each Role fully meaningful (i.e., each Role by itself would be incomplete as a Concept attribute). The definition of the Concept (i.e., in terms of role definition) is incomplete without this identification of the relationship between the Roles, defined by the Role Group. Note the two expanded Role Groups (**Role Group 1**, **Role Group 2**) in the following screen shot, which reflects a concept from an Ontylog Namespace in the Inferred view.



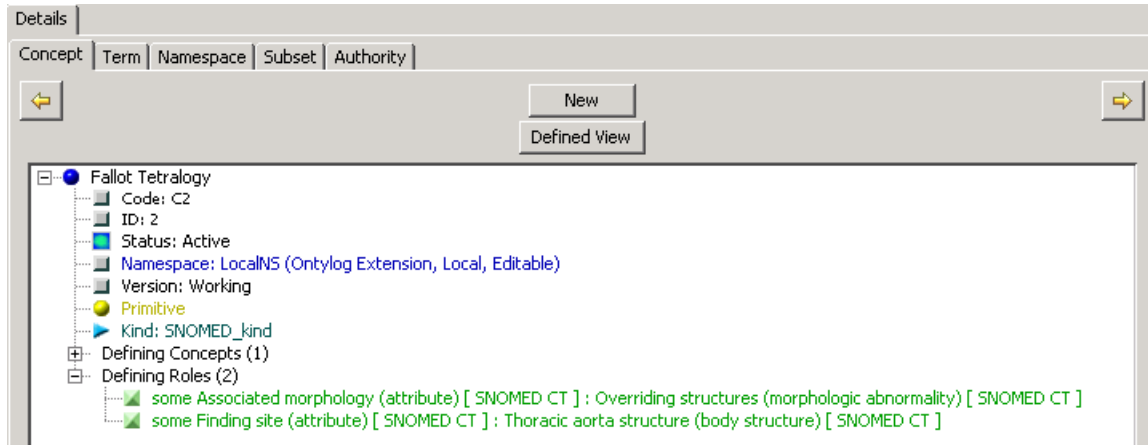
Each of the two Roles in **Role Group 1** defines a relationship between Concepts of different Kinds. Each Role, however, is incomplete by itself. It takes the combination of the two Roles in a group in order to make each Role meaningful as a Concept attribute (i.e., one Role Type is not meaningful without the other).

In the example, the Role Type **Finding site** with the target Concept **Right ventricular structure** is not fully meaningful unless it is grouped with the Role Type **Associated morphology**, with the target Concept **Congenital hypertrophy**.

DTS 4: Ontylog Namespaces and Namespace Classification Guide

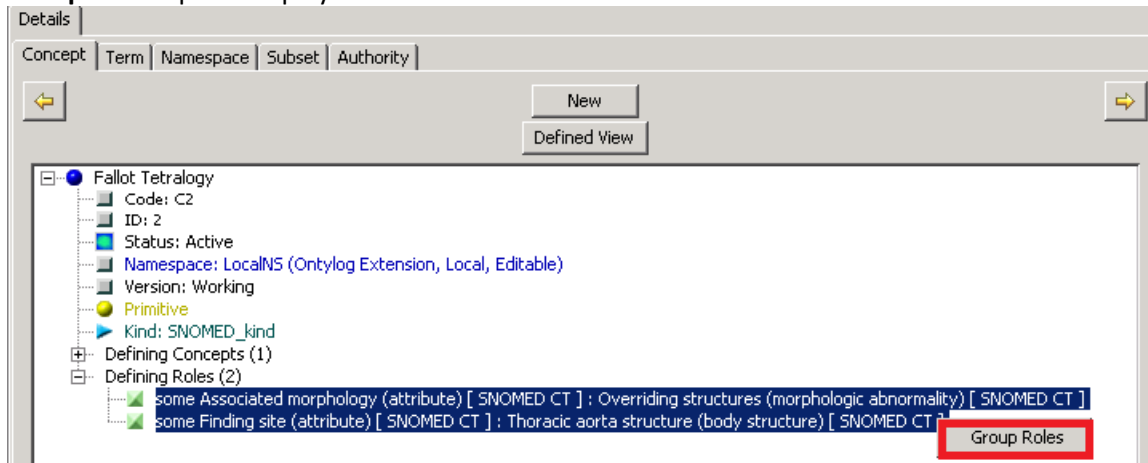
Follow this procedure to create a Role Group (the illustrations reflect Role Groups for a Concept in a Local Ontylog Namespace).

1. Make sure the Concept for which you want to group Roles is displayed in the *Concept* tab in the Defined view.



2. Highlight the Roles you want to group together. To select two or more nonadjacent Roles, click one Role, then hold down **CTRL** and click each additional Role; each Role selected is highlighted. To select adjacent Roles to group, click the first Role in the sequence, then hold down **SHIFT** and click the last Role in the sequence. All the roles in the sequence selected are highlighted.

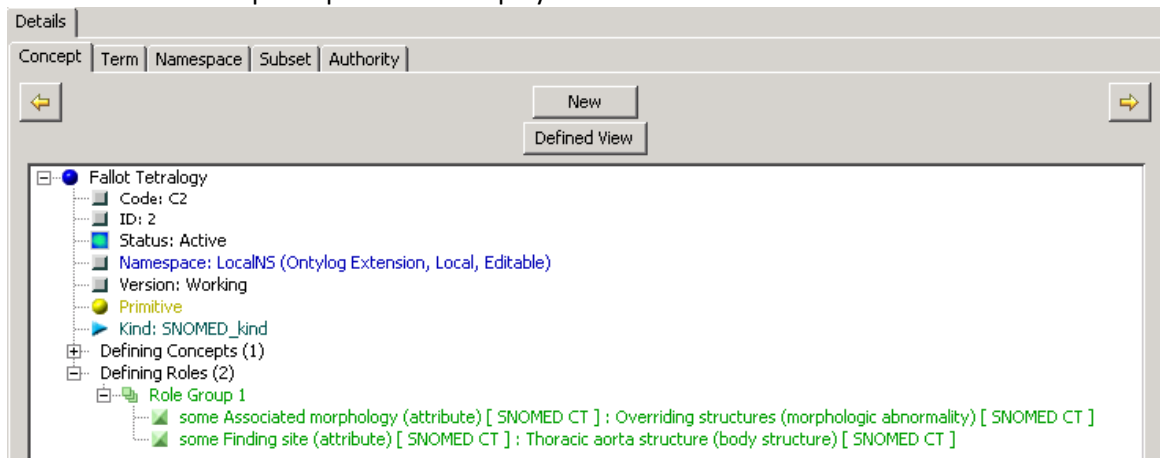
After the Roles to be grouped have been selected, right-click in the highlighted section. The **Group Roles** option displays.



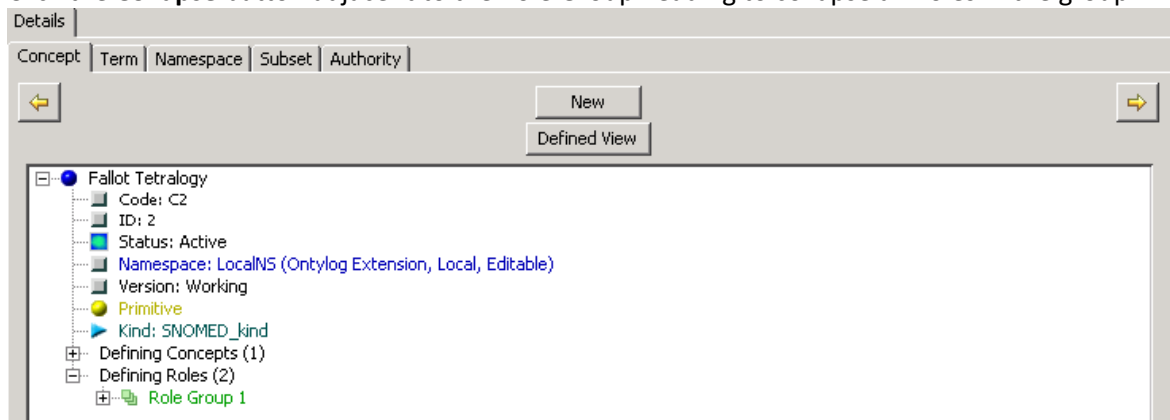
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3. Click **Group Roles**. The Roles you selected are combined into a Role Group, identified by a Role Group heading (**Role Group 1** in this case). The DTS Editor assigns this name to the Role Group; you cannot change Role Group names.

Note: The Role Group is expanded for display as the default.



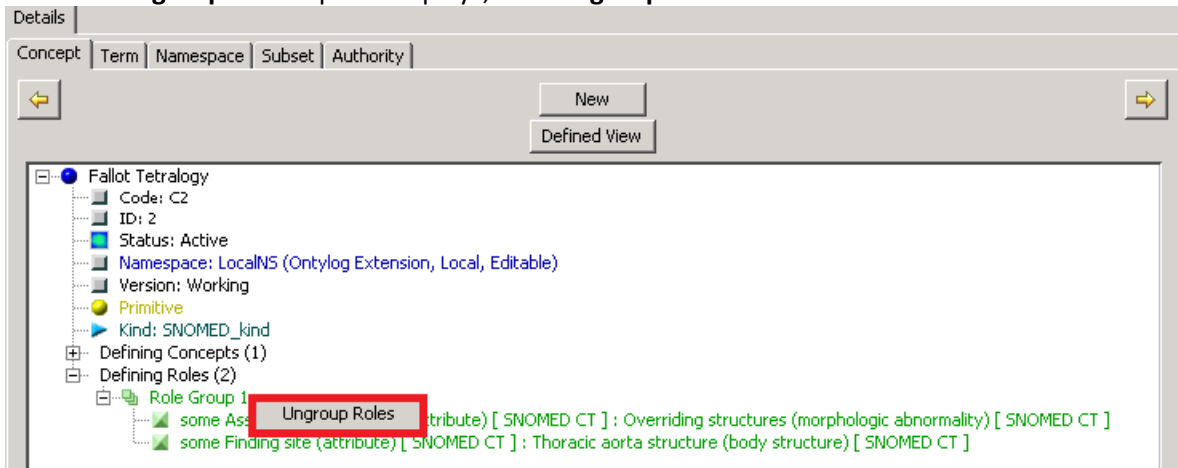
4. Click the **Collapse** button adjacent to the Role Group heading to collapse all Roles in the group.



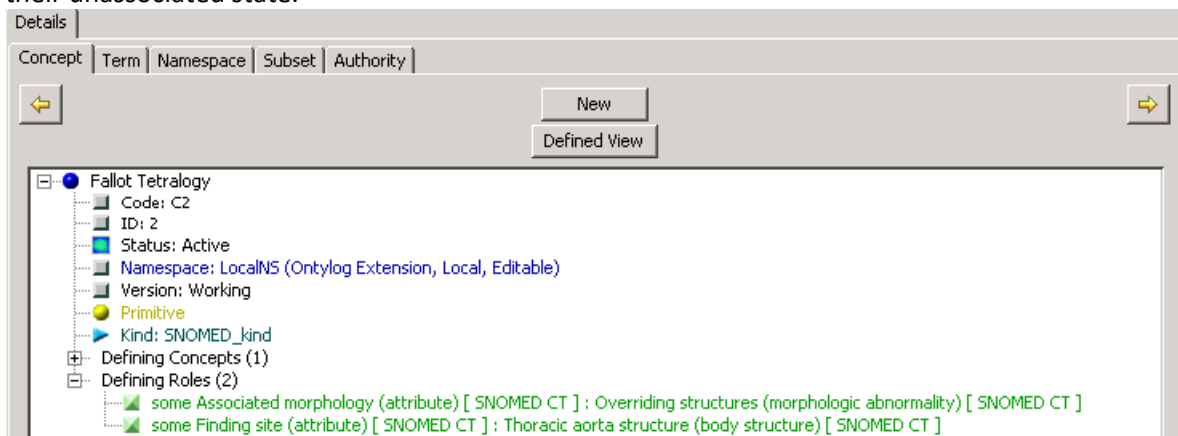
If at a later time the Role Group is no longer required, the Roles can be ungrouped to return them to their unassociated state. See the section below. Note that a Role Group must consist of two or more Roles. If you delete a Role in a group that consists of only two Roles, the remaining Role is ungrouped automatically.

Ungrouping Concept Roles

1. Load the Concept for which the Roles should be ungrouped in the *Concept* tab in the Defined view. Right-click the Role Group heading; it does not matter if the Role Group is expanded or not. The **Ungroup Roles** option displays, click **Ungroup Roles**.



2. The Role Group heading is removed, indicating the Roles have been ungrouped and returned to their unassociated state.



Classifying an Ontylog Namespace

You must **classify** a Local Ontylog or Extension Ontylog Namespace in order for changes to that Namespace (i.e., new local content, or content that extends another linked Subscription Ontylog Namespace) to be reflected in the Ontylog Namespace's Inferred view. Classification updates the inferred information for a Local Ontylog or Extension Ontylog Namespace.

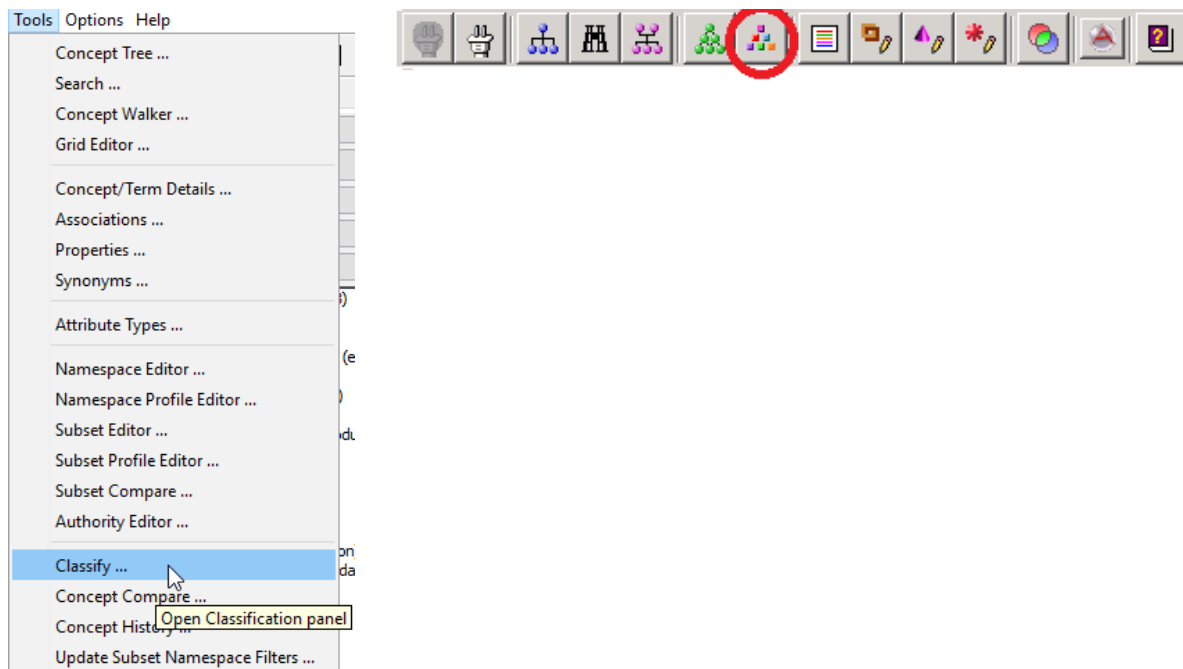
The Inferred Ontylog Namespace view will **NOT** reflect the following Concept edit actions if you don't classify the Ontylog Namespace.

- Adding a new Concept
- Adding or editing a Role and/or Role Group
- Modifying a Kind assignment
- Changing a Concept to Primitive or Defined
- Changing a Concept's Status
- Adding or Modifying a Defining Concept (i.e., superconcept)

Classification of Local Ontylog or Extension Ontylog Namespaces are accomplished through a component called the **Classifier**, which is installed as part of the DTS installation.

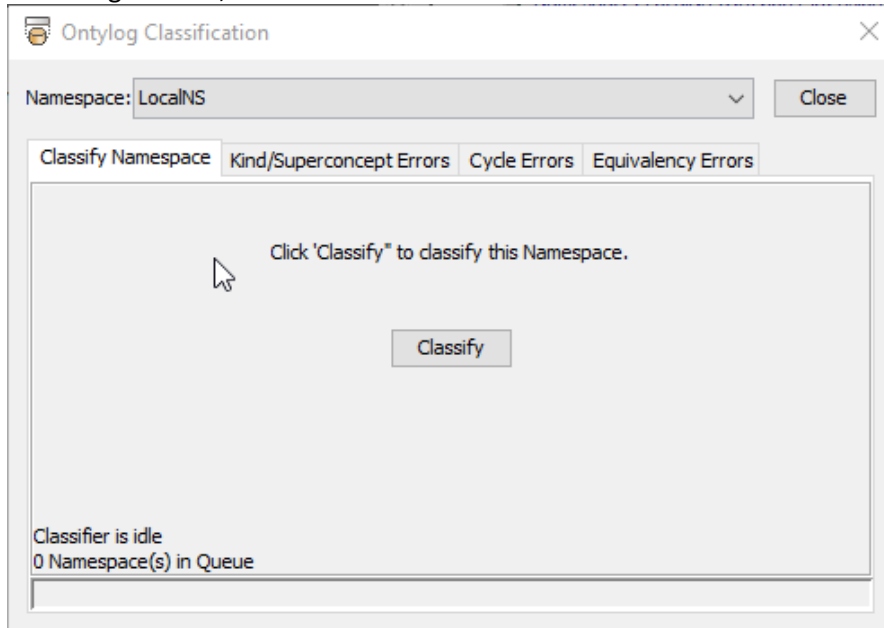
Perform the following procedure to classify a Local Ontylog or Extension Ontylog Namespace.

1. Select **Classify** from the **Tools** menu, or click the **Classify** icon in the *DTS Editor Main* window toolbar. Note that you must have Write or Manage permissions on the Ontylog Namespace to be able to perform classification.

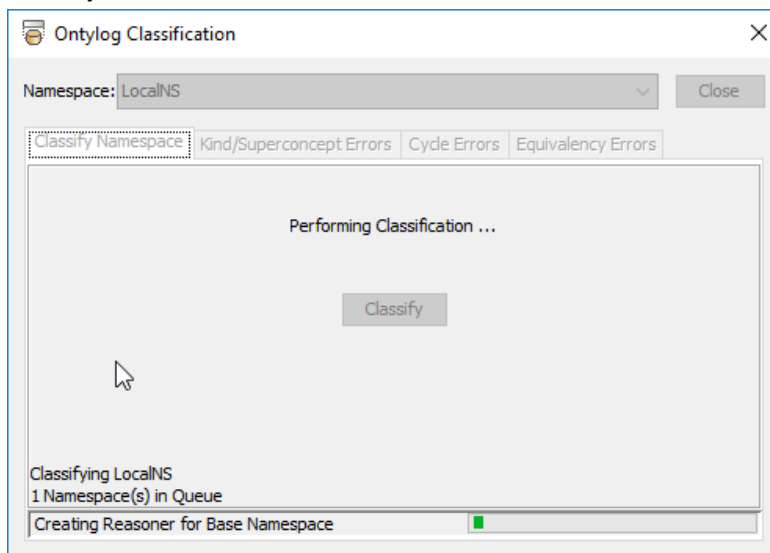


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2. Select the Ontylog namespace to be classified from the **Namespace** dropdown in the *Ontylog Classification* panel. Only Local and Extension Ontylog Namespaces, to which the User has Write or Manage access, will be shown.

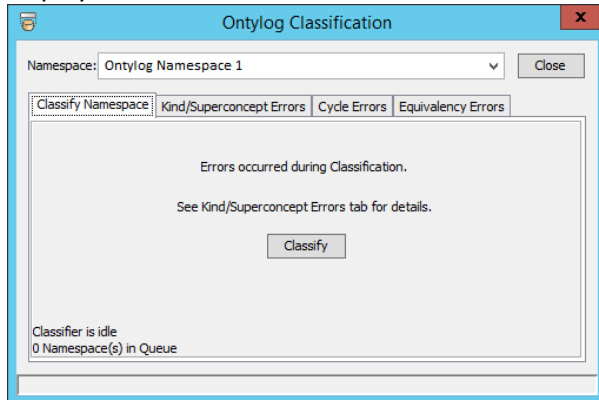


3. The *Classify Namespace* tab of the panel will show the classification status of the selected Ontylog Namespace. If no changes have been made to the selected Ontylog namespace that require classification, a message displays indicating that the Namespace is up to date and Classification is not required. If changes have occurred that require classification, the message "Click 'Classify' to classify this Namespace" is displayed and the **Classify** button is available. Click **Classify** button.



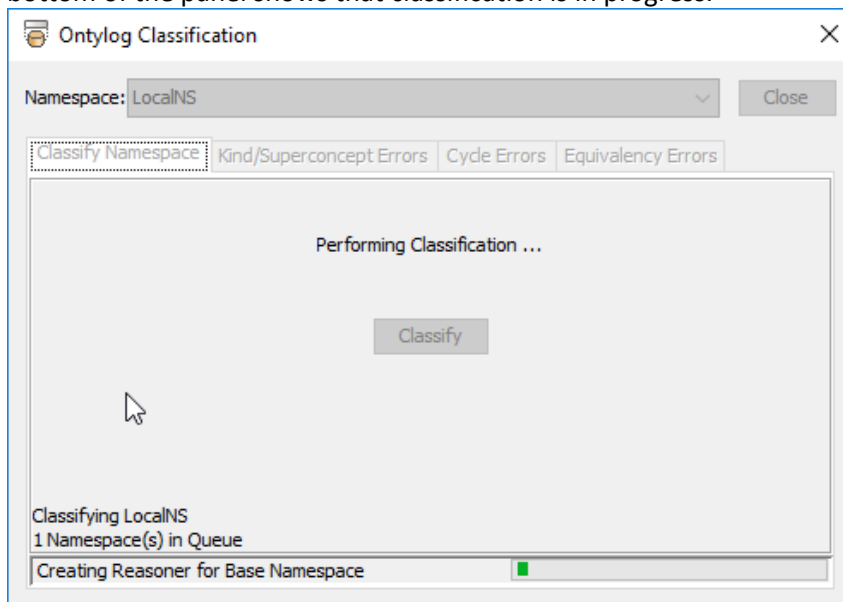
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- The Classifier verifies that each Concept in the Ontylog namespace you are classifying has a valid Defining Concept, except in the case of Local Ontylog Root concepts which must have a Kind defined but not a Defining Concept. If one or more concepts are found with no Defining Concept, or a Local Ontylog Root concept without a defined Kind, the following message displays.



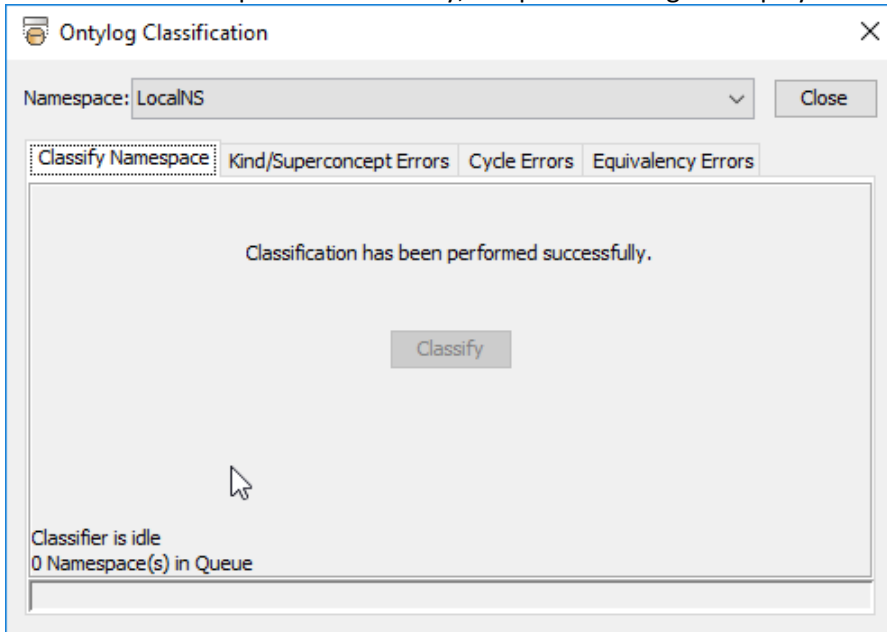
If this message is shown, select the Kind/Superconcept Errors tab to see all concepts that prevented successful classification. Other error situations can exist that may prevent successful classification. Error tabs with messages specific to those situations provide you with the option to view these errors. Refer to the [Classification Errors](#) discussions later in this section.

If the Classifier encounters no error situations, classification is started. An animation bar at the bottom of the panel shows that classification is in progress.



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5. If classification completes successfully, the panel message is displayed as below:



Click **Close**.

The *Concept Tree*, *Concept Walker*, and the inferred view on the *Concept* tab of the *Details* panel are refreshed to reflect the edits resulting from classification.

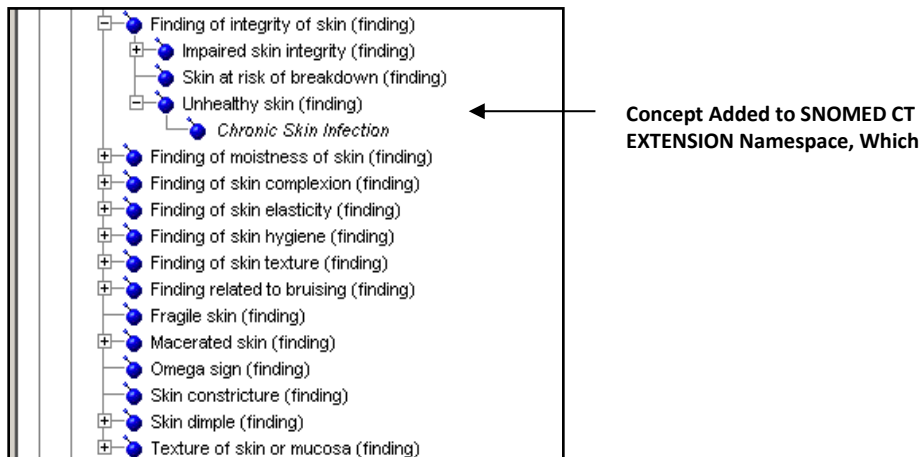
Concept Tree View and Ontylog Namespaces

This discussion of the *Concept Tree* panel is specific to views that are available for an Ontylog Namespace after that namespace is classified.

If the *Concept Tree* panel is opened after successful classification of an Ontylog Namespace, the displayed hierarchy for that Ontylog Namespace will now be represented in the Tree View. In the case of an Ontylog Extension Namespace, the Tree View reflects both the linked Subscription Ontylog Namespace concepts, and concepts from the Extension Namespace.

Note:

a. An Ontylog Extension Namespace does not display as a stand-alone hierarchy. Rather, the Extension Namespace Concepts (i.e., those created to extend the Ontylog Namespace) display in italics to distinguish them in the hierarchy from Ontylog Namespace concepts.

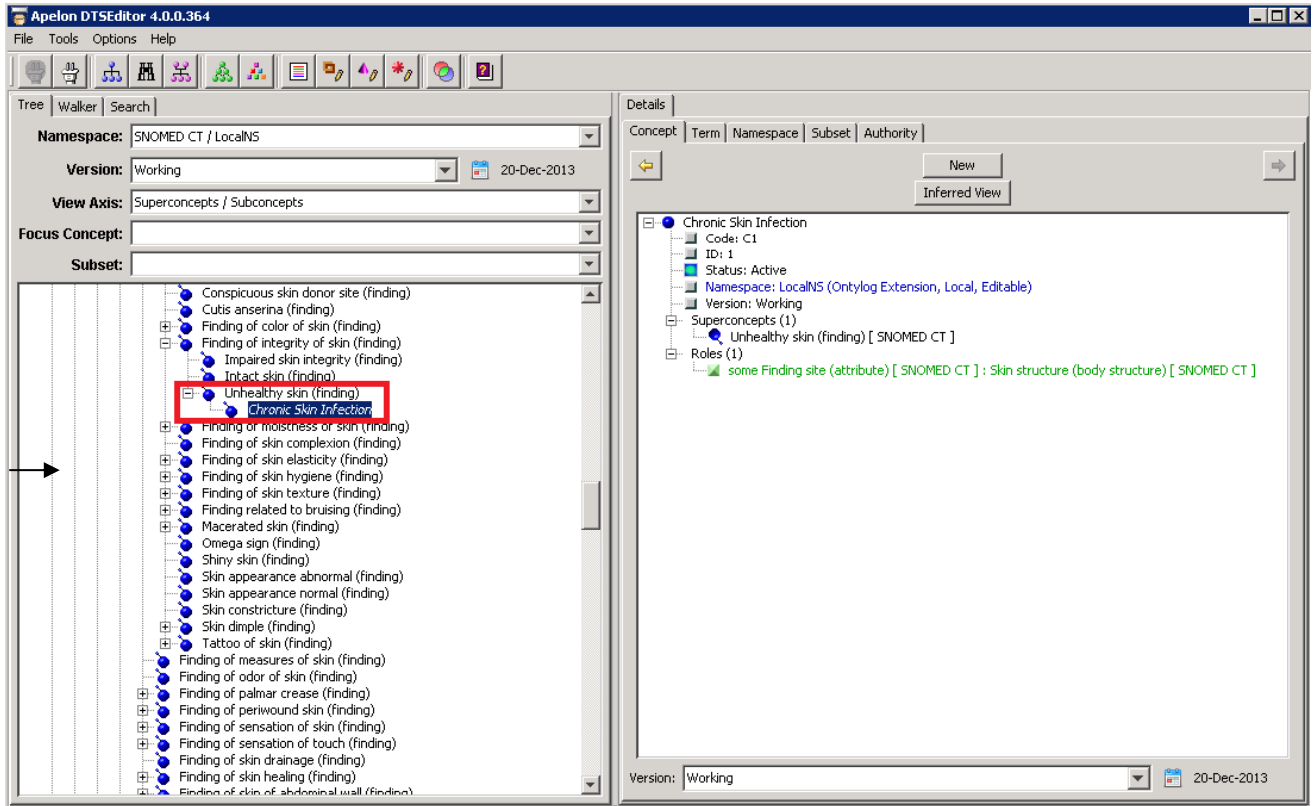


b. When an Ontylog Extension Namespace is selected from the *Namespace* field dropdown list, the *Namespace* field reflects both the linked Subscription Ontylog Namespace (i.e., **SNOMED CT**) and the Extension Namespace (i.e., **LocalINS**) in the format **SNOMED CT / LocalINS**.



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Classification of the Ontylog Namespace produces the Namespace's Inferred view in the *Concept Tree* panel. Note the illustration.



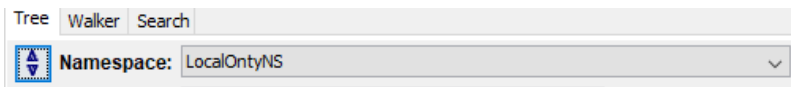
Concept Walker View and Ontylog Namespaces

This discussion of the *Concept Walker* panel is specific to views that are available for an Ontylog Namespace after that Namespace is classified. For procedures on the basic use of the *Concept Walker* panel, refer to the *Concept Walker View* discussions in the *DTS Editor Users Guide*.

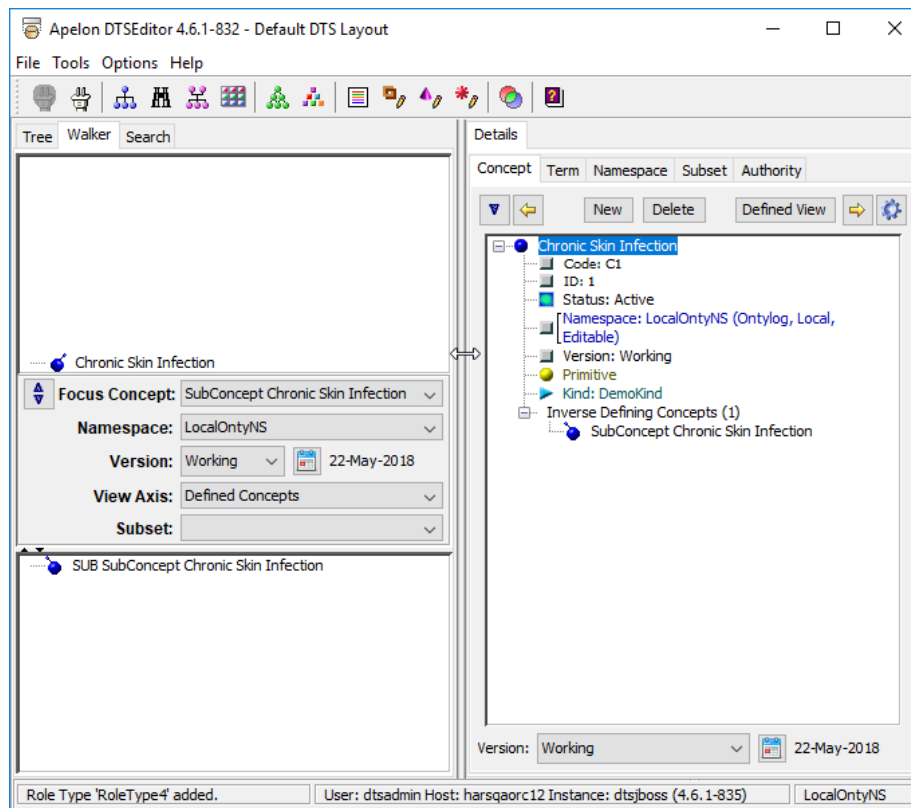
If you open the *Concept Walker* panel after successful classification of an Ontylog Namespace, the displayed hierarchy for a focus Concept in that Namespace reflects both the linked Ontylog Namespace Concepts, and if it's an Ontylog Extension Namespace, Concepts from the Extension Namespace. An Ontylog Extension Namespace does not display as a stand-alone hierarchy. Rather, the Extension Namespace Concepts (i.e., those created to extend the Ontylog Namespace) display in italics to distinguish them in the hierarchy from Ontylog Namespace concepts.

Focus Concept from a Local Ontylog Namespace

When you drop a concept from a Local Ontylog namespace into the **Focus Concept** field, the *Namespace* field reflects the Local Ontylog namespace from which the concept comes.



The hierarchy shown in the walker tab will be the hierarchy of the Local Ontylog Namespace. This view axis can be changed between Superconcepts/Subconcepts and Defined Concepts. (*Note the “Axis” dropdown will also contain associations from other namespaces loaded into DTS, but will not display useful information unless related to the selected concept.*)

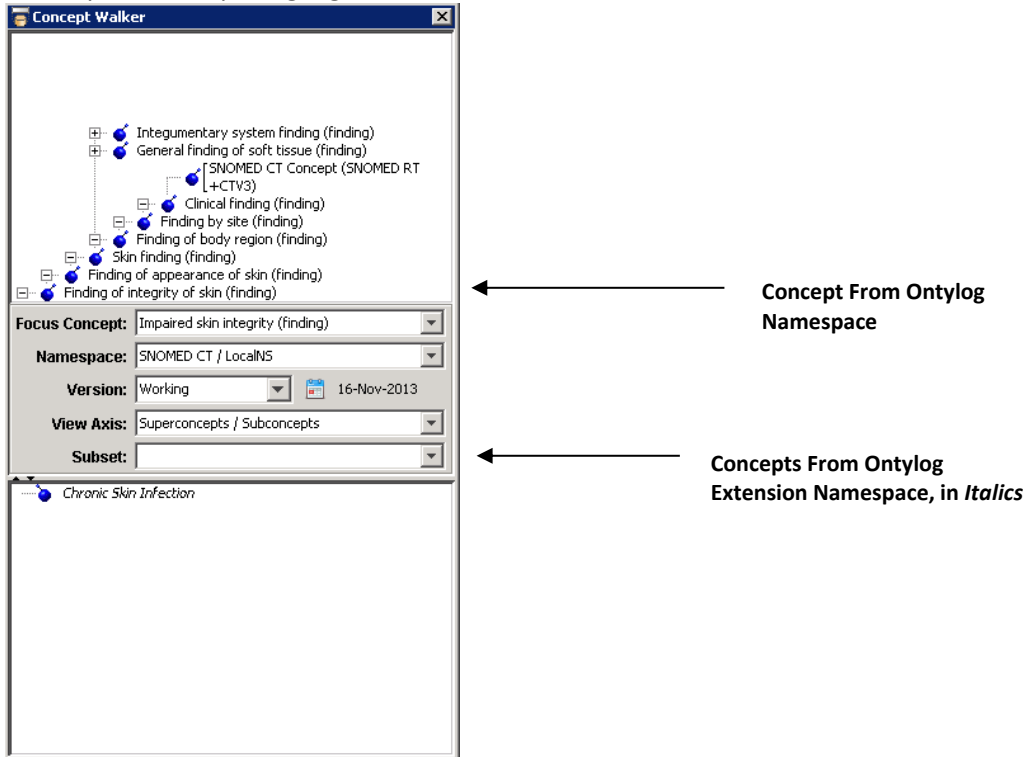


Focus Concept from an Ontylog Extension Namespace

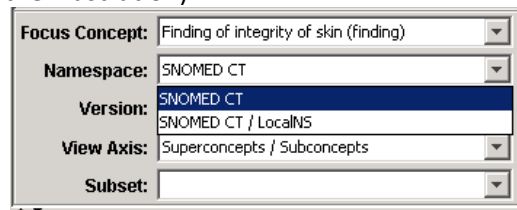
When you drop a concept from an Ontylog Extension namespace into the **Focus Concept** field, the *Namespace* field reflects both the linked Ontylog Namespace (i.e., **SNOMED CT**) and the Extension namespace (i.e., **LocalNS**) in the format **SNOMED CT / LocalNS**.



The hierarchy shown in the Walker tab will be the Linked Ontylog Namespace with Extension Namespace concepts highlighted in italics.

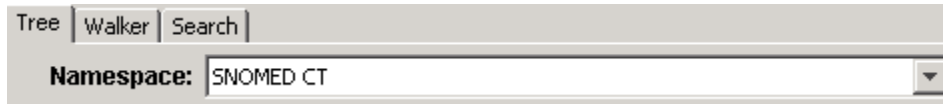


You can change the view in the *Concept Walker* panel to reflect the hierarchy from the linked Ontylog Namespace. From the *Namespace* field dropdown list, click the subscription namespace (**SNOMED CT** in the illustration).

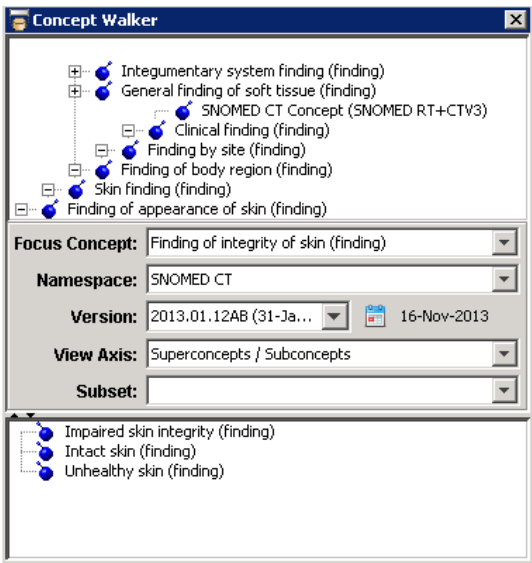


Focus Concept from a Subscription Ontylog Namespace

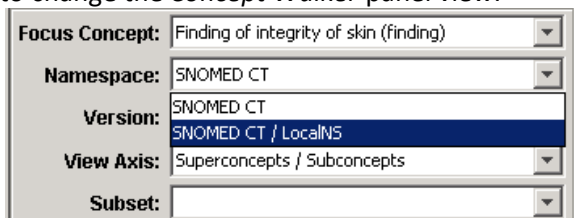
When you drop a Concept from a Subscription Ontylog Namespace (i.e., **SNOMED CT**) into the *Focus Concept* field, the *Namespace* field reflects the linked Ontylog subscription namespace only (i.e., **SNOMED CT**).



The *Concept Walker* panel view for the focus Concept reflects the Subscription Ontylog Namespace Concept hierarchy.



The view in the *Concept Walker* panel can be changed to reflect the hierarchy that includes Concepts from any of the Ontylog Extension Namespaces linked to the Subscription Ontylog Namespace in the *Namespace* field. In the illustration, the *Namespace* field dropdown list includes all Extension Namespaces linked to the Subscription Ontylog Namespace **SNOMED CT**; click the desired Namespace to change the *Concept Walker* panel view.

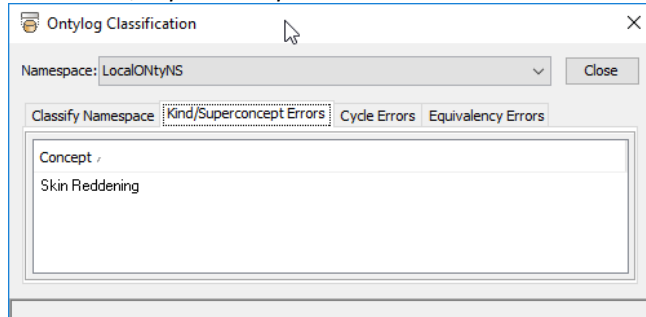


Classification Errors

The Ontylog Classification panel contains tabs to view any error situation severe enough to prevent classification. The following three types of classification errors are in this category.

Kind/Superconcept Errors

This type of error occurs if a Concept in the Ontylog Namespace does not have a parent (i.e., superconcept) assigned to it. Also, this type of error will occur if a Local Ontylog Root Concept does not have a Kind defined. If there are one or more Kind/Superconcept errors, the affected Concepts are listed in the *Kind/Superconcept Errors* tab.



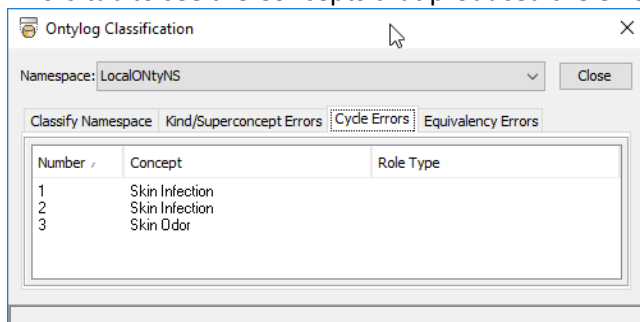
The order of the Concepts can be modified by clicking the column header.

Any of the listed Concepts can be dragged to the *Details* panel to view attribute details and make necessary edits (make sure the *Concept* tab is in the Defined view when you make the edits).

Cycle Errors

Cycle errors occurs when classification of either a defining concept (i.e., superconcept) or Role definition in the Ontylog Namespace would create a contradiction (i.e., a cyclic condition) in the Ontylog Namespace hierarchy. **Example:** In the Ontylog Namespace you create a new Concept, and define two superconcepts. If classification of the Ontylog Namespace would place the new Concept higher in the Namespace hierarchy than one of the defined superconcepts, a cycle error will occur.

If there are one or more cycle errors, a message appears in the main classification tab. Select the *Cycle Errors* tab to see the Concepts that produced the errors.



The information in the *Cycle Errors* tab references the **Cycle** number, the **Concept** name in the cycle, and the name of the **Role Type** through which this cycle is forming (the **Role Type** is blank if the cycle is due to a superconcept relationship). Table data can be sorted by clicking the appropriate column header.

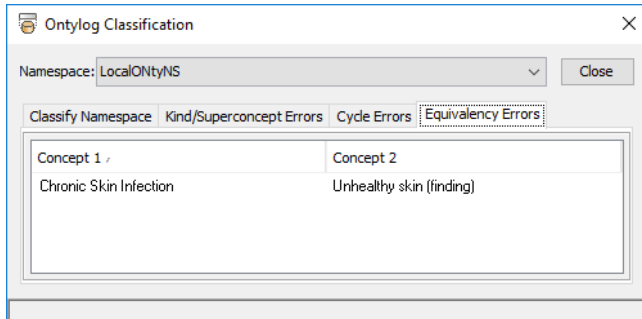
Any of the Concepts in the error table can be dragged to the *Concept* tab of the Details panel to view

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attribute details and make necessary edits (make sure the *tab* is in the Defined view when edits are made).

Equivalency Errors

Equivalency errors occur when classification of a Defining Role for a Concept (a Concept with its Primitive/Defined attribute set to **Defined**) in the Ontylog Namespace would create an equivalency (i.e., two concepts on the same hierarchal level) in the Namespace hierarchy. If there are one or more equivalency errors, the erroneous Concepts are shown in the *Equivalency Errors* tab of the Ontylog Classification panel.



The order of Concept presentation can be modified by clicking the column headers. Any of the listed Concepts can be dragged to the *Details* panel to view attribute details and make necessary edits (make sure the *Concept* tab is in the Defined view when you make the edits).