Validating and Requesting Identifiers for External Code Systems and Identifier Systems

(Pocab Motion: Approve the process, as documented below during the May WGM Vocab joint session with TSGM: DG moves, CC seconds: 16-0-0)

(TSGM Motion: Approve the process, as documented below during the May WGM TSGM session: RM moves, RD seconds: 9-0-0)

(TSC Approved via TSC e-Vote 2022-06-20)

Purpose

The purpose of this page is to provide information for IG authors (Requestors) on the necessary steps to validate, request and/or obtain a CodeSystem or Identifier System identifier (url) defined by an entity external to HL7. AdmitSource is an example of an internal to HL7 CodeSystem.

A code system is a managed collection of concepts wherein at least one internally unique code represents each concept. Code Systems define concepts through formal definition and assign a unique identifier for each unique conceptual meaning captured as a code. Code Systems may be referred to as terminologies, vocabularies, or coding schemes, HL7 considers all such collections ‘Code Systems’. Examples of external CodeSystems are SNOMED CT, LOINC, ICD-11, etc.

Identifier systems are composed of non-coded strings (typically numeric or alphanumeric) that have a common purpose and/or context. Typically, identifiers are used to connect content in resources to external content available in other frameworks or protocols. The Global Trade Item Number (GTIN) system and US state driver’s license number systems, country passport number systems are examples of external Identifier Systems.

It is highly recommended that this process be started as soon as you know your IG requires terminology content from an external source. Do not wait until you’re ready to publish the IG for ballot. HTA recommends you start this process at least 3 months before you plan to ballot your IG.

Please note that adjudication of requests and/or conflicts outside of the process outlined here via Zulip is not sanctioned by you’re ready to publish the IG for ballot. HTA recommends you start this process at least 3 months before you plan to ballot your IG.

Validate a Identifier System or Code System or Identifier

(Current, with the migration of data from HTA Confluence and FHIR Terminology pages to terminology.hl7.org still in progress)

To validate if an external code system or identifier system has been registered with the HTA, FMG or THO (and therefore a URL for use within HL7 products already exists), the following process should be followed.

1. HL7 will only create a new identifier when an appropriate existing identifier is not available for use in HL7. Requestors must read the FHIR introduction to Terminology resources here that further describes what a code system and identifier system are as defined by HL7 FHIR. Keep in mind that the description and/or name registered with HL7 may differ from what the requestor may know of the code system (US Tax Code, also know as US EIN etc..) or identifier system.

2. Requestor searches available resources to determine if HL7 has recorded an identifier for the CodeSystem or Identifier System - searching of existing information (e.g., THO - terminology.hl7.org, OID Registry, HTA External Terminologies Registry, https://oidref.com) PRIOR to contacting HTA for assistance.
   a. If found in FHIR External Terminologies most recent published version, use the canonical URL for the CodeSystem or Identifier System as identified there
   b. If not found in previous step, check THO's most recent published version and use the canonical URL for the CodeSystem or Identifier System as identified there
   c. If not found in THO's most recent published version, check the current build of THO.
      i. If found in the current build of THO, use the canonical URL for the CodeSystem or Identifier System as identified there
         1. Requestors should note that THO includes retired CodeSystem information, please see the Vocab Work Group’s policy on The Use of Retired and Legacy Code Systems
         ii. If not found in the current build of THO build -
            1. Check the HTA External Terminologies Registry to determine if someone has initiated a request for the CodeSystem or Identifier System in question
               a. If you see an entry for the CodeSystem or Identifier System in question, scroll down to the section for Technical Identifiers. If a URL has been assigned and is endorsed for use by HTA, use it
               b. Contact HTA members to find out the status of the request if its not clear
            2. Check the HTA JIRA project to see if someone submitted a JIRA ticket for the CodeSystem or Identifier System in question; follow the ticket’s progress to obtain the URL
               d. If not found in any of the locations above, then move to the Request the CodeSystem or Identifier System Identifier process shown below.
      i. NOTE: If found in any related OID registry, include the information in the request

(Future - when THO has been established as single source of truth. All other places utilize references to THO)

To validate if an external code system has been registered with the HTA (and therefore a URL for use within HL7 products already exists), the following process should be followed.

1. Code systems may be referred to as terminologies, vocabularies, or coding schemes, HL7 considers all such collections ‘Code Systems’. HL7 will only create a new code system when an appropriate existing code system is not available for use in HL7. Requestors must read the FHIR introduction to Terminology resources here that further describes what a code system is as defined by HL7 FHIR. Keep in mind that the code
system description and/or name registered with HL7 may differ from what the requestor may know of the code system (US Tax Code, also know as US EIN etc.).

2. Requestor searches THO's most recent published version as the single source of truth for code system metadata to determine if HL7 has recorded an identifier for the CodeSystem PRIOR to contacting HTA for assistance
   a. If found in THO's most recent published version (from link above), use the canonical URL for the CodeSystem as identified there
   b. If not found in THO most recent published version, check the current build of THO.
      i. If found in the current build of THO, use the canonical URL for the CodeSystem as identified there
      ii. If not found in the current build of THO -
         1. Requestors should note that THO includes retired CodeSystem information, please see the Vocab Work Group's policy on The Use of Retired and Legacy Code Systems
      iii. Check the HTA JIRA project to see if someone submitted a JIRA ticket for the CodeSystem in question; follow the ticket's progress to obtain the URL
      c. If not found in any of the locations above, then move to the Request the CodeSystem Identifier process shown below.
         i. NOTE: If found in any related OID registry, include the information in the request

Request the Code System or Identifier System Identifier

(Current, with the migration of data from HTA Confluence and FHIR Terminology pages to terminology.hl7.org still in progress)

1. Initiate a request by:
   a. Open a ticket in the HTA JIRA Project
      i. Instructions on how to enter an HTA JIRA ticket can be found here: JIRA workflow for creation and management of External Code or Identifier System Owner Engagement requests for new code or identifier system canonical URLs (this needs to be checked and/or updated to ensure it covers identifier systems)

2. HTA reviews the request and confirms that the external code system identifier has not been assigned
   a. HTA will notify the HL7 community of the request via Implementers and Terminology Zulip channels
   b. If HTA is aware of, or identifies, an agreed upon URI, it will be provided to the Requestor and communicated via the Implementers and Terminology Zulip channels
   c. If it is not possible, HTA will provide the requestor with a temporary placeholder URI using the following syntax http://terminology.hl7.org/temporary-uri/codeSystem/xxx or http://terminology.hl7.org/temporary-uri/NamingSystem/xxx, and update the JIRA ticket with this information
      i. where xxx = is an established short symbolic name.
      ii. OIDs for V3/CDA (temporary OID may also be assigned) and if the V2 Management Group desires that a V2 mnemonic be created for an external code system then that request shall be made directly to HTA with an addition to the https://terminology.hl7.org/ValueSet-v2-0396.html code system as a pro-forma addition.

3. HTA contacts the external Code System or Identifier System owner, and provides guidance if necessary on good practices for URLs.
   a. If a response is received by HTA within the stated timeframe, (typically two weeks) HTA will
      i. Proceed with resolving the request, collaborating with the Requestor and Code or Identifier System owner
   b. If a response is NOT received by the HTA within the stated timeframe. HTA will:
      i. Work with the Requestor and other required parties to create the required Code System or Identifier System Information for use within HL7 products.
      1. If creating a new URI, HTA will use a standard syntax (http://terminology.hl7.org/CodeSystem/xxx or http://terminology.hl7.org/NamingSystem/xxx) where xxx is an established short symbolic name (which cannot contain spaces, but can include hyphens)
      a. Note, that HL7 publishing tools require that the xxx not contain an additional / as everything after "CodeSystem" or "NamingSystem" is used as the ID
   c. If not found in any of the locations above, then move to the Request the CodeSystem Identifier process shown below.

4. Start the UTG process to create the CodeSystem and/or NamingSystem resource in THO, linking the UP JIRA ticket to the original HTA JIRA ticket

5. Upon resolution, HTA will close any open tickets, attaching pertinent correspondence and documenting the resolution. Steps include
   a. Creation of an informational page under External Terminologies - Information
   b. Notify Requestor and/or known interested parties
      i. If a temporary URI was created, that URI will need to be changed to the final URI wherever it exists.
      ii. The temporary placeholder URI will be maintained as a non-preferred identifier using a NamingSystem artifact that is made for the new code system (does not apply to Identifier Systems).
   c. Update the original HTA JIRA ticket with the resolution
   d. Notify the HL7 community of the resolution via Implementers and Terminology Zulip channels
   e. Notify the Vocabulary Work Group

(Future - when THO has been established as single source of truth. All other places utilizes references to THO)

1. Initiate a request by:
   a. Open a ticket in the HTA JIRA Project
      i. Instructions on how to enter an HTA JIRA ticket can be found here: JIRA workflow for creation and management of External Code or Identifier System Owner Engagement requests for new code or identifier system canonical URLs

2. HTA reviews the request and confirms that the external Code System or Identifier System identifier has not been assigned
   a. HTA will notify the HL7 community of the request via Implementers and Terminology Zulip channels
   b. HTA will provide the requestor with a temporary URI using the following syntax http://terminology.hl7.org/temporary-uri/codeSystem/xxx or http://terminology.hl7.org/temporary-uri/NamingSystem/xxx, and update the JIRA ticket with this information
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3. HTA contacts the external Code System or Identifier System owner, and provides guidance if necessary on good practices for URLs.
   a. If a response is received from the Code System or Identifier System owner is received by HTA within the stated timeframe, (typically two weeks) HTA will
      i. Proceed with resolving the request, collaborating with the Requestor and Code System or Identifier System owner
      ii. Start the UTG process to create the CodeSystem or NamingSystem resource in THO, tagging the Requestor on the ticket (UP JIRA project)
b. If a response is NOT received by the HTA within the stated timeframe. HTA will:
   i. Work with the Requestor and other required parties to create the required Code System or Identifier System Information for use within HL7 products.
      1. If creating a new URI, HTA will use a standard syntax (http://terminology.hl7.org/C\odeSystem/xxx or http://terminology.hl7.org/NamingSystem/xxx) where xxx is an established short symbolic name (which cannot contain spaces, but can include hyphens)
         a. (Note, that HL7 publishing tools require that the xxx not contain an additional / as everything after “CodeSystem” or “NamingSystem” is used as the ID)
4. Start the UTG process to create the CodeSystem and/or NamingSystem resource in THO, tagging the Requestor on the ticket (UP JIRA project)
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   b. Update the original JIRA ticket with the resolution
   c. Notify the HL7 community of the resolution via Implementers and Terminology Zulip channels
   d. Notify the Vocabulary Work Group