

Release notes

Release 3.2

platform upgrade

(Project ART-DECOR)

December 2021



Introduction

ART-DECOR® Release 3 will be published step by step starting, continuing today with Release 3.2 that brings along many new features and improvements.

Overview

Story/cluster Platform upgrade: A new user interface with an improved user experience (UX); a new framework (Vue) replaces the Orbeon® platform. The eXist® database (exist-db.org) remains as the well-founded backend; an update to the latest version has been done to improve performance and stability.

Resolved in Release 3.2

Story/cluster: new landing page, new landing page for the project overview as well as panels for datasets, scenarios, terminologies, and templates with the navigation tree on the left and details shown on the right. Database upgrade (to version 5.3.0).

New functionalities (compared to ART-DECOR 3.1; compared to ART-DECOR 2 in **bold**)

Project

- add metadata (copyright) in dedicated field.
- manage repositories.
- manage services.
- manage name spaces.
- manage project languages
- edit publication locations.
- manage project identifiers.
- manage governance groups the project is associated with.
- project development panel with check project, compile development environments and artefact management.
- the project index, an overview of all artefacts of the project **in a new layout**.

Datasets

- **add new or clone dataset in project.**
- managing inheritance and containment of dataset concepts.



Scenarios

- view scenarios and transactions, including representing templates and corresponding actors.

Terminology

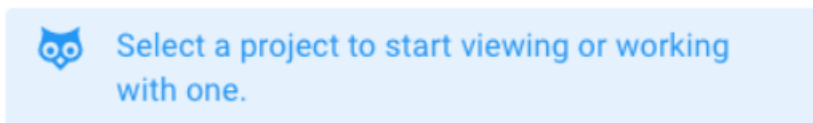
- view value sets, navigation and details.
- view code systems, navigation and details.
- terminology identifiers list.
- **terminology browser with quick cross code system browsing.**

Rules

- constraint rules, here: templates especially for HL7 v3 and CDA documents, navigation, grouped by type, and details including most items of the template design body.

General enhancements

- In certain situations our wise owl may appear and give you hints or instructions on how to continue or what to do. The example below is the owl telling you to select a project first, before you can browse it.



Missing functionality

In ART-DECOR release 3 compared ART-DECOR release 2 some functionality is still missing. The following main areas (main menu items) are still under development and therefore are missing functionality:

- Scenarios and Transactions (read-only in 3.2)
 - Representing Template; the representing template documents which dataset concepts are linked to a transaction and enriches it with additional properties.
- Terminology (read-only in 3.2)
 - Value Sets
 - Code Systems
 - Mappings
- Rules
 - Templates (read-only in 3.2)

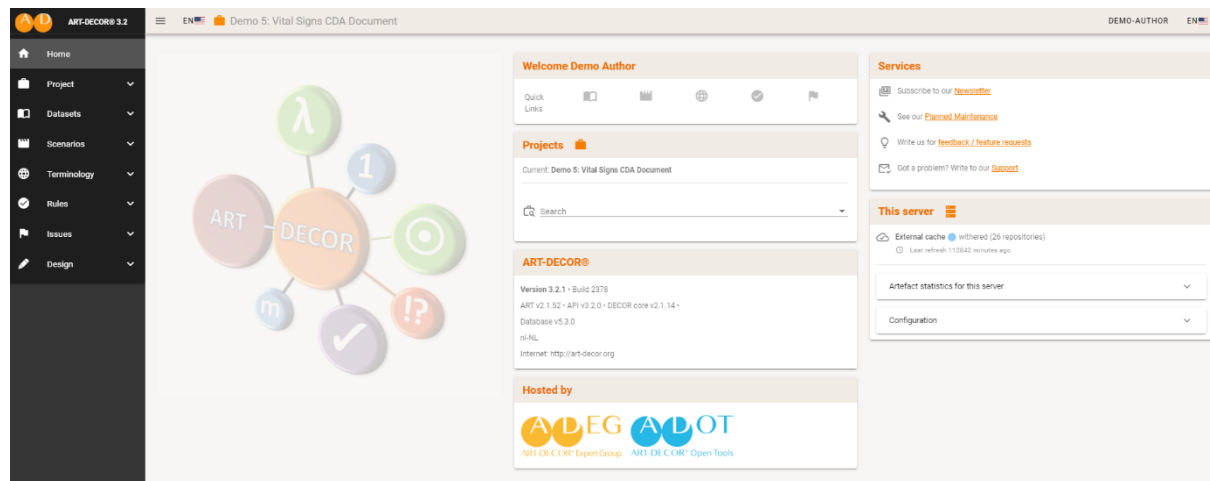
The other areas are available in Release 3.2. Specific missing functionality for these areas are listed on the following pages. The ticket numbers that are given and are the ART-DECOR Expert group ticket numbers.

We also zoom in on the areas which are ready to be used to provide you with more details about the area.



Landing page (Home)

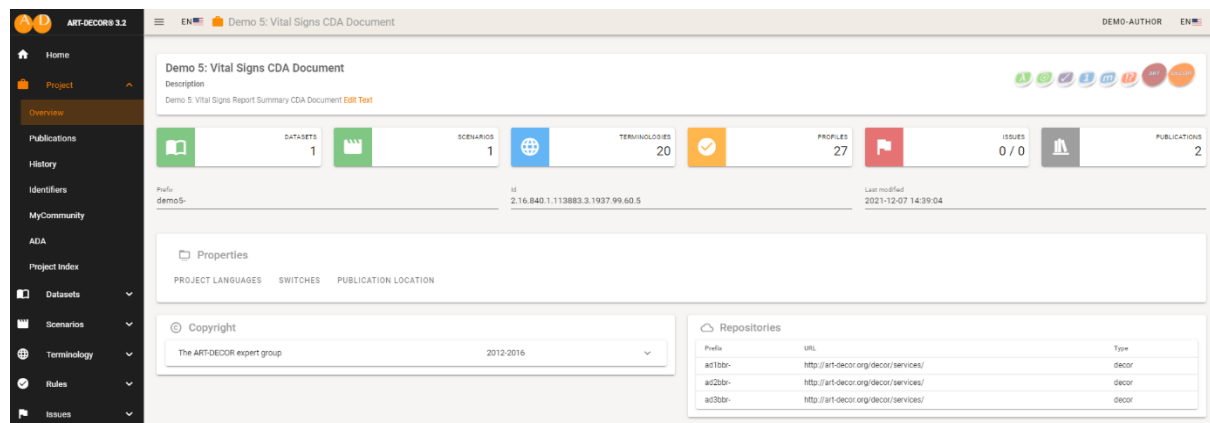
New landing page where you can choose a project to inspect or work with. The menu on the left let you choose a specific area (**Project, Datasets, Scenarios, Terminology, Rules, Issues**)



Resolutions details for Project, Datasets, Scenarios, Terminology, Rules, Issues.

Project

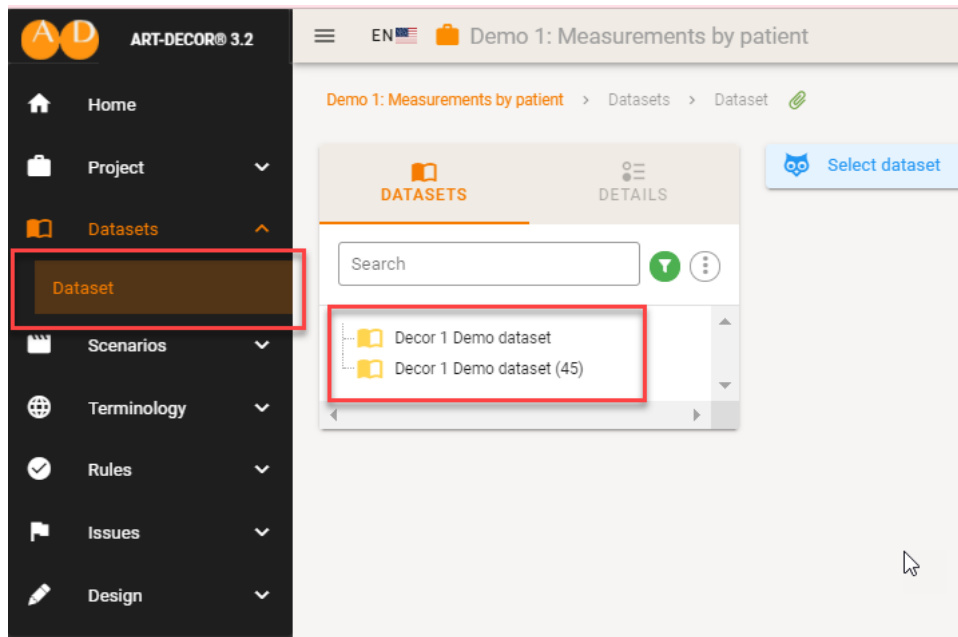
Project is ready to be used. You can go to different areas with the navigation tree on the left and details shown on the right. The areas in Project are: Overview, Authors, Publications, History, Identifiers, DECOR Locks, MyCommunity, Governance Groups, ADA, Development and Project Index.



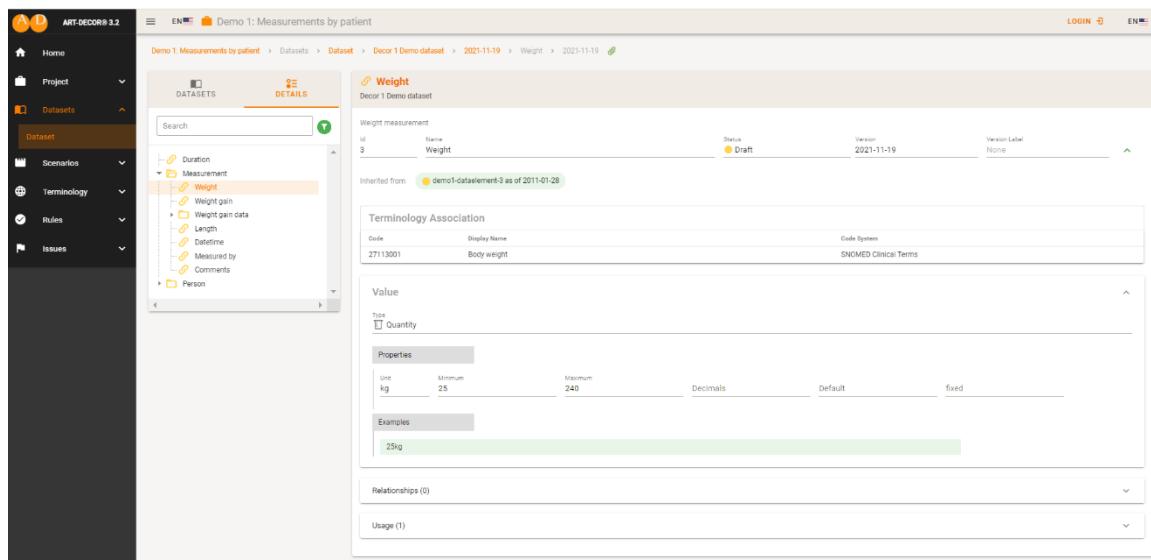
Datasets

Datasets is ready for use. To see the datasets, you have to click on the submenu 'datasets'. The datasets for that project will be shown in the navigation tree view.





When you select a dataset in the navigation tree view you can see the details on the right.



Missing functionality for datasets:

- *Currently when you click on the inherited link you see only basic information from the inherited concept (see screenshot below). This will be extended in the next release in ticket [AD30-457].*

The screenshot shows a web interface for a dataset named 'First names'. The page title is 'First names' and it is identified as a 'Test dataset'. The description is 'The collection of official first names registered at birth.' The ID is '4'. A 'Jaam' icon is visible. A modal window is open, displaying the following information:

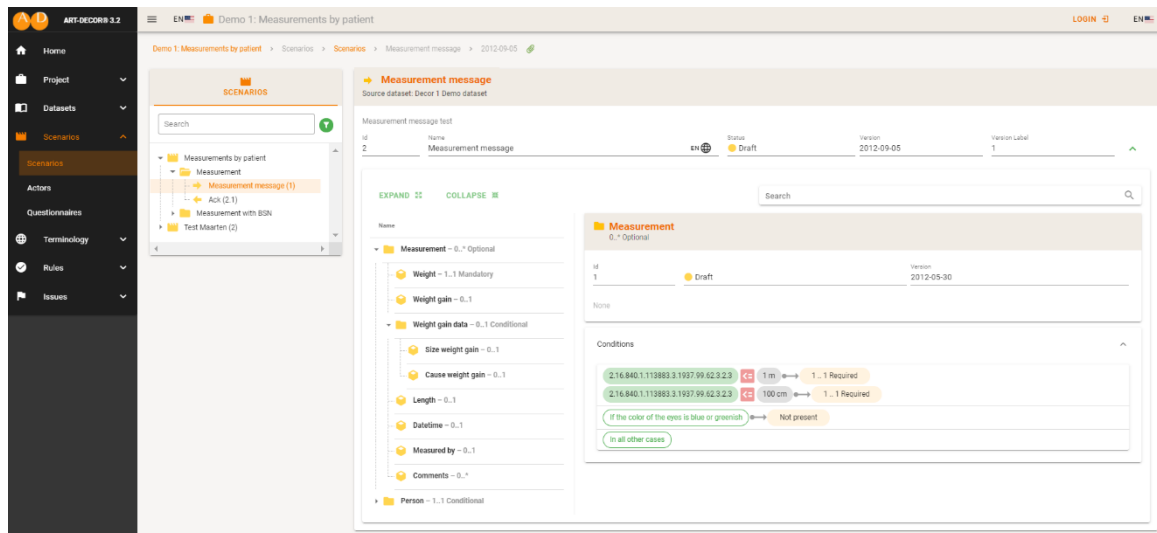
mp-dataelement612-4160	
Id:	2.16.840.1.113883.2.4.3.11.60.20.77.2.1.4160
Version:	2013-07-24 00:00:00
Status:	final

Below the modal, there are buttons for 'Eigenschappen' and 'Voorbeelden'. At the bottom, there is a 'Gebruik' section.

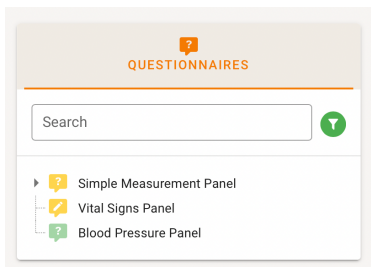
Scenarios

The areas in Scenarios are: **Scenarios, Actors and Questionnaires.**

The Panel offers all scenarios and nested transaction groups and transaction leaves in the navigation tree. The right detail area varies depending on the items chosen in the navigation. Transaction groups typically show sequence diagrams (in new style), the transaction leaves show their representing template along with details of the transaction concepts such as a view on the corresponding dataset concept, conditions etc.



Questionnaires are already present as a draft preview Navigation Tree mock-up.



Note: Questionnaires are viewable/downloadable from the Project Index.

Missing functionality for scenarios:

- Adding a new scenario and cloning of a scenario is not available. This will be extended in the next release in ticket [AD30-387].
- Scenario, transactions and representing template are read-only. The representing template documents which dataset concepts are linked to a transaction. This will be extended in the next release in ticket [AD30-453].

Terminology

The areas in Terminology are: **Value Sets, Identifiers, Mappings, Code Systems** and **Browser**.

Terminology Panel is not yet fully ready for use, but most parts are available read-only. We will zoom in on the specific areas to inform you about the missing functionality.

Terminology: Value Sets

The Panel offers the list of all value sets of the project, sorted alphabetically and indicating whether they are in-project value sets or references from a building block repository (BBR). Once a value set is chosen on the left, the right card shows the details of the value set including the concept list.

The screenshot shows the 'demo1-all-types' value set details. The 'Source Codesystems' table lists the following entries:

id	codesystem name
2.16.840.1.113883.6.1	Logical Observation Identifier Names and Codes
2.16.840.1.113883.6.256	RadiLex
2.16.840.1.113883.3.1037.99.02.3.5.999	demo1-codesystem-999
2.16.840.1.113883.6.96	SNOMED Clinical Terms
2.16.840.1.113883.5.1008	Null Flavor

The 'Concept list' table shows the following entries:

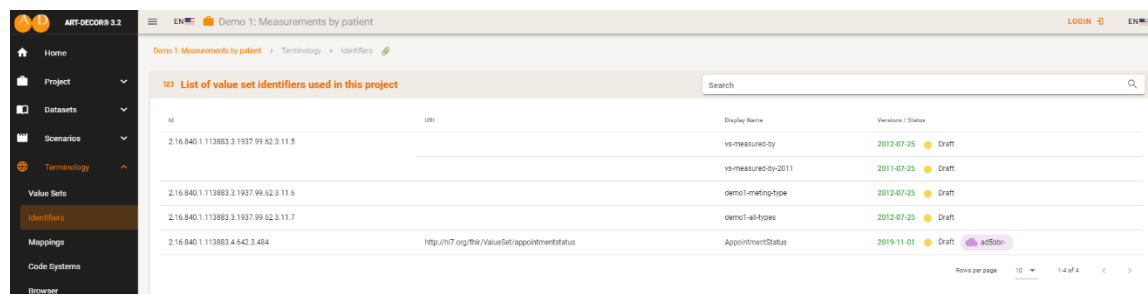
Level/Type	Code	Display Name / Description	Code System
	LOINC		LOINC
	RadiLex		RadiLex
	level 0 A	Some description	demo1-codesystem-999
0-A	level 0 A	Some description	demo1-codesystem-999
1-S	level 1 S	level 1 S	demo1-codesystem-999
1-O	level 1 O	level 1 O	demo1-codesystem-999
2-L	level 2 L	level 2 L	demo1-codesystem-999
		Include is-a Code 105590001 Substance	SNOMED Clinical Terms
		Exclusion is-a Code 26579002 Material	SNOMED Clinical Terms
0-A	NI	no information	Null Flavor
0-S	PNF	positive infinity	Null Flavor

Missing functionality for Terminology, Value Sets:

- *Add and Edit Value Sets is currently disabled. Only viewing is available. This will be extended in the next release in ticket [AD30-393].*

Terminology: Identifiers List

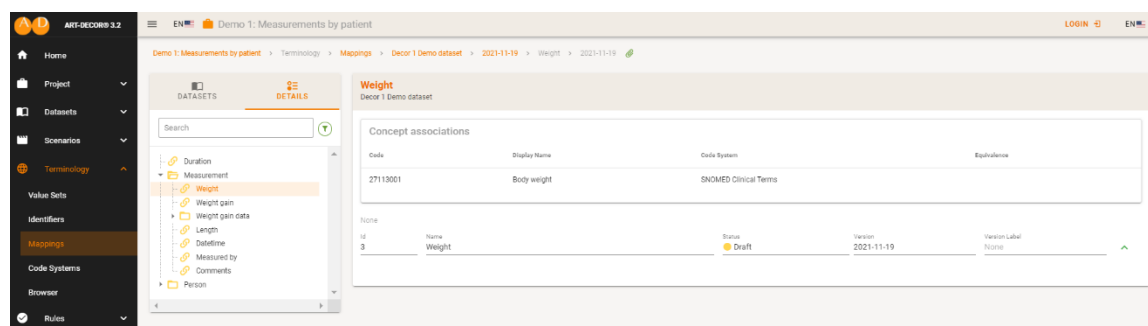
A sortable list of all terminology identifiers of the project is available.



id	url	display name	version / status
2.16.840.1.113883.3.1937.99.62.3.11.5		vs-measured-by	2012-07-25 Draft
2.16.840.1.113883.3.1937.99.62.3.11.6		vs-measured-by-2011	2011-07-25 Draft
2.16.840.1.113883.3.1937.99.62.3.11.7		demo1-meeting-type	2012-07-25 Draft
2.16.840.1.113883.3.1937.99.62.3.11.7		demo1-all-types	2012-07-25 Draft
2.16.840.1.113883.4.942.3.484	http://hl7.org/this/ValueSet/appointmentstatus	AppointmentStatus	2019-11-01 Draft

Terminology: Mappings

The Mappings Panel allows first creations of terminology mappings.



code	display name	code system	equivalence
27113001	Body weight	SNOMED Clinical Terms	

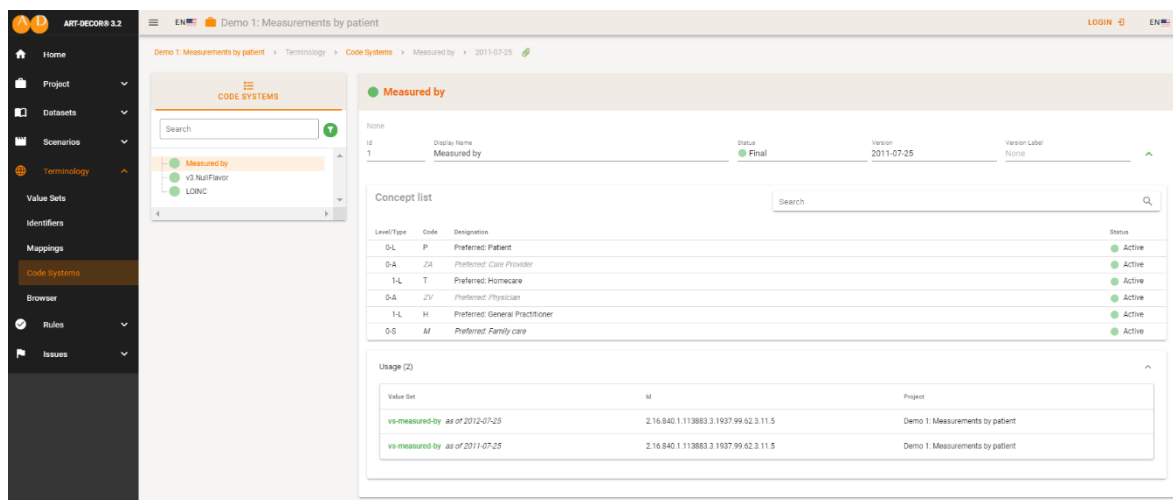
id	name	status	version	version label
3	Weight	Draft	2021-11-19	None

Missing functionality for Terminology, Mappings:

- *Add and Edit Mapping is currently disabled. Only viewing is available. This will be extended in the next release in ticket [AD30-233].*

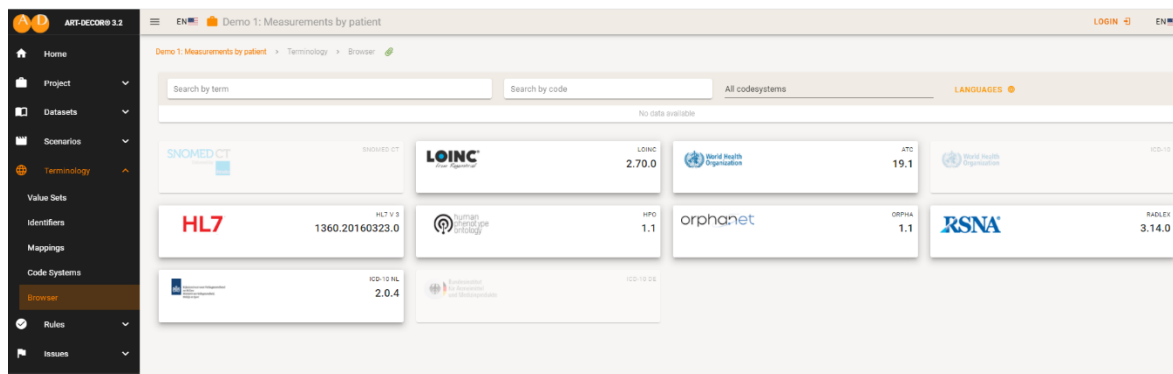
Terminology: Code Systems

The list of code systems used in the project is viewable through the Code System Panel.



Terminology Browser

The terminology browser with quick cross code system browsing is available. The browser will be also used for adding and editing value sets in the next release.



Rules

The areas in Rules are: **Templates, Profiles, Associations and Identifiers.**

Rules: Templates

The Panel offers the list of all templates of the project, grouped by their type as usual. The templates are groupwise sorted alphabetically and indicate whether they are in-project templates or references from a BBR. Once a template is chosen on the left, the right card shows the details of the templates including the template design body.

The screenshot shows the ART-DECOR 3.2 interface. On the left, a sidebar lists navigation options: Home, Project, Datasets, Scenarios, Terminology, Rules, Templates (selected), Profiles, Associations, Identifiers, and Issues. The main area is titled 'Blood pressure' and shows a list of templates. The selected template is 'Blood pressure' (ID 128, Draft, Version 2018-12-80). Below the list, the 'Example' section shows the template design body with a table of items:

Item	DT	Card	Conf	Description / Constraints
- n7observation		1..1		
classCode	1..1	F	OBS	
moodCode	1..1	F	EVN	
- n7templateId	1..1			
root	1..1	F	2.16.840.1.113883.2.1937.99.60.5.10.128	
n73d		1..1		
n7code	CE	1..1	M	Fixed: @code = 35094.2 @codeSystem = 2.16.840.1.113883.6.1
n7text	ED	0..1		
n7statusCode	CS	1..1	M	Fixed: @code = completed
n7effectiveTime	TS	0..1		
n7value			NP	
n7methodCode	CE	0..1		Binding: 2.16.840.1.113883.1.11.14079 dynamic
n7entryRelationship		0..1		Contains: 2.16.840.1.113883.3.1937.99.60.5.10.129 TemplateName: Systolic blood pressure

Missing functionality for Rules:

- *Template Panel (in Rules) is read-only. This will be extended in the next release in ticket [AD30-36].*
- *Template Design Body is yet only almost feature complete, next release will show all properties properly [AD30-61].*
- *FHIR Profile Panel is in development [AD30-425], an editor is planned for a later release [AD30-429].*
- *Association is in development [AD30-434].*
- *Identifiers is in development [AD30-472], functionality is already present in the Project Index, tabs Templates and Profiles.*

Issues

The areas in issues are: **Issues** and **Labels**

Issues Panel

Issues are listed (paginated) and can be filtered by various switches and filters.

The screenshot shows the 'Issues' panel in the ART-DECOR 3.2 application. The interface includes a search bar with filters for Status (Open, In Progress), Type (Change Request, Incident), Priority, and Label. A search term '75' is entered. Below the search bar, there are 6 results listed in a table. Each row contains an ID, an issue description, status, priority, type, date, assignment, and labels.

Id	Issue	Status	Priority	Type	Date	Assignment	Label
69	Add ASSERTs for the defined constraints	Open	Lowest	Change Request	2017-09-01 16:04:45	Dr. Kai Heitmann	Meds, COA, STUIballot
105	hl7.doseQuantity examples to be checked	Open	Low	Change Request	2017-06-21 15:18:30	Dr. Kai Heitmann	Meds, COA
123	Change proposals for LOINC	Open	Normal	Change Request	2017-07-19 10:32:59		TBD, Yocab
138	ActStatusActiveCompleted no more used	Open	Normal	Change Request	2020-05-27 17:49:30		
146	Harmonize the approach for the "no info" cases	Open	Normal	Change Request	2020-05-27 17:46:27		
150	qualifier and translation order	Open	Normal	Change Request	2020-09-22 11:12:06		



Issue Labels

Issue labels can be added and maintained including assigning colours and descriptions to the labels. Labels can be associated with issues for optimal change management and maintenance.

The screenshot shows the 'Labels' management interface in ART-DECOR 3.2. The left sidebar contains navigation options: Home, Project, Datasets, Scenarios, Terminology, Rules, Issues (expanded), Labels (selected), Server Admin..., and Design. The main content area is titled 'International Patient Summary (IPS) > Issues > Labels'. It features a search bar and a table of labels.

Name	Code	HTML color	Description	Actions
STU1 Ballot	STU1Ballot	#FE8282		⋮
To be discussed	TBD	#eddc28	Used for filtering issues that should be discussed in the next IPS call(s)	⋮
Vocabularies	Vocab	#00ff55		⋮
For CCDA consideration	CCDA	#a01111		⋮
For eHDSI consideration	eHDSI	#a14214		⋮
For IHE consideration	IHE	blue		⋮
Medications	Meds	#F2EE60FF		⋮
Allergy	Allergy	green		⋮
CDA implementation	CDA	#e989a4		⋮
Data Set	DataSet	#dae889		⋮

At the bottom right of the table, there is a pagination control: 'Rows per page: 10 1-10 of 10'.



Backend API

ART-DECOR 3 supports a powerful, modern backend RESTful API. The ART-DECOR frontend leverages this API, but scripting or third-party add-ons are also made possible.

The ART-DECOR 3 API is documented using OpenAPI 3¹ and presented through Swagger². Privileged actions need authentication using an access token. Any ART-DECOR server has the Swagger UI interface at the following location: [base]/exist/apps/api/. This interface allows inspection and testing of any actions within the limitations of your account where applicable.

All actions support input and output examples, textual documentation and schemas. All actions that support json input/output, also support xml input/output.

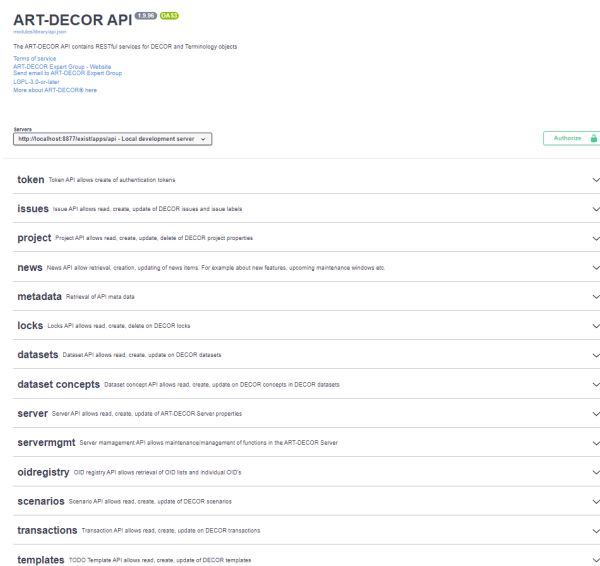
The API is organized in sections: Token, project, scenarios, transactions, value sets, code Systems, issues, and more.

A note on terminology: we are re-organizing ART-DECOR in how terminology works internally. The API reflects the progress in this area. The sections *codeSystem* and *valueSet* support DECOR representations, while the section *terminology* represents what has been dubbed Centralized ART-DECOR Terminology Services or CADTS. CADTS currently powers the Browser frontend. More on that to come.

Outlook on what comes next: ART-DECOR® – Release 3.3

The current development is on:

1. Extend information in details of an artefact (e.g., an inherited concept).
2. Adding and cloning of a scenario/transaction.
3. Adding and maintaining value sets in terminology.
4. Detailed views on Templates in the Rules section.



¹ See specification: <https://www.openapis.org> and <https://swagger.io/specification/>

² See also: <https://swagger.io>

