

Comments to template assigning_identifiers

Introduction

This document presents comments and questions from the Norwegian implementation project based on a review of the capability assigning_identifiers. The focus of the review was section “Capability templates”.

General comments from implementers (that has some PLCS experience)

- Documentation in “Reading templates” (ref. DEXLib Help file) is necessary for the understanding of section “Capability templates”
- The document “Reading templates” is easy to understand and the documentation level is satisfactory from an implementers point of view
- Similar documentation as “Reading templates” is needed to achieve an understanding of the “logic” in the reference data library structure
- Section “Capability templates” is understandable from the implementers point of view
- It might be a question if the sub-section “Reference-path” is needed as long as the input parameter list and the instantiation examples are part of the documentation
- Documentation of rules/constraints should be made more explicit
- Rules/constraints should be possible to identify (i.e. unique name or number)
- The textual expression of rules/constraints should be unambiguous (not only by text)
- The section “Information model overview” is of minor interest for the implementers. It might be of interest if the implementers have no PLCS experience at all
- Where to store instantiated parameter sets of the templates? Ref. Table below Figure 5 in “Reading templates” document in Help section of DEXLib

For more detailed comments and questions, please see comments below.

Capability templates

The following sections define a set of templates for the capability, where a template is a specification of a set of entities that need to be instantiated to represent a given set of information.

Template: assigning_identification (Short name: asg_id)

This section specifies the template assigning_identification.

NOTE An explanation of a template and the associated instantiation path is provided in the [Template overview](#) section.

Description:


This template describes the assignment of an identifier to something. identifier must be defined in the context of an organization. type or role of the identifier provided by assigning reference data to the identification assignment and thereby, identifying the identification assignment as a subclass of “Identifier_type”.

Model diagrams

EXPRESS-G diagram below shows EXPRESS entities that are required to represent the template assigning_identification. The text highlighted in blue, shows the template parameters.

Reference parameters:

The following reference parameters are defined for this template.


 `sgn([triha11]Type='Identification_assignment')`
by the [Identification_assignment](#) entity instantiated in this path to be referenced when this template is used. [triha12]

Note: The [Identification_assignment](#) entity can be referenced in a template path by:

```
%^target = $assigning_identification.id_assgn%
```

where target is the parameter to which the [Identification_assignment](#) is bound.

For example, to identify the date of an identification by assigning a date to the [Identification_assignment](#) entity. E.g.

```
-- The template assigning_identification has an external
reference
-- id_assgn. Bind this to the local external reference
-- id_assignment. It can now be the target for assigned dates
%^id_assgn = $assigning_identification.id_assgn%
-- assign date to identification_assignment in the role of
"created"
/assigning_calendar_date(items=id_assgn,
    date_class_name='Date_actual_start',
    date_ecl_id=p://www.plcsinc.org/plcs-proposed', [triha13]
    year=@creation_year,
    month=@creation_month,
    day=@creation_day)/
```

Reference path: [triha14]



The reference path shown below specifies the entities that are to be instantiated by the template.

A description of templates and the syntax for the reference path is provided in the [Reading Templates](#) help section.

[Identification_assignment](#)

```
-- Mark the Identification_assignment entity as
-- referable when this template is used by binding it to the reference
-- parameter id_assgn
%^id_assgn = Identification\_assignment%
Identification\_assignment.identifier = @id
Identification\_assignment.role = '/IGNORE'
Identification\_assignment.description = '$'
Identification\_assignment.items -> @items

-- provide the role of the identification by classifying the
Identification_assignment
/assigning_reference_data(
    items=id_assgn,
    class_name=id_class_name,
    ecl_id=id_ecl_id)/

--  sign an organization to the identifier and classify it as 'Owner_of' [triha15]
/assigning_organization(
    items=id_assgn,
    org_id=@org_id,
    org_id_class_name=@org_id_class_name,
    org_id_ecl_id=@org_id_ecl_id,
    org_assgn_class_name=ner_of '[triha16]',
    org_assgn_ecl_id='http://www.plcsinc.org/plcs-proposed')/
```

The following entities are instantiated with attributes as specified:

Entity in path	Value	Inherited from
----------------	-------	----------------

Identification_assignment.identifier	@id	—
Identification_assignment.role	'/IGNORE'	—
Identification_assignment.description	'\$'	—

Instance diagrams

The instance diagram below shows an example of the EXPRESS entities that are instantiated by the template:

```
/assigning_identification(items='#1', id='ZXS10345',
id_class_name='Part_identification_code',
id_ecl_id='http://www.plcsinc.org/plcs-proposed', org_id='Big Planes Inc',
org_id_class_name='Organization_identification_name',
org_id_ecl_id='http://www.plcsinc.org/plcs-proposed')/
```

Note that the [assigning_reference_data](#) and [assigning_organization](#) templates are used in the diagram. Namely:

```
/assigning_reference_data(items='#1', class_name='Part_identification_code',
ecl_id='http://www.plcsinc.org/plcs-proposed')/
/assigning_organization(items='#1', org_id='Big Planes Inc',
org_id_class_name='Organization_identification_name',
org_id_ecl_id='http://www.plcsinc.org/plcs-proposed',
org_assgn_class_name='Owner_of', org_assgn_ecl_id='http://www.plcsinc.org/plcs-
proposed')/
```

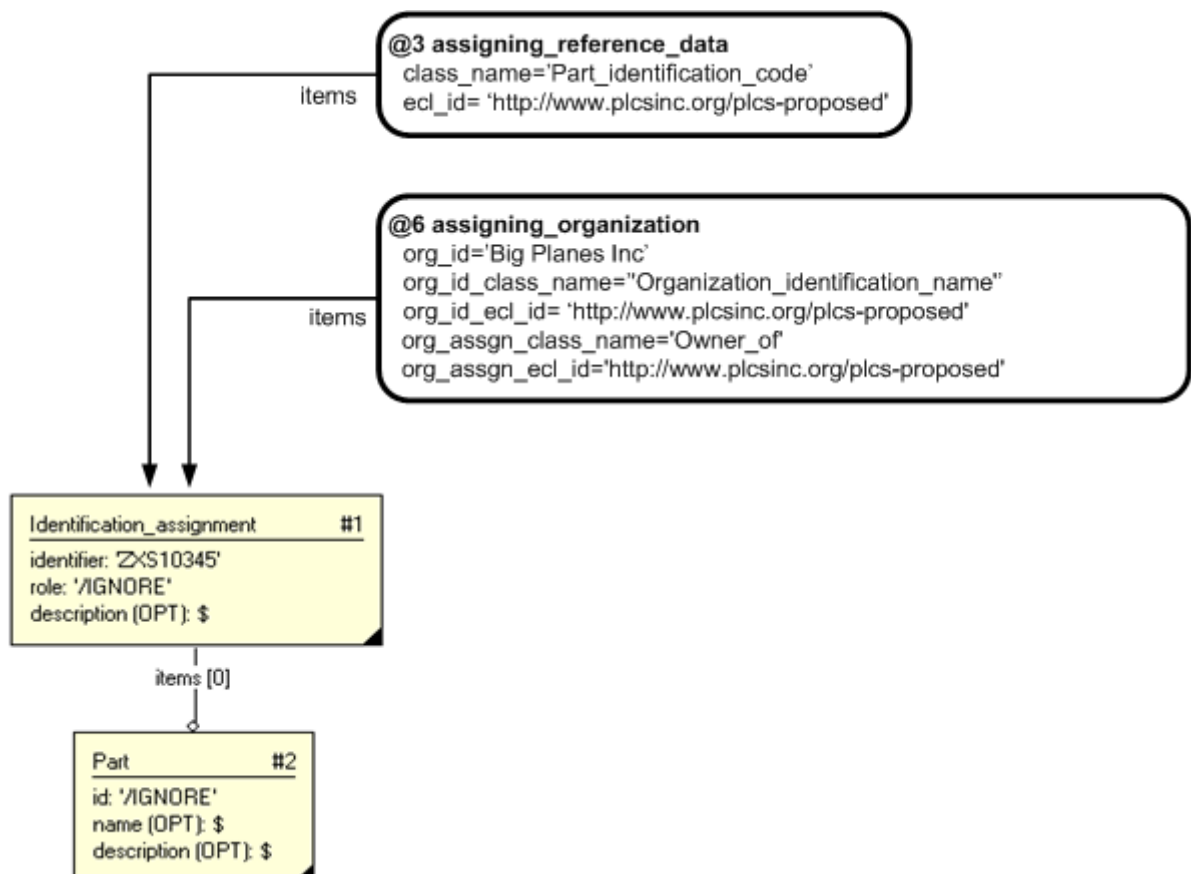
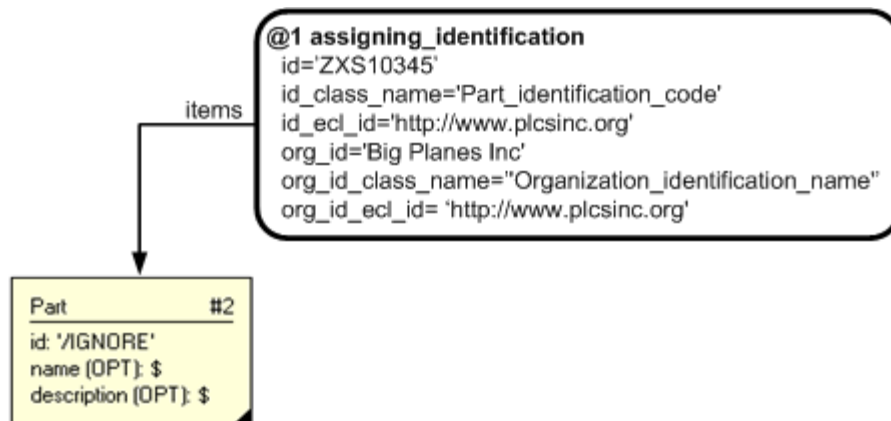


Figure 5.3 — Instantiation of Template Components

The instance diagram below shows the graphic symbol for the template that is to be used in other instance diagrams. The example template is:

```
/assigning_identification(items='#1', id='ZXS10345',
id_class_name='Part_identification_code',
```

```
id_ecl_id='http://www.plcsinc.org/plcs-proposed', org_id='Big Planes Inc',
org_id_class_name='Organization_identification_name',
org_id_ecl_id='http://www.plcsinc.org/plcs-proposed') /
```



[triha17][triha18]Figure 5.4 — Consolidated Template Instantiation

Characterizations:

The assigning_identification template can be optionally characterized by assigning other constructs to it. The following characterizations may apply.

Characterization: Assigning date

Dates can be associated with the assignment of an identifier by using the template [assigning_calendar_date](#). For example, the date on which an identifier was created is represented by assigning a date to the [Identification_assignment](#).

The model for assigning a date to an identifier is shown below.

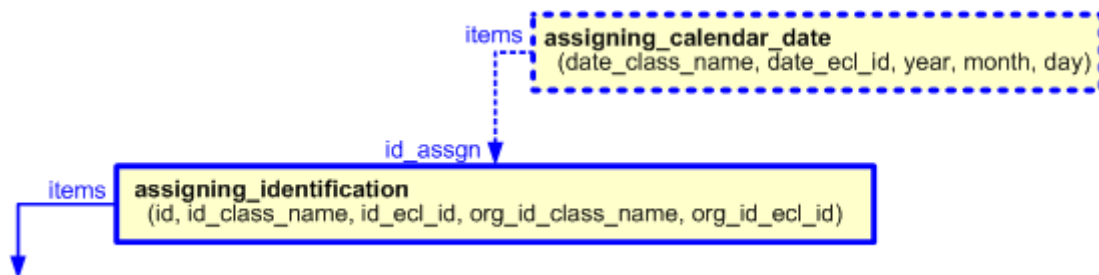


Figure 5.5 — Template Configuration with Optional Calendar Date Assignment

An example showing the assignment a start date to an identifier is shown below.

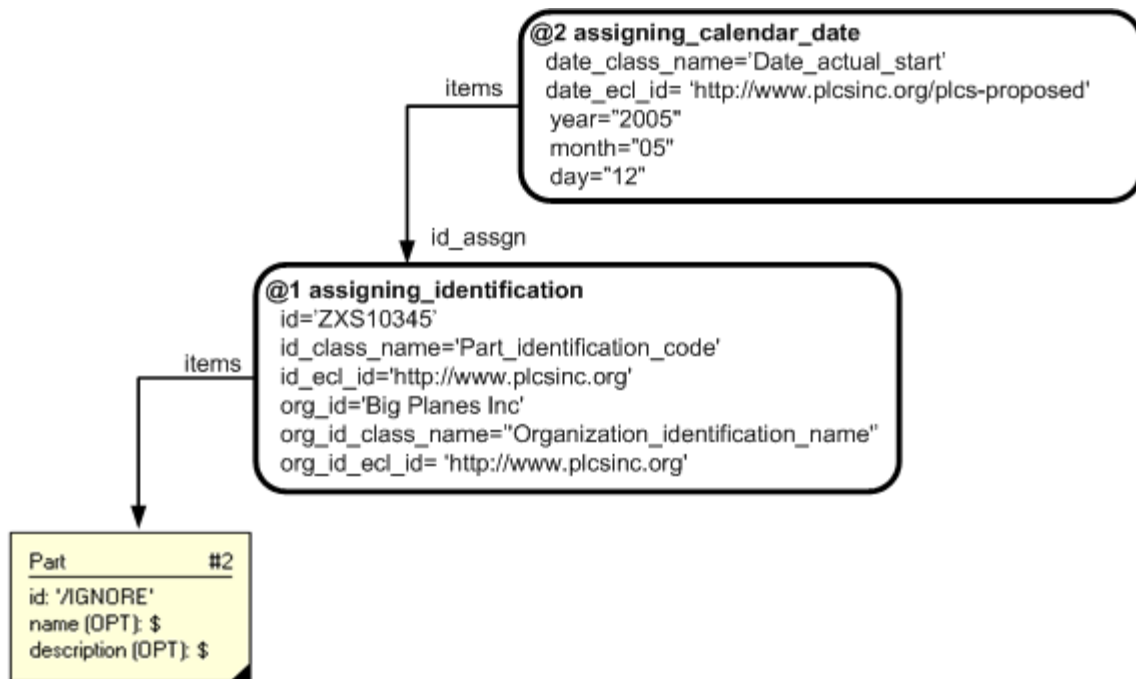


Figure 5.6 — Instantiation of Optional Template Configuration

The instantiated templates for assigning a identification to a part is:

```
/assigning_identification(items='#1', id='ZXS10345',
id_class_name='Part_identification_code',
id_ecl_id='http://www.plcsinc.org/plcs-proposed', org_id='Big Planes Inc',
org_id_class_name='Organization_identification_name',
org_id_ecl_id='http://www.plcsinc.org/plcs-proposed')/
```

The instantiated templates for assigning a date to an identification is shown below. Note the use of the reference parameter \$assigning_identification.id_assgn to identify the [Identification_assignment](#) instantiated by the template assigning_identification.

```
/assigning_calendar_date(items='$assigning_identification.id_assgn',
date_class_name='Date_actual_start', date_ecl_id='http://www.plcsinc.org/plcs-
proposed', year='2005', month='05', day='12')/
```