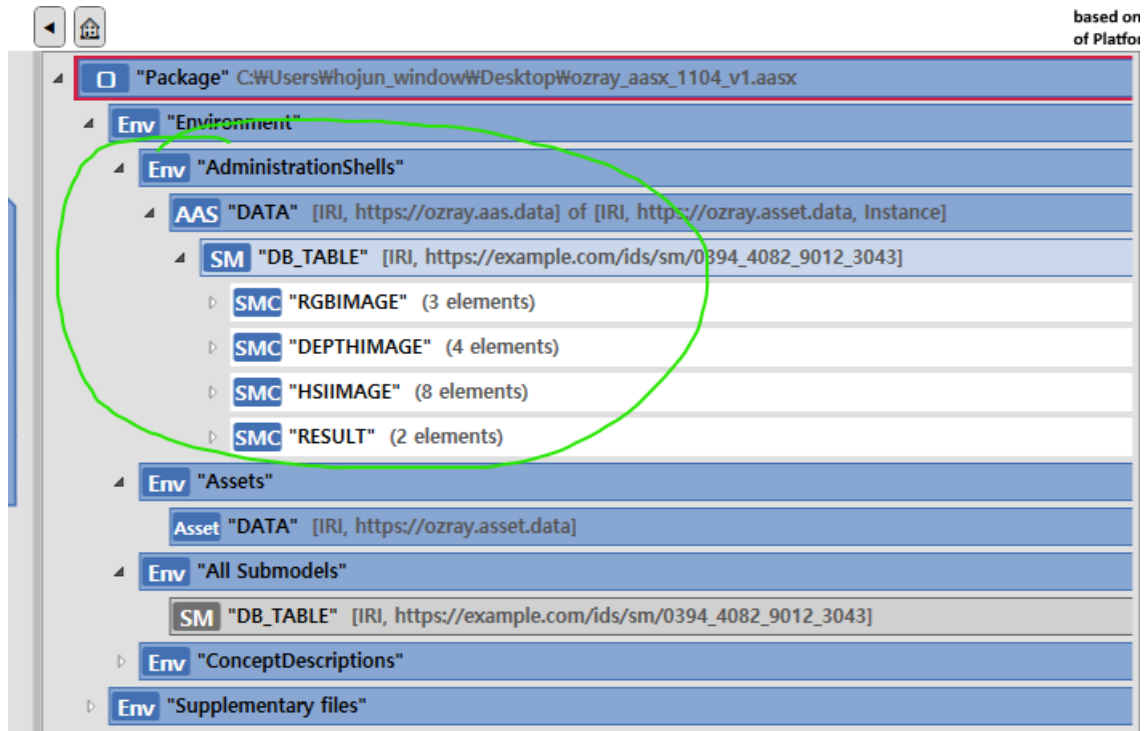


AASX 파일 작성법

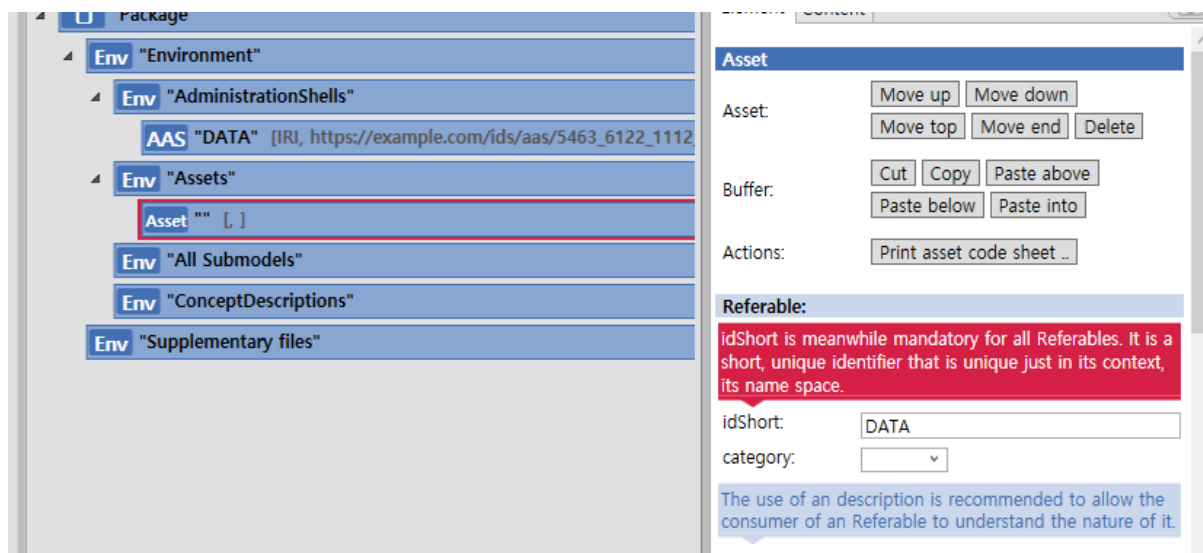


위 초록색 원 부분만 작성해주면 프로그램과 호환 가능한 AASX 파일을 만들 수 있습니다

AASX Package Explorer 실행

- Workspace → Edit를 통해 편집 view 키기

Assets 생성



idShort: DATA

AAS "DATA" [IRI, https://example.com/ids/aas/5463_6122_1112]

Env "Assets"

Asset "DATA" [IRI, https://example.com/ids/asset/1593_6122_111]

Env "All Submodels"

Env "ConceptDescriptions"

Env "Supplementary files"

DataSpecification: Create data element!

Identifiable:

idType: IRI

id: https://e Generate Input Rename

Check if providing administrative information on version/revision would be useful. This allows for better version management.

idType: IRI
id는 Generate로 생성

AAS 생성

Package

Env "Environment"

Env "AdministrationShells"

AAS "" []

Env "Assets"

Env "All Submodels"

Env "ConceptDescriptions"

Env "Supplementary files"

based on specifications of Platform Industrie 4.0

INDUSTRIE4.0

Element Content

Environment of Asset Administration Shells

There are no assets in this AAS environment. You should consider adding an asset by clicking 'Add asset' on the edit panel below.

There are no Submodels in this AAS environment. In this application, Submodels are created by adding them to associated to Administration Shells. Therefore, an Administration Shell shall exist before and shall be selected. You could then add Submodels by clicking 'Create new Submodel of kind Type/Instance' on the edit panel. This step is typically done after creating asset and Administration Shell.

There are no ConceptDescriptions in this AAS environment. Even if SubmodelElements can reference external concept descriptions, it is best practice to include (duplicates of the) concept descriptions inside the AAS environment. You should consider adding a ConceptDescription by clicking 'Add ConceptDescription' on the panel below or adding a SubmodelElement to a Submodel. This step is typically done after creating assets and Administration Shell and when creating SubmodelElements.

Add Asset Add AAS

Add ConceptDescription

Copy single entity

Copy from existing AAS: Copy recursively

Take over changes Undo changes

Add AAS로 AAS 생성

Env "AdministrationShells"

AAS "" []

Env "Assets"

Env "All Submodels"

Env "ConceptDescriptions"

Env "Supplementary files"

Copy from existing Submodel: Copy single entity Copy recursively

Entities: Add View

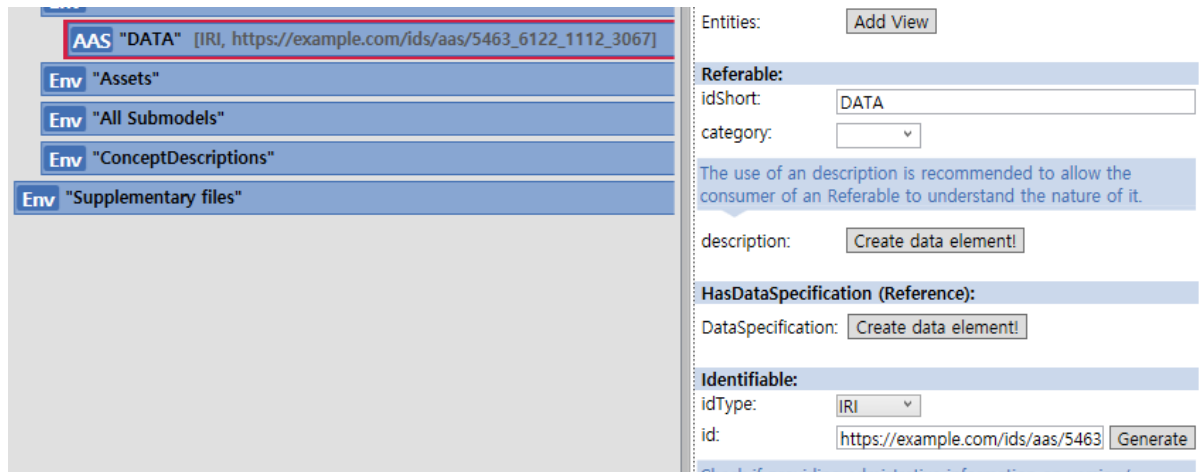
Referable:

idShort: DATA

category:

The use of an description is recommended to allow the consumer of an Referable to understand the nature of it.

idShort: DATA



AAS "DATA" [IRI, https://example.com/ids/aas/5463_6122_1112_3067]

Env "Assets"

Env "All Submodels"

Env "ConceptDescriptions"

Env "Supplementary files"

Entities:

Referable:

idShort: DATA

category:

The use of an description is recommended to allow the consumer of an Referable to understand the nature of it.

description:

HasDataSpecification (Reference):

DataSpecification:

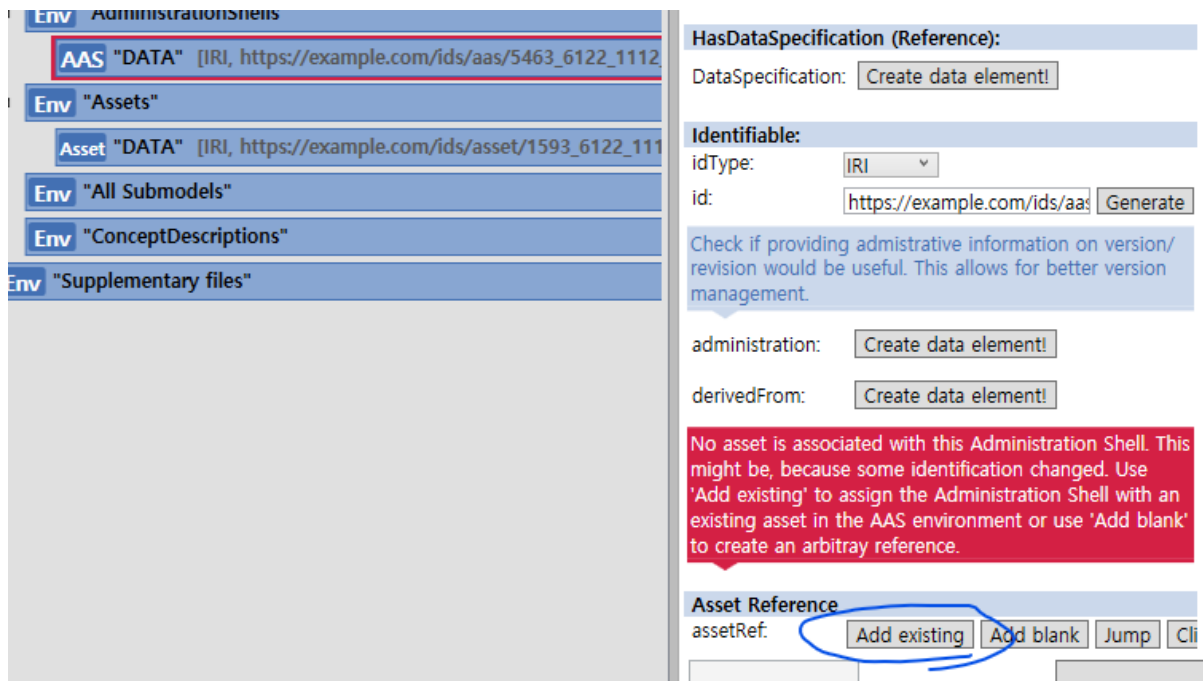
Identifiable:

idType: IRI

id: https://example.com/ids/aas/5463

Check if providing administrative information on version/revision would be useful. This allows for better version management.

idType: IRI
id는 Generate로 임의 생성



Env AdministrationShells

AAS "DATA" [IRI, https://example.com/ids/aas/5463_6122_1112_3067]

Env "Assets"

Asset "DATA" [IRI, https://example.com/ids/asset/1593_6122_1112_3067]

Env "All Submodels"

Env "ConceptDescriptions"

Env "Supplementary files"

HasDataSpecification (Reference):

DataSpecification:

Identifiable:

idType: IRI

id: https://example.com/ids/aas/5463

Check if providing administrative information on version/revision would be useful. This allows for better version management.

administration:

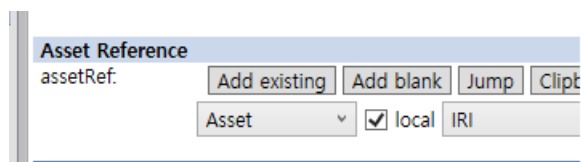
derivedFrom:

No asset is associated with this Administration Shell. This might be, because some identification changed. Use 'Add existing' to assign the Administration Shell with an existing asset in the AAS environment or use 'Add blank' to create an arbitray reference.

Asset Reference

assetRef:

방금 생성한 Asset파일 select



Asset Reference

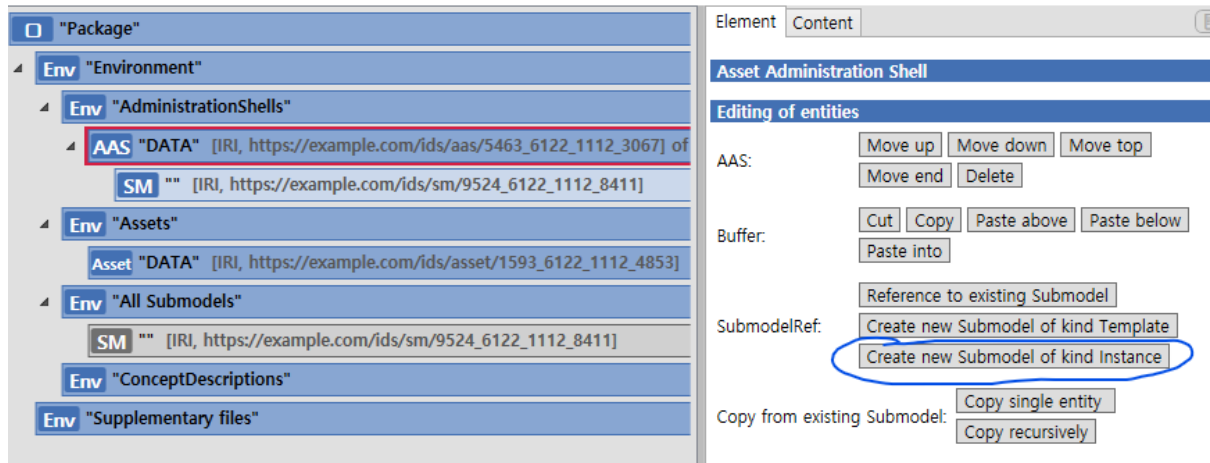
assetRef:

Asset

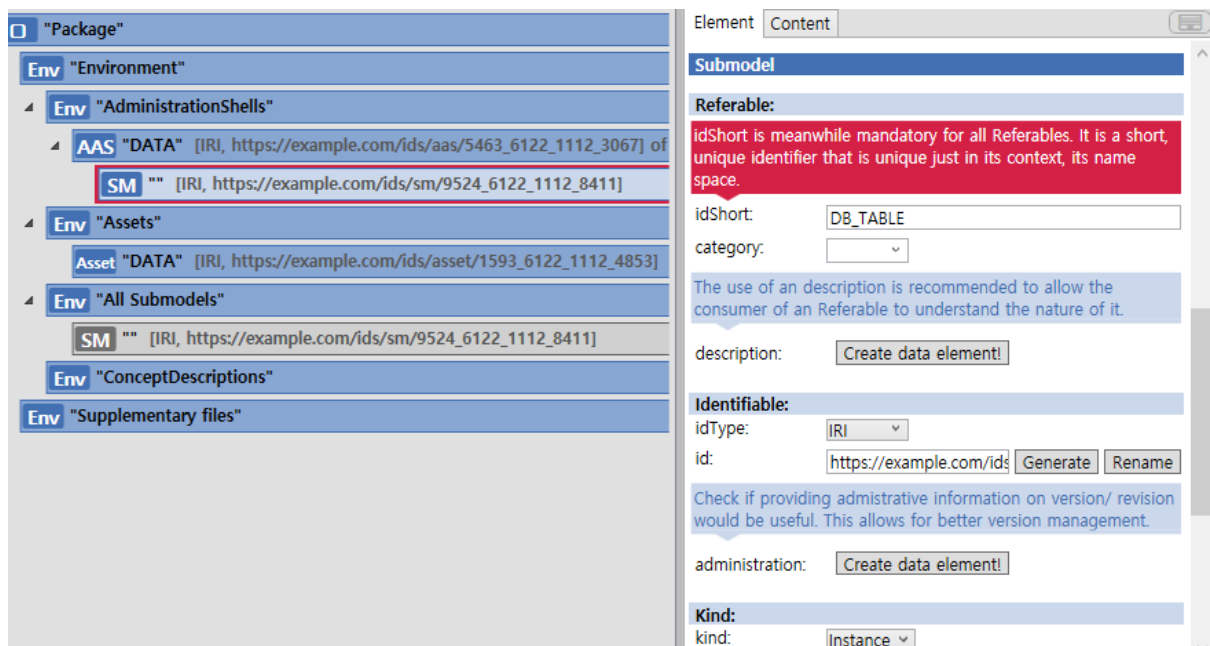
☒ local IRI

결과화면 확인

SM(서브모델)생성



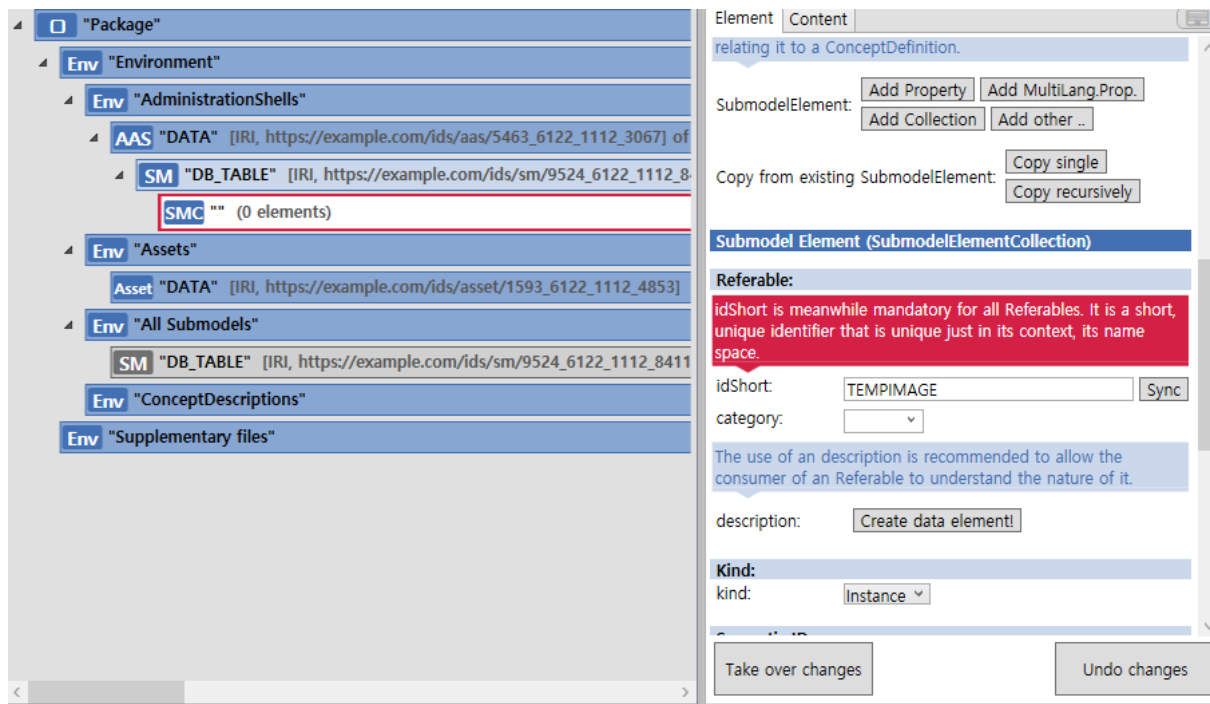
위 버튼으로 SM 객체 생성



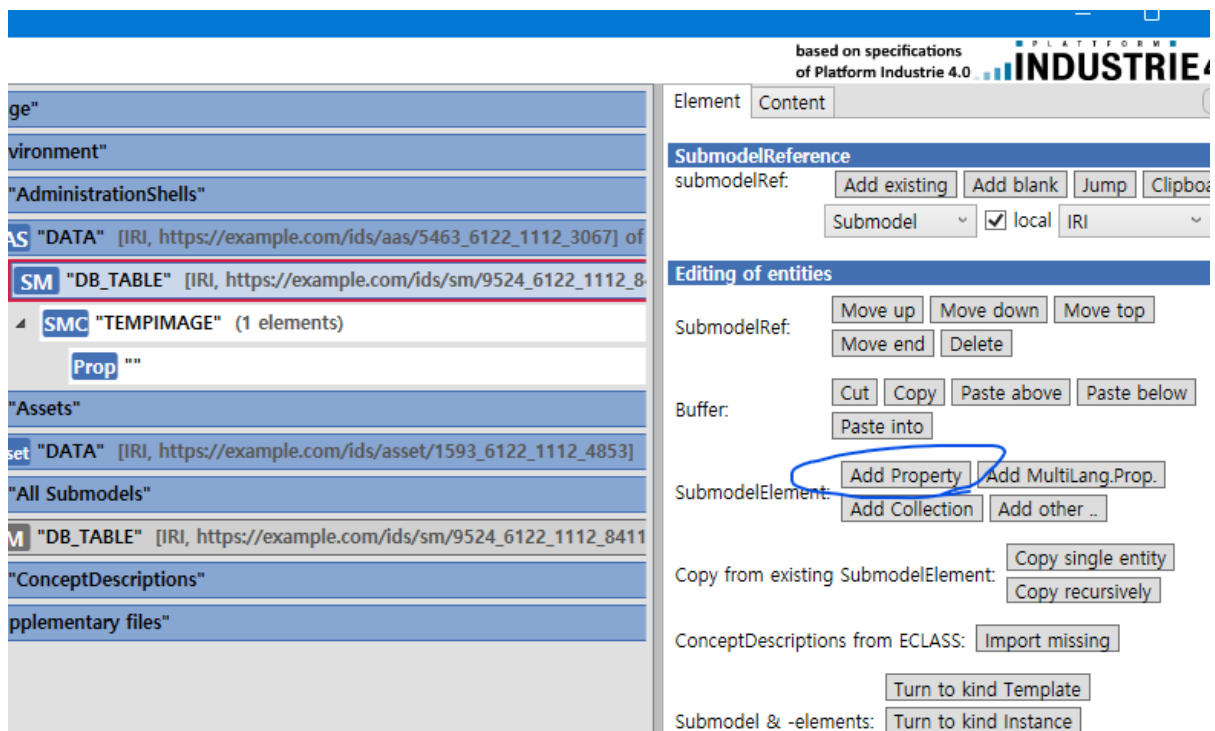
idShort: DB_TABLE

idType: IRI, id는 generate로 생성

SMC(서브모델컬렉션)생성 - 일반적 데이터베이스의 테이블 역할



idShort: "원하는 테이블이름 입력"



Add Property로 테이블에 들어갈 컬럼 추가

Property 생성 - 일반적 데이터베이스의 컬럼 역할

Environment"

AdministrationShells"

S "DATA" [IRI, https://example.com/ids/aas/5463_6122_1112_3067] of

SM "DB_TABLE" [IRI, https://example.com/ids/sm/9524_6122_1112_8

SMC "TEMPIMAGE" (1 elements)

Prop ""

Assets"

et "DATA" [IRI, https://example.com/ids/asset/1593_6122_1112_4853]

All Submodels"

"DB_TABLE" [IRI, https://example.com/ids/sm/9524_6122_1112_8411

Assign to existing CC

Concept Description:

Create empty and assign

Create and assign from ECLASS

ConceptDescriptions from ECLASS:

Import missing

Submodel Element (Property)

Referable:

idShort is meanwhile mandatory for all Referables. It is a short, unique identifier that is unique just in its context, its name space.

idShort:

temp_value

Sync

The use of category is strongly recommended for SubmodelElements which are properties! Please check which pre-defined category fits most to the application of the

idShort: "원하는 변수명 입력"

SMC "TEMPIMAGE" (1 elements)

Prop "temp_value" = 50

Assets"

et "DATA" [IRI, https://example.com/ids/asset/1593_6122_1112_4853]

All Submodels"

"DB_TABLE" [IRI, https://example.com/ids/sm/9524_6122_1112_8411

ConceptDescriptions"

plementary files"

DataSpecification:

Create data element!

Property

Please check, if you can provide a value type for the concept. Value types are provided by built-in types of XML Schema Definition 1.1.

valueType:

int

The value of the Property. Please provide a string representation (without quotes, '.' as decimal separator, in XML number representation).

value:

50

You can express the value also by referring to a (enumerated) value in a (the respective) repository. Below, you can create a reference to the value in the external

Value 타입 지정, value: 임의의 값 넣기
이후 aasx 파일로 save

AasxServerCore 프로그램 실행

```
PS C:\Users\hojun_window\Desktop\Work\오즈레이AAS\Python_project\AAS\server\AasxServerCore> .\AasxServerCore.exe --opc
--rest --data-path .\ozray_aasx\
Serving the AASxs from: .\ozray_aasx\
Security 1 Startup - Server
Security 1.1 Load X509 Root Certificates into X509 Store Root
Connect to OPC UA by: opc.tcp://0.0.0.0:51210/UA/SampleServer
Loading .\ozray_aasx\test_1.aasx...

Please wait for the servers to start...
Connect to REST by: localhost:51310
http://localhost:51310/
REST Server started.
OPC UA Server started..
Servers succesfully started. Press Ctrl-C to exit...
```

ozray_aasx 디렉토리에 방금 만든 aasx파일을 이동시킨이후 Loading 잘 되었는지 점검

파이썬 프로그램 실행 및 args 지정

```
db>python main.py --table_list TEMPIMAGE
```