# Actual structure of XML file

# XML actual structure

A program generating an actual structure of XML file with the name xml\_doc.exe allows to obtain an information about:

- the structures that define the objects of D2000 System
- · the type of attributes in these structures
- the value types of these attributes
- · which values can the attributes acquire

This statement also contains the unsupported objects and enumerated types.

The program generates the statement in Slovak (the parameter /lsk) or English (the parameter /lgb) language. By default, the statement in English language is generated (if the program is started without parameters). The program is placed in a **bin** subdirectory in an installation directory of D2000 System. The automatic generated statement of actual structure with the name **xml\_structs.htm** is placed in a **Help** subdirectory in the installation directory of D2000 System.

Example: xml\_doc.exe /lsk > vypis.htm

The statement from xml\_doc.exe describes:

- value types they are the supported value types of the structure attributes
- definition of records the structures, their attributes and attribute description
- enumerated types the list of enumerated types and their values
- object definitions a defined structures for the individual objects of D2000 System

#### **Definition of records**

This part describes all the definitions of structures, their attributes and characteristic of these attributes. These structures define the objects existing in the configuration of D2000 System.

The example of the structure attribute description:

Definition of the structure attribute:

- AttributeName1 most of attributes of elementary type (e.g. numerical values)
- AttributeName2 the attributes of elementary type T\_ENUM (the values of enumerated type)
- AttributeName3 the attributes of elementary type T\_STRING, T\_BOUNDED\_STRING alebo T\_UNBOUNDED\_STRING (string values)
- AttributeName4 the attributes of structured type T\_ARRAY (a range defined by the enumerated type)
- AttributeName5 the attributes of structured type T\_ARRAY (a range defined by the integer value)
- AttributeName6 the attributes of structured type T\_RECORD (it contains the definition of attributes of the nested structure)

Also the attributes of elementary type T\_BOOLEAN contain the values of the enumerated type but there is either the value True or False.

If some type of structure attribute was renamed and/or changed the description contains also the previous version in the form:

```
<StructureName>
  <AttributeName> : Definition
Previous version:
  <NameOfPreviousAttribute> : PreviousDefinition
```

If the whole structure was replaced by different newer structure the description of structure contains also the reference to newer structure:

```
<StructureName>
--> <NewStructureName>
```

If the whole structure is replacing the structure in previous version the description of structure contains also the reference to the previous structure:

```
<StructureName>
<-- <PreviousStructureName>
```

#### **Enumerated types**

This part defines the enumerated types with ID and name:

```
<NameOfEnumeratedType>
0 : ValueNameOfEnumeratedType0
1 : ValueNameOfEnumeratedType1
N : ValueNameOfEnumeratedTypeN
```

### **Object definitions**

This part describes the definitions of all objects. The object consists of the several structures and the list of structures together with their quantity is in the description:

```
ObjectNumber - ObjectName
  StructureName1 ( Quantity1 )
  StructureName1 ( Quantity2 )
  StructureNameN ( QuantityN )
```

The objects, for which the export and import of configuration is not supported, contain only the text "Unsupported object" instead of the list of defined

If object contains the structures with the structures of previous version the form is following:

```
ObjectNumber - ObjectName
  StructureName ( Quantity )
  Previous version:
    NameOfPreviousStructure1 ( Quantity1 )
    NameOfPreviousStructure2 ( Quantity2 )
    NameOfPreviousStructureN ( QuantityN )
```



## (i) Related pages:

D2000 XML XML file structure XML data specification