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:

```
<StructureName>
  <AttributeName1> : ItemType
  <AttributeName2> : ItemType <EnumeratedTypeName>
  <AttributeName3> : ItemType, Length: MaximalSignCount, Type: TypeOfString
  <AttributeName4> : ItemType of ItemType_X [ X = EnumeratedTypeName ]
  <AttributeName5> : ItemType of ItemType_X [ X = 0 .. N ]
  <AttributeName6> : ItemType StructureNameWithDefinition
```

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 structures.

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 )
```

Related pages:

D2000 XML
XML file structure
XML data specification