

# Using a Natural Data Source

This function enables you to generate an XML document from a data definition held in a Natural local, global or parameter data area.

The following topics are covered:

- Select Natural Data Area
- Select Input Data Area
- Generate File with DTD Definition
- Generate a serializer for an XML document
- Generate a parser for an XML document
- Show Generation Report

See also:

- Using a Document Type Definition as Data Source
  - Setting up Specific Generation Options
  - PF-Key Assignments
- 

## Select Natural Data Area

This screen serves to select generation from a Natural Data Structure or a XML Schema or Document Type Definiton.

**Note:**

The entries shown in the dialogs below are default or example values.

```

15:03:24          ***** NATURAL XML Toolkit - Page 1 of 7 *****          2007-01-16
                  - Main Menu -                                          Library SYSXTK

Code  Function
  L   Generate from Natural Data Structure
  X   Generate from XML Schema or Document Type Definiton
  O   Set up Specific Generation Options

Function Code X

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  LDA   XSD                                     Optio   Canc

```

## Field Descriptions

Library

<b>Belongs to Group:</b>	Select Input Data Area
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All libraries)

Type

<b>Belongs to Group:</b>	Select Input Data Area
<b>Format/Length:</b>	A1
<b>Possible Values:</b>	<b>L</b> - Generate from Natural Data Structure <b>X</b> - Generate from XML Schema or Document Type Definiton <b>O</b> - Set up Specific Generation Options

Name

<b>Belongs to Group:</b>	Select Input Data Area
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All objects of the selected library and type)

Press PF8 to continue.

## Select Input Data Area

This screen is used to select the data type.

```

15:04:59          ***** NATURAL XML Toolkit - Page 2 of 7 *****          2007-01-16
                  - Generate from Natural Data Structure -          Library SYSXTK

Select Input Data Area for Generation
Library:  Type: Name:
SYSXTK   A

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit                               Next                               Canc

```

<b>Format:</b>	A1
<b>Default Value:</b>	(All groups on Level 1)

Mark the desired element, e.g. EMPLOYEE with an **X** and press ENTER .

Press PF8 to continue.

## Generate File with DTD Definition

This screen serves to generate a file with the DTD definition of a given group.

```

15:05:54          ***** NATURAL XML Toolkit - Page 3 of 7 *****      2007-01-16
                  - Generate from Natural Data Structure - Library SYSXTK

Read Data Area for generation.

Select Output File for DTD
Library:  ResType: ResName:
SYSXTK   DTD      empl.dtd

Read Data Area for generation.
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
        Help  Flip  Exit                               Prev  Next                               Canc

```

Press PF8 to continue.

## Generate a serializer for an XML document

This screen serves to select the output source for serializer.

```

15:06:28          ***** NATURAL XML Toolkit - Page 4 of 7 *****      2007-01-16
                  - Generate from Natural Data Structure - Library SYSXTK

Read Data Area for generation.

Select Output Source for Serializer
Library:  Type: Name:
SYSXTK   N

Generate DTD file.
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
        Help      Exit                               Prev  Next                               Canc

```

**Format/Length:**

A253

Press PF8 to continue.

## Generate a parser for an XML document

This screen is used to generate copycode as implementation for the serialization of the given group into an XML document.

```

15:07:08          ***** NATURAL XML Toolkit - Page 5 of 7 *****          2007-01-16
                  - Generate from Natural Data Structure -          Library SYSXTK

Read Data Area for generation.

Select Output Source for Parser
Library:  Type: Name:
SYSXTK   N

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help       Exit                Prev  Next                Canc

```

### Field Descriptions

Library

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All libraries)

Type

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A21
<b>Default Value:</b>	Copycode

Name

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All objects of the selected library and type)

Press PF8 to continue.

## Show Generation Report

After the generation is complete, the generation report is displayed.

```

15:11:31          ***** NATURAL XML Toolkit - Page 6 of 7 *****          2007-01-16
                  - Generate from Natural Data Structure -          Library SYSXTK

Generation Report

Read Natural Data Area for generation. Natural Object:
Library ..: SYSXTK Type ..: A Object ...: LDA
Group ....:
RESULT ...: No group defined on level 1 found.

Generate DTD/XSD data structure. DTD/XSD file:
Library ..: SYSXTK Type ..: DTD Name ..: empl.dtd

Generate serializer. Natural Object:
Library ..: LDA Type ..: N Source ...: TEST

Generate parser. Natural Object:
Library ..: LDA Type ..: N Source ...: TEST

Generation done.

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Prev      Finis      Canc
  
```

### Field Descriptions

Library

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All libraries)

Type

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A1
<b>Default Value:</b>	C - Copycode

Name

<b>Belongs to Group:</b>	Select Output Copycode
<b>Format/Length:</b>	A8
<b>Default Value:</b>	(All objects of the selected library and type)

Press PF9 **Finis**(h) to end the generation process.