Description of the SAP Interface

The interface generated to the connector follows the SAP ABAP conventions. All specifications described below are generated to the SAP connector automatically, though you can create them manually if needed.
Each SAP ABAP function has four parameter sections:

- import (input)
- export (output)
- changing (input/output)
- tables (input/output)

These parameters are mapped to the input and output parameters of the SAP adapter:

Name	Type	Direction	Description
connectionString	**String**	in	Supplies the connection string (optional).
import	**Any**	in	The class specifying the type of this parameter must have stereotype **SAP Parameters**. The attributes and associations of this class correspond to the parameters given by the **import** section of the ABAP function declaration.
export	**Any**	out	The class specifying the type of this parameter must have stereotype **SAP Parameters**. The attributes and associations of this class correspond to the parameters given by the **export** section of the ABAP function declaration (see the export parameters in SAP).
changing	**Any**	in/out	The class specifying the type of this parameter must have stereotype **SAP Parameters**. The attributes and associations of this class correspond to the parameters given by the **changing** section of the ABAP function declaration
tables	**Any**	in/out	The class specifying the type of this parameter must have stereotype **SAP Tables**. The attributes and associations of this class correspond to the parameters given the **tables** section of the ABAP function declaration.

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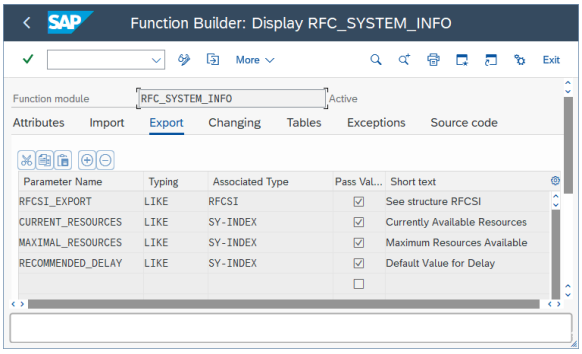
SAP Parameters

You need dedicated classes describing the interface of the RFC and the parameters. When calling for example the **RFC_SYSTEM_INFO** function, we need a set of **export** (output) parameters defined as properties on a dedicated class **Export**.



To specify the type mapping (see also SAP - ABAP Types Mappings), each property needs to have the stereotypes **SAPIDocAttribute** and **XMLElement**, that can have the following stereotype attributes:

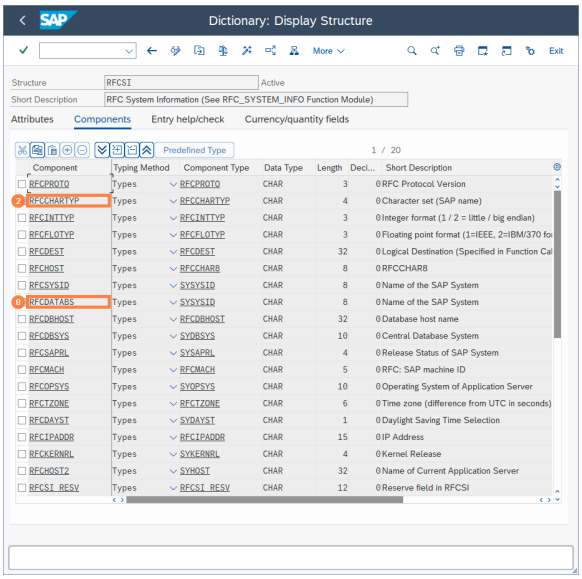
Attribute	Description	Mandatory
nativeType	Specify the native ABAP type. For allowed types and valid internal /native type combinations see appendix beneath.	mandatory
internalLength	Specify the parameter length as given in the ABAP dictionary (except for FLT, INT, DATS, TIMS).	mandatory
decimals	Specify the number of decimals if there are any.	mandatory for native type DEC

In any case, the upper multiplicity of the properties or associations must NOT be greater than one. Otherwise, the classes cannot be mapped to SAP parameters and SAP tables should be used instead.

So, for the RFC_SYSTEM_INFO example, the structure would look like the following:

RFC_SYSTEM_INFO Example			Stereotype	Stereotype Attributes
SAP				
	Interfaces			
		RFCPort_RFC_SYSTEM_INFO	**SAPRFCModuleInterface**	
		RFC_SYSTEM_INFO	**SOAPRPCOperation**	
		out export : **Export**		
	Types			
		Export	**SAPParameters**	
		CURRENT_RESOURCES : Integer		
		MAXIMAL_RESOURCES : Integer		
		RECOMMENDED_DELAY : Integer		
		RFCSI_EXPORT : **RFCSI**		
		RFCSI	**SAPStructure**	
		RFCCHARTYPE : String	**SAPIDocAttribute**	• nativeType = CHAR • internalLenght = 4
			XMLElement	• order = 2
		RFCDATABS : String	**SAPIDocAttribute**	• nativeType = CHAR • internalLenght = 8
			XMLElement	• order = 8
		...	...	...

The listed **order** attribute of the property derives from the order in the SAP data structure RFCSI.



The SAP types yet supported are listed on Native SAP - ABAP - xUML Base Type Mappings. Each SAP native type is mapped to an xUML base type. Because SAP types are sometimes restricted in their length and number of decimals, use stereotype attributes to transport this meta information as shown ion the table above.
For details on the native type definitions, refer to the SAP documentation.