

webMethods EntireX

EntireX Administration under IBM i

Version 10.5

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This document applies to webMethods EntireX Version 10.5 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 About this Documentation

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <code>folder.subfolder.service</code> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the symbol.
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

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- Subscribe to early warnings and critical alerts.
- Open and update support incidents.
- Add product feature requests.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

2 EntireX Administration under IBM i

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Note: The EntireX RPC Server for IBM i of EntireX version 7.1.1 running under IBM i (AS/400) is no longer supported. We strongly recommend using the new *RPC Server for AS/400* or the EntireX Adapter. See also *Connection Parameters for AS/400 Connections*.

Tracing for Broker Stubs under IBM i

To request a log file from the Broker stub, the environment variable `ETB_STUBLOG` must be set. The value of this variable defines how detailed the log will be.

The following table describes the trace values for `ETB_STUBLOG`:

Trace Value	Trace Level	Description
0	NONE	No tracing.
1	STANDARD	Traces initialization, errors, and all ACI request/reply strings.
2	ADVANCED	Used primarily by system engineers, traces everything from level 1 and provides additional information - for example the Broker ACI control block - as well as transport information.
3	SUPPORT	This is full tracing through the stub, including detailed traces of control blocks, message information, etc.

> To evaluate error conditions

- 1 Set the environment variable: run the program `EXASETENV` or use the command:

```
ADDENVVAR ENVVAR(ETB_STUBLOG) VALUE(3)
```

To change the value of the variable, use the command `WRKENVVAR` or change and recompile the source file in `EXASRC`.

- 2 Rerun the example programs.

The member names in the file `LOG` are created with the prefix `ETB` and the six-digit process ID (`ETBpppppp`).



Note: The file will be overwritten if you restart your application in the same session.

Natural RPC Server Configuration for the IDL Extractor for Natural

This section describes how to configure the Natural RPC Server when using the IDL Extractor for Natural.

- [Natural Steplib Configuration](#)
- [Natural RPC Server Configuration when Natural Security is not used](#)
- [Natural RPC Server Configuration when Natural Security is used](#)
- [Natural RPC Server Parameter Configuration](#)



Note: Natural Wrapper is not supported under IBM i.

Natural Steplib Configuration

The Natural IDL Generator server library SYSIDL relies on the following Natural system libraries to function correctly:

Library	Function
SYSIDL	IDL Extractor for Natural server library
SYSRPC	Natural RPC system library
SYSEXT	Natural interface library
SYSLIBS	Natural system library

Depending on whether the Natural RPC Server is used in a Natural Security environment or not, steplibs are defined differently.

Natural RPC Server Configuration when Natural Security is not used

Defining Steplibs when Natural Security is not used

» To define Steplibs

- Specify the required steplibs in the Natural parameter module used for the Natural RPC Server. See *Profile Parameters* in the Natural documentation.

Installation Notes when Natural Security is not used

- If your Natural user applications supported by the Natural RPC Server need more than four steplibs, a separate Natural RPC Server instance must be set up for Natural IDL generation only. You cannot use Natural IDL generation from the same Natural RPC Server instance on which your Natural user application is running. Please remember that Natural supports a maximum of eight steplibs.

Natural RPC Server Configuration when Natural Security is used

Defining Steplibs when Natural Security is used

In a Natural Security environment, the required steplibs must be defined in the library profile of:

- the IDL Extractor for Natural server library SYSIDL
- every user library from which Natural IDL generation is to be performed (see [installation note 1](#) below).

Natural Security Definitions

In a Natural Security environment, clients using the IDL Extractor for Natural need to be defined in Natural Security with access to

- the library SYSIDL
- all libraries from which IDL generation has to be performed

Installation Notes when Natural Security is used

1. If your Natural user applications supported by the Natural RPC Server need more than four steplibs, a separate Natural Security file FSEC and Natural RPC Server instance must be set up for Natural IDL generation only. You cannot use the same Natural Security file FSEC and Natural RPC Server instance on which your Natural user application is running.
2. You cannot use the `STACK` parameter to set steplibs if Natural Security is used.
3. Under Natural Security, start the Natural RPC Server with `LOGONRQ=ON`. If this setting conflicts with your Natural user applications, we recommended setting up a separate Natural RPC Server instance for IDL Generation.

Natural RPC Server Parameter Configuration

Basically all parameters valid for Natural and Natural RPC Server are valid for use with the IDL Extractor for Natural server library SYSIDL.

The most important Natural RPC Server parameters to be set are:

Parameter	Optional/Required	Explanation and Notes
SRVNODE=<value>	Required	The Broker ID.
SRVNAME=<value>	Required	The server name as defined under SERVER under <i>Broker Attributes</i> .
TIMEOUT=55	Optional	Wait timeout for the Natural RPC Server. The default value 55 is suitable for most installations. It can be adapted if necessary.
LOGONRQ=ON	Required to be ON if Natural Security is used.	Forces clients to log on to Natural libraries.
MADIO=0	Required	No limit on DB Calls.
MAXCL=0	Required	No limit on PGM Calls.
YSLW=1979	Optional, but recommended to be set.	<p>The century of save and compile (catalog) dates of Natural objects may be displayed incorrectly if you do not set a Year Sliding or Fixed Window. We suggest setting a fixed window starting from 1979 on. This ensures a correct century in the range 1979 (first release of Natural programs) up to the year 2078. If this window setting conflicts with your application requirements, consider</p> <ul style="list-style-type: none"> ■ using a separate RPC server for the server library SYSIDL. ■ using other YSLW settings which may also solve the problem. See your Natural documentation for more information. <p>Displaying an incorrect century does not have any impact on IDL generation - only the timestamp in the browse dialogs will be incorrect.</p>

You will find the above parameters in your NATPARM module or you can set them dynamically.

See your Natural documentation for more information.

Related Literature

- *Installing EntireX under IBM i*
- *EntireX RPC Server Return Codes*
- *Using the C Wrapper*

- *Using the COBOL Wrapper*
- *Using EntireX RPC for RPG under IBM i*
- *Using EntireX RPC for CL under IBM i*