

Configuring the Natural Web Interface

This section provides information needed to configure the Natural Web Interface. If you are not familiar with a specific product, refer to the corresponding product documentation for more information.

This section covers the following topics:

- Supported HTTP Servers
- Configuring RPC and RPC Server
- Configuring the Web Interface
- Configuring an HTTP Server
- Communication with Natural Security
- Troubleshooting

The latest documentation updates are published in ServLine24: <http://servline24.softwareag.com>. Click to [Product Documentation > Recently Added Documentation](#) and select the item from the selection box.

Supported HTTP Servers

Operating System	HTTP Server
Windows (Intel)	<ul style="list-style-type: none"> ● Microsoft Internet Information Server Version 4.0 ● Netscape FastTrack Server Version 3.0 ● Apache Version 1.3
UNIX (*)	<ul style="list-style-type: none"> ● Netscape FastTrack Server Version 3.0 ● Apache Version 1.3
OS/390 Unix System Services	<ul style="list-style-type: none"> ● IBM Websphere Application Server for OS/390 2.10 and z/OS 1.2, 1.3 or 1.4.

Configuring RPC and RPC Server

In the following configuration description, ETB255 is the name of a Broker and NATWEB1 the name of an RPC Server used for the examples.

For the installation and configuration, refer to the Natural RPC, Entire Net-Work, and Entire Broker documentation.

The following topics are documented below:

- Current Version of Natural for Mainframes/UNIX/Windows
- EntireX / Entire Broker SDK

Current Version of Natural for Mainframes/UNIX/Windows

On Windows and UNIX Systems

To change your NATPARM file so that two additional steplib can be accessed in the RPC environment:

- In the section **Environment Assignments**, add the two steplib SYSWEB and SYSEXT to the steplib parameter subsection.

In an OS/390 Unix System Services Environment

If Natural Security is installed:

- Define the steplibs SYSWEB and SYSEXT for your library.

If Natural Security is **not** installed:

- Modify the Natural program WEB-STLB in library SYSWEB by entering the DBID and file number of the associated FNAT system file of the libraries SYSWEB and SYSEXT. In case of need, you can add additional steplibs.
- STOW the program.
- The STACK parameter for your RPC server should have the following value:
STACK=(LOGON SYSWEB;WEB-STLB)

EntireX / ENTIRE Broker SDK

On Windows Systems

Setting the environment variables is not required.

On UNIX (All Platforms)

All EntireX-relevant environment variables must be passed by the HTTP server.

Configuring the Web Interface

Natural Web Interface

For mainframe, Windows and UNIX environments no configuration is needed.

Natural Web Server Extensions for RPC

Adjust the configuration file using an external editor:

```
RPC_ETB_ID_NAME=ETB255  
RPC_SERVER_NAME=NATWEB1
```

In an OS/390 Unix System Services Environment

The parameter NWW_OUT_CSS_TRANSLATE must be set in the Configuration File. Its value depends on the codepage used.

Natural Web Server Extensions for DCOM

Local DCOM (All Platforms)

No adjustments are needed for local communication.

External DCOM (All Platforms)

For external communication, see the NaturalX documentation for Registry changes, or adjust the configuration file using an external editor:

DCOM_SERVER_NAME=NATWEBEXT

On Windows (Internet Information Server)

If you use the Internet Information Server, the username for anonymous logon, e.g. NATWEB, is used. NATWEB must belong to the group USER, or the GUEST account must be enabled.

On Windows (Apache)

If you use the Apache Server, the default settings for User/Group specified at httpd.conf work fine:

```
# User/Group: The name (or #number) of the user/group to run httpd as User nobody
Group #-1
```

On Windows (Netscape Server)

If you use the Netscape Server, for anonymous logon, the SYSTEM account is used.

To use DCOM with remote access, a specific user, e.g. NATWEB, must be used to run the HTTP server. This user must belong to the group USER and be defined on both computers.

Run Services from the Windows Control Panel to change the Logon for your HTTP Server service:

- Select Netscape Server Service > Startup...
- Log On As: yes
- Userid: NATWEB
- Password: **
- Confirm Password: **

Natural Web Server Extensions for NSAPI

Using an RPC Server

1. Install the Natural Web Server Extensions
2. Open the ...\\config\\mime.types file of the HTTP Server and add the **new line** at the end of the file:

```
type=magnus-internal/nww      exts=nww
```

3. Open the ...\\config\\obj.conf file of the HTTP Server and add the following **new lines** for the RPC Interface:

```
...
Init...
Init funcs="nww-nsapi,nww-init" fn="load-modules" shlib="nwwnsapi.dll"
Init fn="nww-init" file="<yourRoot>/nww/nsapi.ini
...
<Object name="default">
NameTrans...
NameTrans from="/nww" fn="pfx2dir" dir=" <yourRoot>/nww" name="nww"
...
Service... method=...
Service fn="nww-nsapi" method="(GET|POST|HEAD)" type=" magnus-internal/nww"
...
</Object>...
<Object name="nww">
ObjectType fn="force-type" type="magnus-internal/nww"
Service fn="nww-nsapi"
```

```
</Object>
```

```
...
```

4. If not only one service or broker is to be used, specify other files at the /nww directory.
5. If a static read of the .ini file is wanted (performance-relevant), add the *line shown in italics* to your obj.conf.

Using a DCOM Server

1. Install the Natural Web Server Extensions.
2. Open the ...\\config\\mime.types file of the HTTP Server.
3. Add the **new line** at the end of the file:


```
type=magnus-internal/nww      exts=nww
type=magnus-internal/nwwd    exts=nwwd
```
4. Open the ...\\config\\obj.conf file of the HTTP Server.
5. Add the following **new lines** for DCOM:

```
...
```

```
Init...
```

```
Init funcs="nwwd-nsapi,nwwd-init" fn="load-modules" shlib="nwwdnsapi.dll"
```

```
Init fn="nwwd-init" file="<yourRoot>/nwwd/nsapi.ini"
```

```
...
```

```
<Object name="default">
```

```
NameTrans...
```

```
NameTrans from="/nwwd" fn="pfx2dir" dir=" <yourRoot>/nwwd" name="nwwd"
```

```
...
```

```
Service... method=...
```

```
Service fn="nwwd-nsapi" method="(GET|POST|HEAD)" type="
```

```
magnus-internal/dnww"
```

```
...
```

```
</Object>...
```

```
<Object name="nwwd">
```

```
ObjectType fn="force-type" type="magnus-internal/nwwd"
```

```
Service fn="nwwd-nsapi"
```

```
</Object>
```

```
...
```

6. If not only one service or broker is to be used, specify other files at the /nwwd directory.
7. If a static read of the .ini file is wanted (performance-relevant), add the *line shown in italics* to your obj.conf.

Configuring an HTTP Server

Windows (Internet Information Server 4.0)

If you use the Internet Information Server, the username for anonymous logon, e.g. |USR_NATWEB, is used.

|USR_NATWEB must belong to the group USER, or the GUEST account must be enabled.

Communication with Natural Security

The new version EntireX Broker SDK supports the usage of two passwords and userids.

The first userid is used to get access through EntireX Security and the second for Natural Security.

The HTTP Server Security is involved as a third security system.

HTTP Server Security:

Restrict the access of the NWW interface at your HTTP Server. For details, refer to your HTTP server documentation.

EntireX Security:

In the configuration File the NWW_USER_ID, NWW_PASSWORD has to be specified.

Natural Security:

A second UserId/Password (RPC_USER_ID, RPC_PASSWORD) has to be set.

If the parameter USE_REMOTE_USER is activated, the RPC_USER_ID will be set/overwritten. The RPC_PASSWORD remains unchanged.

It is necessary to setup Natural Security with "AUTO=ON" to pass security without Password. If no RPC_USER_ID/RPC_PASSWORD pair is set, the NWW_USER_ID/NWW_PASSWORD will be used to ensure the compatibility with the existing implementation.