

Activating the Natural Development Server on UNIX

When a Natural Development Server is used, a procedure to activate the server may be called during system startup.

The Natural installation process provides a Natural Development Server start/stop service procedure. The name of the procedure will be generated depending on the `$SAG` directory and the Natural Development Server version.

Furthermore, the Natural installation process determines the platform automatically and prepares the system (V style or AIX) to execute the start/stop service procedure during start/stop of the system. Depending on the platform, the system directory for initialization and, if needed, the runlevel startup directories will be selected. The start/stop service procedure will be copied to the system directory for initialization and links will be created in the runlevel startup directories.

The Natural installation process installs the Natural Development Server start/stop service as an optional feature. You can also set up this service manually as described below.

This chapter covers the following topics:

- Preparing the System V Style Startup Procedure
- Preparing the AIX Startup Procedure
- Sample of a Natural Development Server Start/Stop Procedure

To verify the operation of the Natural Development Server, invoke a Natural for Windows and connect to the system on which the servers runs. Use the port specified at start of the Natural Development Server.

Preparing the System V Style Startup Procedure

The procedure template `natdvsrv.tpl` in the `$NATDIR/$NATVERS/INSTALL` directory may be used to create a script which is used to invoke the Natural Development Server during system startup.

The following table shows where the `init.d` and `rc3.d` directories are located on the various platforms. In the following description, `init.d` or `rc3.d` stand for the relevant path indicated below for the platform you are using.

Platform	System Directory for Initialization	Runlevel Startup Directory
Solaris	<code>/etc/init.d</code>	<code>/etc/rc3.d</code>
HP-UX	<code>/sbin/init.d</code>	<code>/sbin/rc3.d</code>
Linux	<code>/etc/init.d</code>	<code>/etc/init.d/rc3.d</code> or <code>/etc/init.d/rc5.d</code>

A sample copy of the Natural Development Server start/stop procedure is shown below. It can be edited with a text editor.

To set up the system, proceed as described below:

1. Log in as user "root".
2. Copy the template *natdvsrv.tpl* to the *init.d* system directory and rename it, for example to *sagIndv22srv*.
3. If already available, create a backup copy of your current *sagIndv22srv* file contained in the *init.d* directory (see the above table).
4. Set the following environment variables in the *sagIndv22srv* procedure:

NATDIR	Location where Natural was installed.
NATVERS	Natural version number.
NATADM	The login name of the Natural system administrator responsible for this Natural Development Server. It is assumed that this administrator account is called "sag", and that the user ID is already known to the system. It does not have to be a user with root privileges.

Note:

The Bourne shell does not allow blanks before and after the equals sign in the lines to be customized.

5. Create a link "S99sagIndv22srv" to the *sagIndv22srv* procedure in the *rc3.d* directory.

You may create a link to the Natural Development Server start/stop procedure in the runlevel 3 startup directory of your UNIX machine. The *rc3.d* directory contains several Bourne shell scripts or links to Bourne shell scripts that start with "S" followed by a number, for example "99". A lower number will be executed first. If you add a file or a link to this directory, the respective code is executed when the system changes to "multi-user mode".

Make sure that the Natural Development Server is started after the buffer pool and is stopped before the buffer pool.

Preparing the AIX Startup Procedure

The procedure template *natdvsrv.tpl* in the *\$NATDIR/\$NATVERS/INSTALL* directory may be used to create a script which is used to invoke the Natural Development Server during system startup.

To set up the system, proceed as described below:

1. Log in as user "root".
2. Copy the template *natdvsrv.tpl* to the *etc* system directory and rename it, for example to *sagIndv22srv*.
3. Set the following environment variables in the *sagIndv22srv* procedure:

NATDIR	Location where Natural was installed.
NATVERS	Natural version number.
NATADM	The login name of the Natural system administrator responsible for this Natural Development Server. It is assumed that this administrator account is called "sag", and that the user ID is already known to the system. It does not have to be a user with root privileges.

Note:

The Bourne shell does not allow blanks before and after the equals sign in the lines to be customized.

- The */etc/inittab* file supplies the script to the init command's role as a general process dispatcher. Therefore, enter a record with the *sagIndv22srv* script in the */etc/inittab* file using the *mkitab* command. For example:

```
mkitab "sag1ndv22srv:3:wait:/etc/sag1ndv22srv > dev/console"
```

- Verify your changes to make sure that the changes made consist only of those changes desired.

Sample of a Natural Development Server Start/Stop Procedure

```
#!/bin/sh
#
# Copyright (c) 2007 Software AG, Germany. All rights reserved.
#
# Start/stop script for Natural Development Server
#
#=====

if [ ! -r "/SAG/ada/v51103/INSTALL/adaenv" ] ; then
    echo "$0: Adaenv not found!"
    exit 1
else
    adaenv="/SAG/ada/v51103/INSTALL/adaenv > /dev/null"
fi

if [ ! -r /SAG/nat/v6320/INSTALL/natenv ] ; then
    echo "$0: Natenv not found!"
    exit 1
else
    natenv="/SAG/nat/v6320/INSTALL/natenv > /dev/null"
fi

NATDIR=/usr/SAG/nat      # customize
NATVERS=v6320          # customize
NATADM=sag              # customize

PORT=pnum               # customize
PARAM=NDVPARAM         # customize

export NATDIR NATVERS PORT PARAM
#
```

```

#-----
#
natdvsrv=${NATDIR}/${NATVERS}/bin/natdvsrv

if [ "${LOGNAME}" = "" ]; then
    LOGNAME=root
    HOME=/
    export LOGNAME HOME
    UNDO=1
else
    UNDO=0
fi

case "$1" in
    start)
        echo "Starting Natural Development Server ..."
        if [ -x "${natdvsrv}" ]; then
            su ${NATADM} -c ". ${adaenv} \
                && . ${natenv} \
                && ${natdvsrv} -port=${PORT} parm=${PARM}"
        else
            exit 1
        fi
        echo "done..."
        ;;
    stop)
        echo "Stopping Natural Development Server ..."
        if [ -x "${natdvsrv}" ]; then
            su ${NATADM} -c ". ${adaenv} \
                && . ${natenv} \
                && ${natdvsrv} -terminate=${PORT}"
        else
            exit 1
        fi
        echo "done..."
        ;;
    *)
        echo "Usage: $0 {start|stop}"
        exit 1
        ;;
esac

if [ ${UNDO} ]; then
    unset LOGNAME HOME
fi
unset UNDO
#
#=====
#

```