

Overview

This guide explains the various companions tools provided with the gateway.

Here is a summary of the tools provided with the gateway:

Tool name	Description
Properties File Editor	Allow to set or modify a property in a “.properties” file. For example, the properties editor can be used to set or modify the gateway application properties file (\$INSTALLDIR/config/gw.properties)
Sangoma Board Detector	List all Sangoma boards installed in the system.
Configuration Backup Tool	Allow to backup and to restore gateway configuration.

Notes

- \$INSTALLDIR is used in this document to refer to the installation directory of the gateway application.
 - Under Windows the default installation directory is:
“C:\Program Files\Netborder\Express\Gateway”
 - Under Linux the default installation directory is:
“/opt/Netborder/Express/Gateway”
- All applications mentioned in this guide are command line applications installed under the \$INSTALLDIR/bin folder.
- All applications depends on shared libraries that are located under the \$INSTALLDIR/bin folder under Windows and under the \$INSTALLDIR/lib folder under Linux. To successfully run any of theses applications under Linux you must have to set the LD_LIBRARY_PATH environment variable to contains the \$INSTALLDIR/lib folder. For example if the \$INSTALLDIR is /opt/Netborder/Express/Gateway you must set the variable as follow:

```
export LD_LIBRARY_PATH=/opt/Netborder/Express/Gateway/lib:LD_LIBRARY_PATH
```

Tools and pre-Requisites

1. Installed version of **NetBorder Express**
2. Installed **Sangoma boards and device drivers**
3. **Gateway Manager Quick setup** shall have been run

Properties File Editor

Overview

The main goal of this command line application is to provide a mean for OEM integrators to set and modify properties files from their own application.

The application first loads one or more input properties file. Optionally, the tool can also read a parameter database (-p option) that contains definitions for all allowable properties for a given application e.g. the gateway. The parameter definition consist of a description, a property type and other parameter attributes. When a parameter database is supplied, it will be used to validate the input properties for their existence and type. Furthermore, the parameter database is used to add parameter documentation in the output properties file.

There are 3 ways to have the tool execute property edition commands. The first one is to pass a semicolon list of commands using the -c option (cmd1;cmd2;...). The second way (-f option) is to pass a file of containing commands (one per line) to executes. The last way (-c/-f options not used) is to have the tool read it's commands from standard input, either interactively or through a pipe.

You can also use this application to consolidate multiple properties files in one file when you specify multiple input properties files to the application.

Note, the editor parses the command like to a UNIX shell where the command and arguments are delimited by a space character. For example, the command line "save a.properties" will be parsed as the command "save" to file "a.properties" If you need to pass an argument containing one or more space characters,put this argument between double quotes (example: "argument with space"). If this argument also contains double quotes, escape the double quote with a back slash (example: "argument with space and \"double quotes\""). Similarly if you need to pass and argument containing back slash (\) such as a file Windows file path, you have to double the back slash characters (example: c:\\tmp\\myfile.properties).

Usage

netborder-properties-editor [options] input-props-file1 input-props-file2 ...

Allowed options:

-h [--help]	Produce help message
-p [--param-db] arg	Parameter info database (XML format).
-o [--output-properties-file] arg	Output properties file containing the modifications made by the editor.
-c [--command] arg	A string that is a semicolon delimited list of editor commands. When this option is specified, the application runs the specified commands and returns immediately. When this option is not specified, the tool enters interactive mode. The interactive mode can be used by users who wish to pipe their commands (one per line) to the tool's standard input.
-f [--file] arg	A file containing commands (one per line) to execute. A line starting with # is a comment line.

Input-props-files<1,2,...> specifies the properties file(s) to be used by the properties editor.

Return codes

The application return 0 on success and a positive value if the application failed to perform any of the follow actions:

- open the parameter database file
- open an input file
- open the output file
- execute one or mode commands
- save the output file

Properties database file

The parameter database is a XML file containing all properties that could be used by the application.

The gateway properties database file is located in the **\$INSTALLDIR/config** folder (example: “C:\Program Files\Netborder\Express\Gateway\config”) and the file name is **netborder-gateway-paramDefs.xml** file.

IMPORTANT: Don't edit the parameter database file.

List of supported commands

help [command]	List supported commands or display help for a specific command.
ls [regex]	Only available if the parameter database was supplied. List the name of all properties defined in the parameter database whose name matches regex (if supplied).
get [regex]	List the name and value of all properties of the current configuration whose name matches regex (if supplied).
set <param-name> <param-value>	Set the property named <param-name> to <param-value>.
or	Examples:
<param-name>=<param-value>	<ul style="list-style-type: none">• set a b• a=b
add-defaults	Only available if the parameter database was supplied. This command sets the value of all parameters that are not currently set to their default value if a default value is specified in the parameter database.
save <filename>	Saves the current configuration to <filename>.
quit	Save configuration to the output properties file (if specified) and quit the application. Save occurs only if configuration was modified and not saved with the save command.

Example

This example shows how to invoke the properties editor in order to edit the file gw.properties using the \$INSTALLDIR/config/netborder-gateway-paramDefs.xml parameter database to modify the parameter "netborder.media.rtp.rfc2833Supported" to "true".

In command shell (for example cmd.exe under Windows) do:

1. Set the working directory to \$INSTALLDIR/bin.

```
cd "C:\Program Files\Netborder\Express\Gateway\bin"
```

2. Type the following command to run the properties editor:

```
netborder-properties-editor -p ../config/netborder-gateway-paramDefs.xml -c "set  
netborder.media.rtp.rfc2833Supported true;save ../config/gw.properties" ../config/gw.properties
```

Sangoma Board Detector

Overview

This application outputs a list of all Sangoma boards and interfaces installed in the system.

Usage

netborder-list-boards [options]

Allowed options:

- | | |
|-------------------------------|---|
| -h [--help] | Produce help message |
| -o [--output-file-name] arg | The name of the file where to output the list of boards and interfaces installed in the system. When this option is not used, the results will be produced to standard out. |

Return codes

The application returns 0 on success and a positive value if the application failed to perform any of the following actions:

- open the output file

Output format

The application outputs the list of boards and interfaces using a **XML syntax** described by the **Relax-NG XML schema** located in file `$INSTALLDIR/config/pstn-config.rng`.

Here is a sample output for a digital board with 4 T1/E1 interfaces:

```
<?xml version="1.0" encoding="UTF-8"?>
<pstnConfig version="2.3">
  <boards>
    <sangomaDigitalBoard ID="1" displayName="B1 - A104_digital" model="A104" pciSlot="0" pciBus="5">
      <interface ID="1" displayName="B1I1" wanpipe="1"/>
      <interface ID="2" displayName="B1I2" wanpipe="2"/>
      <interface ID="3" displayName="B1I3" wanpipe="3"/>
      <interface ID="4" displayName="B1I4" wanpipe="4"/>
    </sangomaDigitalBoard>
  </boards>
</pstnConfig>
```

Example 1

This example shows how to invoke board detector to output a list of boards and interfaces to the console.

In command shell (for example cmd.exe under Windows) do:

3. Set the working directory to \$INSTALLDIR/bin.

```
cd "C:\Program Files\Netborder\Express\Gateway\bin"
```

4. Type the following command to run the board detector:

```
netborder-list-boards
```

Example 2

This example shows how to invoke board detector to output a list of boards and interface to a file.

In command shell (for example cmd.exe under Windows) do:

5. Set the working directory to \$INSTALLDIR/bin.

```
cd "C:\Program Files\Netborder\Express\Gateway\bin"
```

6. Type the following command to run the board detector:

```
netborder-list-boards -o list-of-boards.xml
```

Configuration Backup Tool

Overview

This application allows to backup and restore gateway configuration via a command line tool. The customer could use this tool to periodically backup gateway configuration.

Usage

netborder-smart-update -e -o <output-dir> -a <archive-file-name> -c <config-dir> --app-install-dir <install-dir> --app-executable <path-netborder-gateway-exec> --global-config <properties-file>

netborder-smart-update -i -o <output-dir> -a <archive-file-name> --global-config <properties-file>

Allowed options:

-h [--help]	Produce help message
-o [--output-dir] arg	Folder where the resulting archive file will be saved in export mode and where the imported files will be copied in import mode..
-i [--import-mode]	Configure the application to run in the import mode (restore).
-e [--export-mode]	Configure the application to run in the export mode (backup).
-a [--archive-name] arg	Name of the configuration archive file. In export mode, default value is built as follow: <date>-<time>-<application_name>_<application_version>.zip.
-c [--config-path] arg	Path to the configuration folder to be archived.
--app-install-dir arg	Installation dir of the exporting application.
--app-executable arg	Name of the application exporting the configuration executable file.
--global-config arg	Adds configuration parameters to the application.

The tool can be used in two modes: export mode (-e) or import mode (-i). Only one mode at a time can be specified.

When used in export mode, the tool will zip the folder specified by the [--config-path] option. When [--archive-name] is specified, the name of the resulting zip file will be this name. Otherwise, the zip file name will have the format <currentDate>-<currentTime>_<applianceName>_<applicationVersion>.zip. The zip

file will be added to the folder specified by the [--output-dir] option. The tool will also invoke the application executable file specified by [--app-executable] (absolute path to executable) to get the brand, the sub_brand, the version of the application. Those elements, along with the value of [--app-install-dir], the application name and the platform (Linux or Microsoft) are added to export.txt file which is included in the zip file.

When used in import mode, the tool will start by extracting the archive file specified by [--archive-name]. Then, it will validate that the information contained in the export.txt file is valid on system where the tool is run. To do that, it tries to invoke the application name found in export.txt. When [--import-bin-path] is specified, this is where the application executable file should be located. Otherwise, it should be in Installation.Bin.Directory properties (found in the global config). Finally, it starts the update process.

Return codes

The application return 0 on success and a positive value if the application failed to perform the specified operation.

Export Mode Return Codes:

- 0 : export succeeded
- 200 : export application failure

Import Mode Return Codes:

- 0 : import process completed with success
- 100 : import application failure
- 101 : update succeeded, but some things require your attention
- 102 : invalid configuration archive file
- 103 : export information is missing from configuration archive
- 104 : configuration comes from a different platform (Linux or Microsoft)
- 105 : version of the configuration greater than the currently installed application version
- 106 : application currently installed version is more than one major version from the configuration being imported
- 107 : brand is not matching
- 108 : sub brand is not matching

Example 1

This example shows how to invoke the tool to backup the current gateway configuration in a subfolder **nbe-backups** of the home directory. The name of the archive is **myfirst-nbe-backup.zip**.

In command shell (for example bash under Linux) do:

1. Set the working directory to \$INSTALLDIR/bin.

```
cd /opt/Netborder/Express/Gateway/bin
```

2. Type the following command to run the backup tool:

```
./netborder-smart-update -e -o ~/nbe-backups -c /opt/Netborder/Express/Gateway/config -a myfirst-nbe-backup.zip --app-install-dir /opt/Netborder/Express/Gateway --app-executable  
/opt/Netborder/Express/Gateway/bin/netborder-gateway --global-config  
/opt/Netborder/Express/Gateway/config/smartUpdate.properties
```