Network Simulation Tool for Project 25: Inter-RF Subsystem Interface (ISSI) Server Installation Guide for OS X

September 30, 2011
GUI version 1.0.0

OS X Server

The installation of the ISSI-NST server tool in Mac OS X [1] [2] performs the copy of the server files to the target installation directory.

First of all, obtain the server installation package available at http://www.nist.gov/itl/antd/emntg/ps_p25_tool.cfm. This package will install the ISSI-NST server, the server configuration tool and the server documentation.

The installation of the ISSI-NST server requires Xcode [3] in the target system. The ISSI-NST server configuration tool requires a Java [4] Runtime Environment in the system, version 1.6 or higher. The documentation is provided in PDF format, therefore a PDF reader is required to access the documentation.

Open a terminal and run the package with '**`sh ISSI-NST_Server_setup_mac.bin`**'.

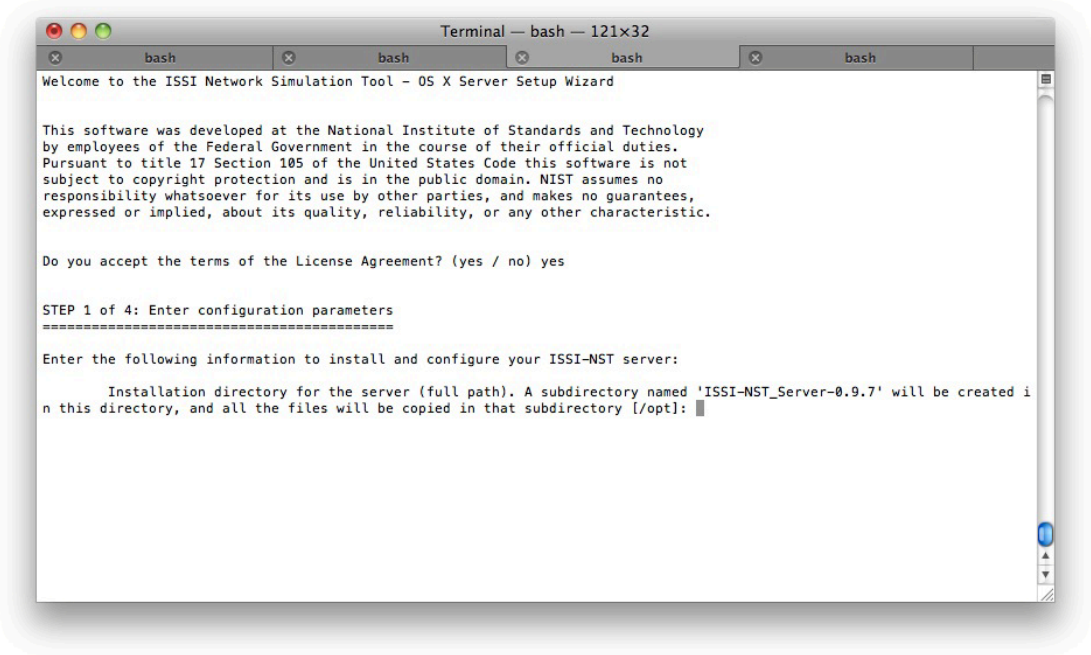
Note: You do not need to have administration privileges to perform the installation. However, you will need to have write permission in the target installation directory. You will need administration privileges to run the server if you intend to use ports lower than 1024.

Follow the instructions. The installer will present you the license and ask about several configuration parameters. For each parameter, the default value is enclosed within brackets. Entering an empty answer (e.g., pressing the ENTER key) will use the default value provided. The configuration parameters requested are the following:

- **Installation directory**: The directory in which the software will be installed. The user running the installation must have write permissions in this directory.

  If the target directory does not exist, the user must have the required permissions to create it. Otherwise the installation will show an error message and request a new path. If the target directory exists, the installation script will ask for confirmation to overwriting that directory (**WARNING**: Selecting 'yes' will delete all the contents of the target directory).

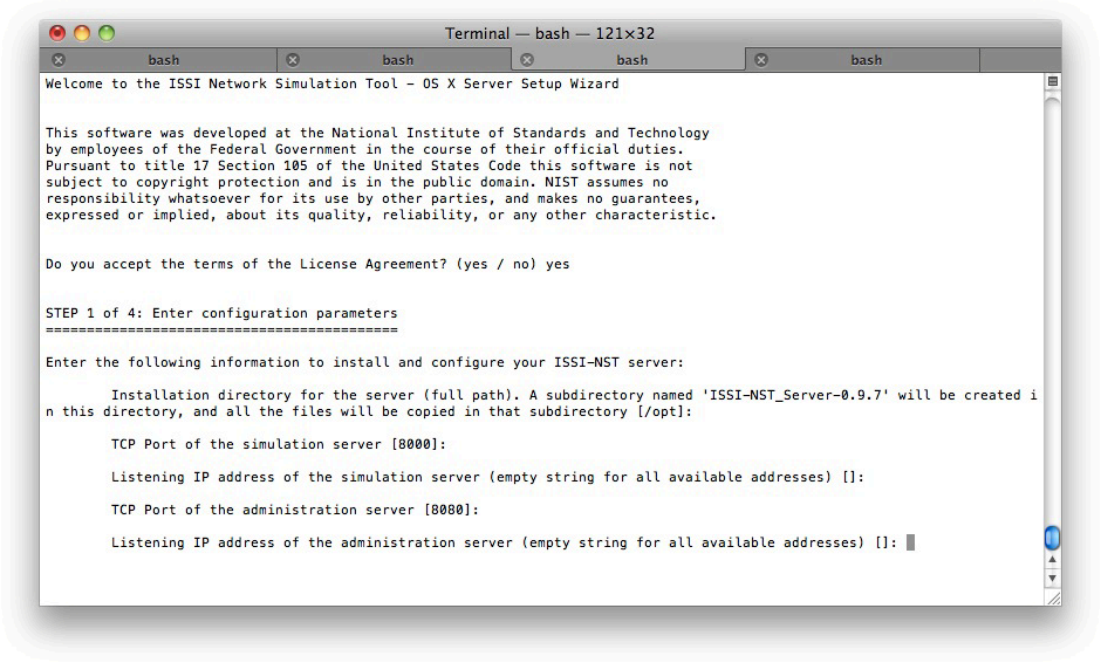
[1] Mac OS X is a registered trademark of Apple, Inc.
[2] Disclaimer: Any mention of commercial products is for information only; it does not imply recommendation or endorsement by the NIST.
[3] Xcode is a registered trademark of Apple, Inc.
[4] Java is a registered trademark of Sun Microsystems, Inc. or its subsidiaries in the United States and other countries.



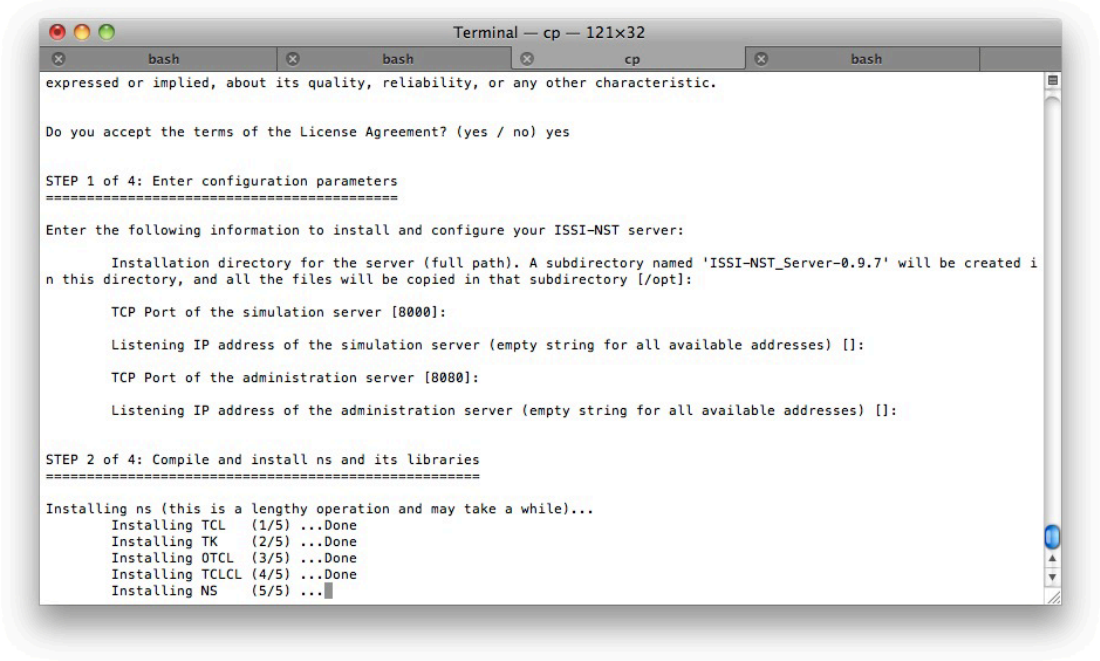
- **TCP port for the simulation server**: The TCP port in which this server will listen for the client requests.

  NOTE: Remember that you will need administrative privileges to start the application if you choose a port lower than 1024.
- **Listening IP address for the simulation server**: Network address in which the server will listen for client requests.
- **TCP port for the administration server**: The TCP port in which this server will listen for configuration updates.

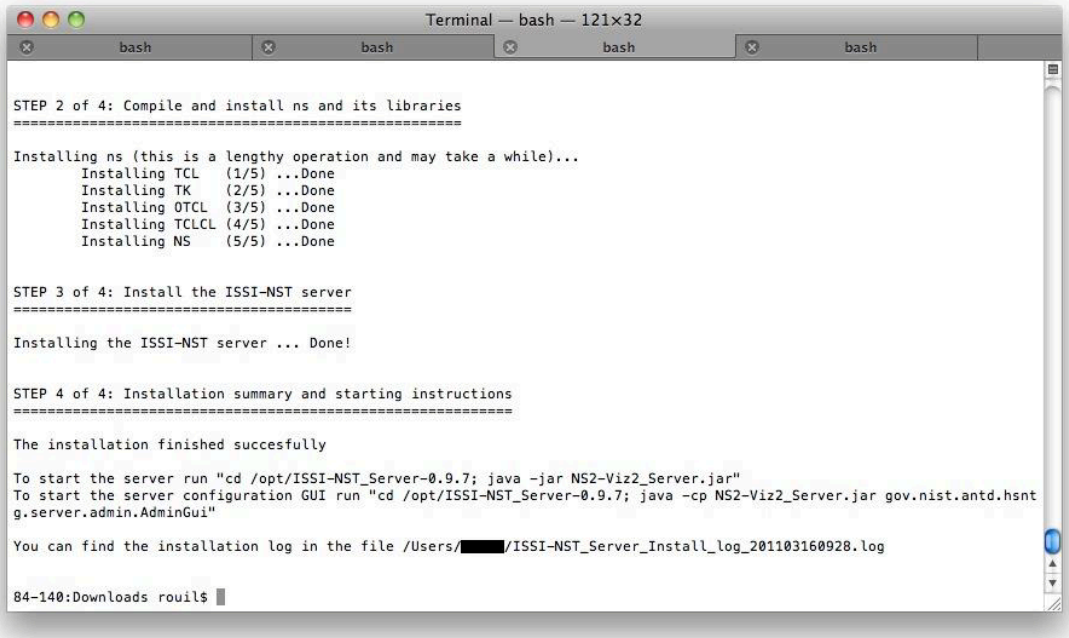
  NOTE: Remember that you will need administrative privileges to start the application if you choose a port lower than 1024.
- **Listening IP address for the administration server**: Network address in which the server will listen for configuration updates.



When all the configuration parameters have been introduced, the installation program will proceed to install the simulation model and its required libraries:



When the installation is over, the installer will present a summary of the installation, along with the commands to start the server, launch the server configuration GUI, and the path to the installation log file:



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STEP 2 of 4: Compile and install ns and its libraries
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Installing ns (this is a lengthy operation and may take a while)...
        Installing TCL   (1/5) ...Done
        Installing TK    (2/5) ...Done
        Installing OTCL  (3/5) ...Done
        Installing TCLCL (4/5) ...Done
        Installing NS    (5/5) ...Done


STEP 3 of 4: Install the ISSI-NST server
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Installing the ISSI-NST server ... Done!


STEP 4 of 4: Installation summary and starting instructions
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The installation finished succesfully

To start the server run "cd /opt/ISSI-NST_Server-0.9.7; java -jar NS2-Viz2_Server.jar"
To start the server configuration GUI run "cd /opt/ISSI-NST_Server-0.9.7; java -cp NS2-Viz2_Server.jar gov.nist.antd.hsnt
g.server.admin.AdminGui"

You can find the installation log in the file /Users/[redacted]/ISSI-NST_Server_Install_log_201103160928.log


84-140:Downloads rouil$
```

The basic configuration provided with the installation program creates a default user for the simulations (**user**: `user01`; **password**: `user01`) and another one for the configuration GUI (**user**: `admin`; **password**: `admin`). This configuration can be changed using the configuration GUI (refer to the documentation for further information).