

# **Net Components**

## ***Introduction***

Net components provides SmartFrog components for FTP, Telnet etc.

## ***How to build***

1. First build the SmartFrog framework by running ant dist in core/smartfrog
2. Build ant tasks by running ant in core/extras/ant
3. Build Logger by running ant in core/components/net
4. Step creates networkComponents.jar file in directory core/components/net/ build/dist/lib
5. Copy following jar files from core/components/net/ build/dist/lib to core/smartfrog/dist/lib or update class path for the SmartFrog daemon so that net classes are available at run time.
  1. Commons-net-1.2.0.jar
  2. networkComponents.jar

## ***Usage***

### **FTP Component**

The FTP component is deployed as a SmartFrog component. When deployed it will download or upload the specified files.

### **Attributes**

<b><i>Attribute Name</i></b>	<b><i>Description</i></b>	<b><i>Optional/Mandatory</i></b>
ftpHost	FTP host name	Mandatory
username	FTP User Name	Mandatory
transferType	Type of file transfer ( possible values "get"/"put")	Optional (Default is "get")
transferMode	Mode of file transfer	Optional (Default is "ascii")
localFiles	List of local files in the form of a vector. Fully qualified, comma separated file names.	Mandatory
remoteFiles	List of remote files corresponding to local files in the form of a vector.	Mandatory
passwordProvider	Reference to password provider component. By default FilePasswordProvider is used.	Mandatory
shouldTerminate	Boolean attribute enables self termination of the FTP component after it upload/download files.	Optional ( Default is true)

Please refer to `ftpExample.sf` for a sample usage of the FTP component.

## Telnet Component

Telnet component is deployed as a SmartFrog component. When the component is started, it issues the series of telnet commands to the remote host.

### Attributes

<b>Attribute Name</b>	<b>Description</b>	<b>Optional/Mandatory</b>
Host	Telnet host name	Mandatory
Username	Telnet User Name	Mandatory
commands	Comma separated list of command to be executed in telnet session.	Mandatory
passwordProvider	Reference to password provider component. By default FilePasswordProvider is used but user can provide their own Password providers such as Database and DirectoryServer password providers by implementing PasswordProvider interface method getPassword().	Mandatory
timeout	Time in milli seconds. Beyond this time telnet component stops waiting on telnet input stream for some response.	Optional ( default value is 30000 ms)
port	Telnet Port	Optional (default value is 23)
shellPrompt	Shell Prompt expected after login in telnet session	Optional (default value is "#")
logFile	Log file used to log all activities in a telnet session. This could be useful for debugging.	Optional
shouldTerminate	Boolean attribute enables self termination of the Telnet component after executing telnet commands.	Optional ( Default is true)

Please refer to telnetExample.sf for a sample usage of Telnet component.

### Security

Remember that neither telnet or FTP are secure protocols; both send passwords in clear text when a session is made, and neither perform any rigorous verification that the remote server is the one that is normally used.

The FilePasswordProvider uses passwords stored in a text file. This text file should have restricted permissions: only the user that the SmartFrog daemon runs as needs read access. Because the passwords are kept out of the .sf files, these file do not need to be kept secret, and can be stored in public locations.