

<This was executed on Windows 10, using the local C: disk and CMD.EXE because scripts are not checked for PowerShell and UNC paths.>

<CMD.EXE(1) - starting the middleware>

Microsoft Windows [Version 10.0.17763.1697]
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<CMD.EXE(1) - starting the codebase web server. It opens a separate cmd window.>

```
C:\localfki\lablv7\lablv7\test\bin\pc>r1_httpd.bat
TOOLJAR = C:\localfki\lablv7\lablv7\test\bin\pc\..\..\lib\tools.jar
PORT    = 8090
WWWROOT = C:\localfki\lablv7\lablv7\test\bin\pc\..\..\cbs
```

<CMD.EXE(1) - starting rmid (RMI daemon). It opens a separate cmd window.>

```
C:\localfki\lablv7\lablv7\test\bin\pc>r2_rmid.bat
*****
Starting the Java RMI daemon
You can shut it down by giving the command    rmid -stop
in a command window. That will also stop activated services.
LOG = C:\Users\fki\AppData\Local\Temp\rmid_log
PCY = C:\localfki\lablv7\lablv7\test\bin\pc\..\..\lib\policy.all
*****
```

<CMD.EXE(1) - starting the Jini Lookup Server. It registers with rmid and then exists.>

```
C:\localfki\lablv7\lablv7\test\bin\pc>r3_reggie.bat
*****
Starting a Jini Lookup Service
PCY = C:\localfki\lablv7\lablv7\test\bin\pc\..\..\lib\policy.all
LOG = C:\Users\fki\AppData\Local\Temp\reggie_log
CBS = http://KTH-11355:8090/reggie-dl.jar
JAR = C:\localfki\lablv7\lablv7\test\bin\pc\..\..\lib\reggie.jar
*****
```

<CMD.EXE(1) - Starting the chat server>

```
C:\localfki\lablv7\lablv7\test\bin\pc>chatserver.bat
Server fki's chatserver on kth-11355 started.
Server> Registered as a Jini service a6d227c4-820f-45d3-910f-969c57a11c9b
<*** Note 1 - see below ***>
```

<*** Note 1 - This output confirms that the chat server has successfully registered itself with the Jini Lookup Server.>

<CMD.EXE(2) - Starting, running, and exiting the chat client>

C:\localfki\lab1v7\lab1v7\test\bin\pc>**chatclient.bat**

[Output from the client is in square brackets]

[Commands start with '.' (period). Try .help]

[When connected, type text and hit return to send]

Client> [Added server net.jini.core.lookup.ServiceItem@165ddd86]

<*** Note 2 - see below ***>

.help

[fki-7.0]

[Commands (can be abbreviated):]

[.list List the currently known chat servers]

[.purge As list, but also forget non-responding servers]

[.name <name> Set the username presented by the chat client]

[.c Connect to the default server]

[.connect <string> Connect to a server with a matching string]

[.disconnect Break the connection to the server]

[.quit Exit the client]

[.help This text]

Client> **.l**

[fki's chatserver on kth-11355]

Client> **.c**

<*** Note 3 - see below ***>

[Connecting to fki's chatserver on kth-11355...ok]

Client> **hi there**

Client> 1 : fki: hi there

bye there

Client> 2 : fki: bye there

.d

[Disconnected from fki's chatserver on kth-11355]

Client> **.q**

[Quitting, please wait...]

[Lookup Cache terminated]

[System Discovery Manager terminated]

C:\localfki\lab1v7\lab1v7\test\bin\pc>

<*** Note 2 - This output confirms that the chat client successfully has discovered and queried the Jini Lookup Server for a chatserver service.>

<*** Note 3 - The .connect command defaults to the one known chat server>

<CMD.EXE(1) - Output from the running chat server and shutdown>

Added client : Proxy[RemoteEventListener, RemoteObjectInvocationHandler
[UnicastRef [liveRef: [endpoint: [192.168.1.9:52458] (remote),
objID:[1ebfea67:1774e9b0cf1:-7fff, -8391173803416767389]]]]]

<*** Note 4 ***>

MSG#1:fki: hi there

<*** Note 5 ***>

MSG#2:fki: bye there

Removed client : Proxy [RemoteEventListener, RemoteObjectInvocationHandler
[UnicastRef [liveRef: [endpoint: [192.168.1.9:52458] (remote),
objID:[1ebfea67:1774e9b0cf1:-7fff, -8391173803416767389]]]]]

<*** Note 6 ***>

```
Server> help  
Available commands:  
quit      Shuts down the server.  
help      This text.  
Server> quit
```

Shutting down, please wait...

Delivery thread exiting.
Join manager terminated.

C:\localfki\lab1v7\lab1v7\test\bin\pc>

<*** Note 4 - Confirmation that a chat client has connected to the chat server>

<*** Note 5 - The chat server console echoes received chat messages.

<*** Note 6 - Confirmation that a chat client has disconnected from the chat server>

<CMD.EXE(1) - Stopping rmid>

C:\localfki\lab1v7\lab1v7\test\bin\pc>**rmid -stop**

<When rmid exits, the Jini Lookup Service exits as well>

<CMD.EXE(3) - Stopping the httpd codebase server>

<Locate the console window and close it, or identify the process and kill it manually.>