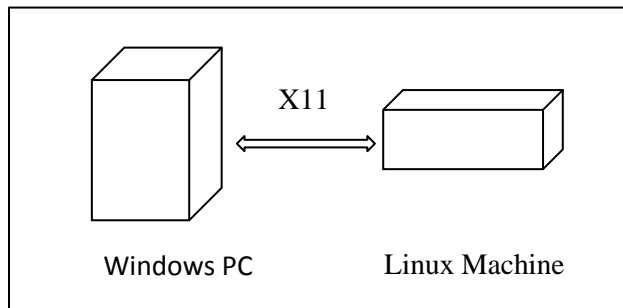


Running the CPUCheck Program on Linux



1. Set up X11 between the Windows PC and the Linux machine according to Appendix C Setting up X11 for Linux.

2. Download the CPUCheck program from <http://www.perfmath.com/download.htm>
3. Log into your Linux machine with Putty and start the AdminServer as follows (make sure the java executable is from the JDK you intend to use rather than the default pre-installed OpenJDK):

```
$java -server -Xms128m -Xmx1024m AdminServer
```

4. Log into your Linux machine with putty and start the client as follows (make sure the java executable is from the JDK you intend to use rather than the default pre-installed OpenJDK):

```
$java -Xms128m -Xmx1024m -DparameterFile=services.properties ServiceDirectory
```

5. Refer to Figures 1 and 2 below, which shows how server and client were started up on one of my Linux machines (Figure 2 shows that creating 299593 service nodes took 76.897 seconds on this Linux machine). Figure 3 shows the Service Admin Console displayed on the PC.

```
henry@linux-ubt1:~/mytest/CPUCheck-1.0$ java -server -Xms128m -Xmx1024m AdminServer
uri =linux-ubt1/127.0.1.1 , port=9999
before reload: Heap utilization statistics [MB]
Used/Free/Total/Max Memory:71/56/127/910
after reload: Heap utilization statistics [MB]
Used/Free/Total/Max Memory:71/55/127/910
```

Figure 1 How the AdminServer process was started up on one of my Linux machines

```
henry@linux-ubt1:~/mytest/CPUCheck-1.0$ java -Xms128m -Xmx1024m -DparameterFile=services.properties ServiceDirectory
continue? press Enter to go ...
start: Heap utilization statistics [MB]
Used/Free/Total/Max Memory:0/122/122/910
admin proxy created with address and port:127.0.0.1:9999
started at Wed Dec 26 20:54:02 PST 2012
create a service directory tree of (l, m) = (6, 8) with 299593 service nodes
recursive ALGORITHM: 420 ms
Recursive call service tree size = 299592
100000 items processed over 28454 ms 3514.444366345681 items / s
200000 items processed over 52438 ms 3814.0279949654832 items / s
processing service tree: 299592 nodes/76296 ms = 3926 nodes/second
recursive (ALGORITHM + processServiceTree): 76717 ms
end: Heap utilization statistics [MB]
Used/Free/Total/Max Memory:75/265/340/910
total elapsed time = 76897 ms
press Enter to exit:
henry@linux-ubt1:~/mytest/CPUCheck-1.0$
```

Figure 2 How the ServiceDirectory client was started up on one of my Linux machines

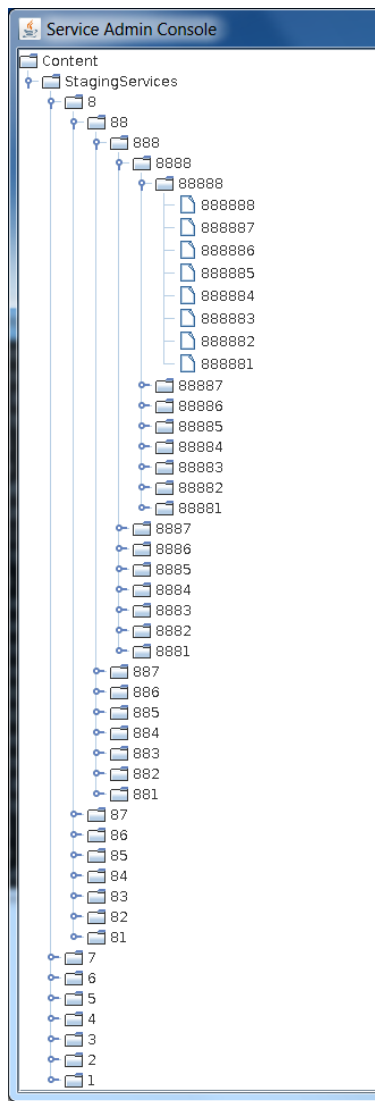


Figure 3 The Service Directory tree created with the Linux example described in this note.