



Troubleshooting Common Issues

The following topics are covered in this chapter:

- High processor utilization
 - Detecting the offending process
 - Bindery issues
 - Looping requests on connections
 - Synchronization issues
 - Schema synchronization issues
 - Offending functions
 - Trends
- High memory consumption
 - Identifying the process that is consuming most of the memory
 - Identifying the process within eDirectory that is consuming the memory
 - Identifying memory fragmentation issues
- Slow Logins Using Client 32
 - Eliminating workstation and network issues
 - Troubleshooting eDirectory bottlenecks
 - Troubleshooting tree-walking issues

There are many different issues that may occur in eDirectory. The purpose of this chapter is to outline a few of the biggest issues that you may encounter as you administer eDirectory: high processor utilization, high memory consumption, and slow logins.

High Processor Utilization

All applications, regardless of the platform, require processor time to execute. eDirectory is a multiple-thread application. Each thread requests time from the processor (or processors) to execute the instructions that come through that thread. In certain conditions, hundreds of threads are all fighting for time on the processor. In other scenarios, one thread with a very large request can take over the processor and not release it for other threads to execute. In either of the described conditions, the end result is that almost 100 percent of the processor time is used, not allowing information to process. The fallout from this condition is that the server appears to “hang” and does not process any new requests.

This section discusses how to determine whether eDirectory is the source of high processor utilization and, if it is, how to focus your troubleshooting efforts to find the offending activity that is causing high-utilization conditions within the eDirectory process space.

Detecting the Offending Process

The first step in troubleshooting high utilization is to eliminate variables to determine the offending process. You can easily figure out if eDirectory is directly or indirectly involved in activities that are causing high utilization simply by unloading eDirectory. To unload eDirectory, perform the following, per platform:

- *NetWare*: At a console, type **unload ds.nlm**.
- *Windows*: Through the Services tab (located in Control Panel), stop the NDS Server service (dhost).
- *Linux, Solaris, AIX, HP-UX*: At a console, type **/etc/init.d/ndsd stop**.

After eDirectory is stopped, observe processor utilization. If it immediately drops, eDirectory is directly or indirectly involved in activities that are causing high utilization. eDirectory does not have the ability to monitor the entire server and all of its applications. You need to rely on the platform's native tools to monitor high utilization. Many such tools are available, some of the most common of which are listed here, per platform:

- *NetWare*: MONITOR.NLM
- *Windows*: Task Manager
- *Linux*: top
- *Solaris, AIX, HP-UX*: pstat