



Partition Operations

The following topics are covered in this chapter:

- Partition splits
 - Partition split best practices
 - Troubleshooting failed partition splits
- Partition merges
 - Partition merge best practices
 - Troubleshooting failed partition merges
- Move SubTree operations
 - Move SubTree best practices
 - Troubleshooting failed Move SubTree operations
- Tree merge
 - NetWare
 - Windows
 - Solaris, Linux, AIX, HP-UX

Partition operations are the most complicated procedures in eDirectory. It is critical that you understand the procedure that takes place in each partition operation so that you can prepare the tree to successfully perform that operation.

Before proceeding further, it is important to establish some basic eDirectory terms. Consider the following:

- *Partition*: eDirectory has the ability to distribute different sections of the tree onto several servers. eDirectory accomplishes this by creating “partitions.” A partition is a defined section of the tree.
- *Replica*: In order for partitions to be distributed to different servers, a replica of the partition is created and placed on one or more servers. The concept of replicas allows the partition, a collection of objects, to be duplicated on many servers for redundancy and to provide convenient access to the objects.
- *Partition boundary*: Partitions are defined by their topmost object in eDirectory. When a container (Tree Root, Organization, or Organizational Unit) has a partition root flag placed on it, the object becomes the partition boundary. All subordinate objects underneath the partition boundary are considered part of that partition until a subordinate container is assigned a partition root flag. The subordinate or child partition root boundary signifies the end of the parent partition.
- *Parent and child partitions*: All eDirectory trees always have at least one partition. The partition boundary is assigned to the Tree Root object. The [Root] partition is considered the topmost or parent partition. All partitions below [Root] are considered child partitions. Parent/child partition relationships are relative. Each child partition has one and only one direct parent partition. Each parent partition, with the exception of [Root], is a child partition to its direct parent partition.

Partition Splits

In eDirectory, the action of “creating a partition” is accomplished by splitting an existing partition into two partitions. The original partition boundary becomes the parent partition and the new partition boundary becomes the subordinate or child partition.

Three main tasks are performed by the eDirectory agent during a partition split:

- *Adds the partition flags and partition attributes to the new child partition root entry object*: The eDirectory agent places a partition root flag on the entry to specify a new partition boundary. In eDirectory, container objects are the only valid objects that can be partition boundary objects. Partition root objects require additional attributes that will be used for partition replication. A new partition root object is “extended” with an auxiliary class called “partition.” This class allows partition-specific attributes to be assigned to the new partition root object.