# **Understanding Interoperating Environments**

Back to Administrator procedures

When you install an Infoprint Manager server, the install process creates a namespace for that server. The *namespace* is a directory structure where Infoprint Manager stores the location information of all of your Infoprint objects, including the server itself, queues and destinations, and the Access Control Lists (ACLs) used by Infoprint Manager Security. On a Windows system, the namespace is located by default at <install path>\var\pddir, where <install path> is the directory that you installed Infoprint Manager in.

If you install a second Infoprint Manager server on another system on your network, that server will create its own namespace and the two serves will operate entirely independent of each other. In some cases, however, you may want your servers to be able to work together. To make Infoprint Manager servers work together, you set up an *interoperating environment* in which two or more Infoprint Manager servers share the same namespace. The namespace resides on one of the servers and the other servers are granted permissions that allow them to use that directory.

In IBM Infoprint Manager for Windows NT and Windows 2000, Version 1, Release 1, the maximum number of servers that you should set up to interoperate is three. Those three servers can all be installed on Windows NT systems, all on Windows 2000 systems, or on a combination of Windows NT and Windows 2000 systems. In addition, if you have IBM Infoprint Manager for AIX, it can be one of the three interoperating servers as well.

When configuring Infoprint Manager servers to support interoperability, ensure that the following two rules are followed:

1. Each Infoprint Manager server must be accessable by all other Infoprint Manager servers using the same IP address.

For example, if **Server1** is an Infoprint Manager AIX server with an IP address of 9.99.155.122, then all other Infoprint Manager servers (whether Windows NT, Windows 2000, or AIX servers) must use 9.99.155.122 to access **Server1**.

2. The IP address for each Infoprint Manager server must be the address that is identified for the first (or primary) network card that is defined to that server.

For information and instructions on setting up interoperating environments, refer to the Infoprint Manager Administration Procedures on your Publication CD or on the Printing Systems website at http://www.ibm.com/printers; click the Infoprint Manager link. From the Infoprint Manager Solutions page, you can either select the Infoprint Manager for Windows NT and Windows 2000 link, click **Product Library** and find **Administrator Procedures** or select the IBM Infoprint Manager for AIX link, click **3.2 Product Library**, and find **Infoprint Manager Interoperability**.

### **Reasons for Setting up an Interoperating Environment**

Not every printing system needs multiple Infoprint servers. In fact, in many environments one Infoprint server is adequate. However, in print environments that do very high volume printing or that print in remote locations (for example, a main office with branch offices in different parts of the city), interoperating Infoprint servers may provide important benefits:

- Interoperating servers are much more scalable than single servers.
  - If your print volume increases and you find that you need more processing power or memory to be able to meet the demand, you can add a second server. However, by making the servers interoperate, you still only have one printing system to administer.
  - If your business expands and you add another office, you can add another server to the namespace. You'll have to define any new printers that you add to the network, but you won't have to redefine existing printers or move resources again to be able to use them from the new location.
- Interoperating servers allow you to distribute print server functions across systems.

Remote locations can have their own local servers, but you can administer them from a central location.

## **Multiserver Configuration Examples**

There are various ways to set up multiple Infoprint Manager servers and have them work together. Below are some example configurations and the benefits they provide.

- Note: For information and specific instructions about setting up your Infoprint Manager servers so that they share one namespace, refer to the Administrative Procedures on your Infoprint Manager Publication CD or on the IBM Printing Systems website at http://www.ibm.com/printers; On the Printing Systems homepage, click Infoprint Manager under **Resources for**, then click Infoprint Manager for Windows NT and Windows 2000 on the Infoprint Manager Family homepage. Select **Product Library** from the drop-down list in the right hand navigation bar, then click the link for **Administrator Procedures**.
- Install 2 Infoprint Manager servers in the same physical location.

One of the servers contains all of the Infoprint print queues and logical destinations, and the other contains all of the actual destinations. In this setup, you balance processing between the two systems by spooling and scheduling on one system and transforming and printing on the other.

• Install one Infoprint Manager server in the main office and one in each branch office.

The namespace resides on the Infoprint Manager server in the main office, and the other two servers are set up to share it. All three servers have logical destinations, queues, and actual destinations defined in them, and the users submit their print jobs to their local server. About 90% of the time, the servers handle local print jobs, so it makes sense for each location to have its own server. However, several times each week, the main office generates reports that are needed at the branches. Instead of printing the reports and sending them across town or faxing several hundred pages to each office, they simply send the print job to printers at the branch offices. If necessary, the branch offices can do the same thing. In addition, because of the common namespace, the system administrator can monitor all of the servers from a central location; if there's a problem at one of the branches, he can investigate it from the main office.

### Important Issues in Interoperating Environments

Before you set up an interoperating environment, consider these issues.

#### • Which system should contain the namespace?

The namespace does not contain large volumes of data (so it doesn't have to reside on the system with the most disk space) and it doesn't move a lot of data across the network. However, because all of the other servers will rely on the namespace server, it must be available and reliable. Put the namespace on the system that is the most available (always running) and most reliable (doesn't have to be rebooted often).

#### • Infoprint Manager Security

All of the information that Infoprint Manager Security uses to protect your printing system (groups and Access Control Lists (ACLs)) is stored in the namespace. When you share the namespace, the groups and ACLs that you set on the namespace server apply to all of the servers; the groups and ACLs that you set on the other servers before they joined the common namespace disappear. As a result, you should wait until you have the interoperating environment set up before you set up any security on the systems.

#### Printer drivers

If you are setting up an interoperating environment with mixed operating systems (for example, two Windows NT systems and one Windows 2000 system), make sure that the printer drivers you choose work correctly in both environments.

Back to Administrator procedures