

Global, scalable, secure printing.



InfoPrint Manager Scalability and Security

Mike, an IBM® InfoPrint® system administrator, has set up his Denver help desk operators with control of printers in the data center. He has configured the printers for pooling so that all the printers are staying busy and jobs process quickly. He gets a call from management, "Can you handle our payroll activity from your printers?" Seeing the opportunity, Mike quickly assesses which printers could be used, where they should reside, and how he would control access to support the new print requirement. With DCE cells already in place, Mike confidently responds, "Yep, when do you want to start?"

Should I add DCE to my InfoPrint Server?

By default, your InfoPrint server will be configured as a non-DCE system, using the file permissions and socket transfer mechanisms that are defaults of AIX®. You may choose to upgrade your server(s) to support DCE depending on the security and scalability characteristics you require in your print environment.

The following scenarios may help you decide whether or not you need the scalability of DCE:

- No: You have one server (RS/6000®) controlling one or more printers managed by one person or department.
- No: You have a few servers (RS/6000s) controlling printers in a local geography, managed by a single department or administrator.
- No: You have multiple servers each controlling its own printers, not requiring shared printers or communication between servers.
- No (if standard AIX file and directory permissions are sufficient): You have multiple servers across the city or perhaps a campus, controlling local and remote printers, managed by a single department.
- Yes (if user, group and object-specific access control is needed): You have multiple servers across the city or perhaps a campus, controlling local and remote printers, managed by a single department.
- Yes: You have multiple servers across geographies on a wide area network, managed by one or more departments.

Highlights

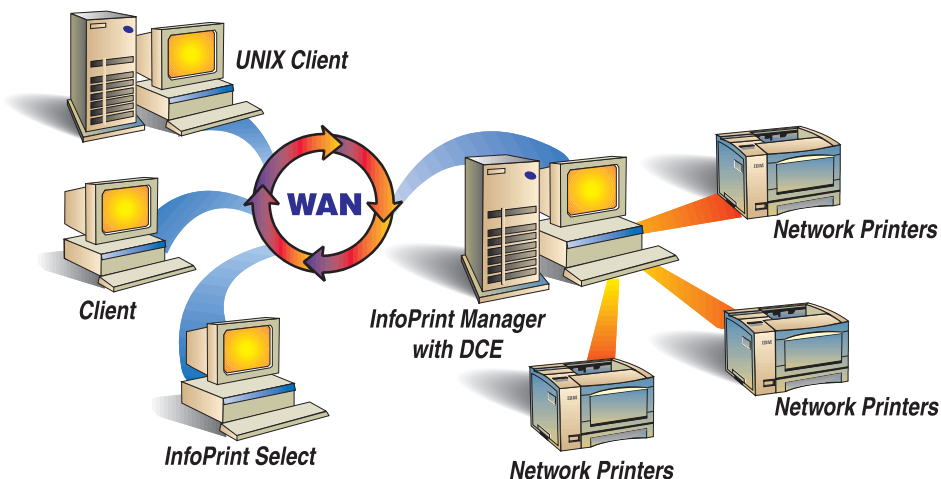
- **Robust, network-wide security with DCE (Distributed Computing Environment)**
- **Scalable for networks of all sizes, from LAN to WAN**
- **Global directory (or "namespace") for identifying servers and printers**

Similarities of DCE and Non-DCE Environments:

- Commands are identical, allowing customers to migrate from one to the other without altering their scripts.
- The AIX GUI is identical in each version, except that users must log into DCE prior to using the DCE version for administering InfoPrint.
- Clients installed with the non-DCE version may submit jobs to and query information from DCE pdservers.

Functional Differences Between DCE and Non-DCE: Scalability

- Yes and No: Recommended for a large network of multiple servers each supporting multiple printers and local and remote job submission.
- Yes: Recommended for a very large network that spans major geographies; can include remote servers, printers, and job submission clients.



Security

- No: Uses standard AIX permission (ie. .chmod 777) to control access to commands and functions.
- Yes: Uses Access Control Lists (ACLs) to grant access to each server, queue and printer on a per-user, per-group, and per-object basis.
- Yes: Uses secure communications between processes with Kerberos encryption.
- Yes: Operators log into DCE
- No: Users do not log in. Operators log into AIX (unless they are using the Jobs and Printers GUI from a Windows® NT™ system).

Client/Server Communication

With InfoPrint Manager, you will add clients to your environment depending on the function you need. The following chart summarizes the function available from DCE and non-DCE clients when communicating with a DCE or non-DCE server.

Note: additional interactions (such as managing jobs on a non-DCE server from a DCE client) may be possible but are not supported.

Scalability

Some very large customers of PSM who are migrating to a complete InfoPrint solution may find that they require the increased scalability and more granular security that DCE provides. InfoPrint can be configured with non-DCE servers, DCE servers or both (but DCE servers will not inter-operate with non-DCE servers and vice versa). The scope of your managed printing is limited only by the needs of your business.

IBM InfoPrint Manager: Scalability and Security at a glance

Software Prerequisites

If you plan to use Distributed Computing Environment (DCE), you will need IBM DCE Security Services for AIX Version 2.1 (5765-533) and IBM DCE Directory Services for AIX Version 2.1 (5765-534).

	Submit jobs	Manage jobs and printers	Configure the system
Submit client (non-DCE) to DCE or non-DCE server	Yes		
Non-DCE Select client (Win/NT, WIN 95™, Windows 3.1 and OS/2®) to non-DCE server	Yes (and manage your own jobs*)		
DCE Select client (Win/NT and OS/2) to DCE server	Yes	Yes*	Yes*
Non-DCE AIX client to non-DCE server	Yes*	Yes* (if configured for server file sharing)	Yes* (if configured for file sharing)
DCE AIX client to DCE server	Yes*	Yes*	Yes*
Non-DCE Job and Printers GUI (workstation and AIX versions) to non-DCE server		Yes	
DCE Job and Printers GUI (NT and AIX versions) to DCE server		Yes	
Non-DCE AIX GUI (basic and advanced) to non-DCE server		Yes	Yes
DCE AIX GUI (basic and advanced) to DCE server		Yes	Yes

*Indicates command line interface only

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