

DCE Application Programming

Instructor-led training (5 days)

Audience:

- System Architects
- Application Developers
- Support Staff
- System Administrators

Prerequisites:

- Experience with distributed UNIX systems
- C programming knowledge is required
- Some background in DCE is assumed

Description: The Open Software Foundation's Distributed Computing Environment (DCE) is on its way to becoming the preeminent platform for supporting enterprise-wide distributed applications. While DCE provides a number of useful services, writing applications that take advantage of those services is a non-trivial task. This course teaches how to create distributed applications using DCE. The goal is to provide attendees with sufficient understanding of DCE development to write applications in their own DCE environment.

Objectives:

- A working knowledge of DCE APIs
- Coverage of the compiler tools and development of DCE based applications

Goals: On leaving the class, participants should be able to:

- Write a client and server DCE based application
- Understand the key DCE APIs and how they are used

Outline:

- An Overview of DCE Application Development
- Clients and servers
- Interfaces and stubs
- Bindings and the DCE directory
- Threads, security, and objects
- The Interface Definition Language (IDL)
- Simple IDL types
- More complex IDL types
- Using ACF files
- Writing a Server
- Creating bindings
- Exporting bindings
- Listening for RPCs
- Running a server
- Writing a Client
- Acquiring bindings: explicit, implicit, automatic
- String bindings
- Running a client
- Error Handling
- Returning errors as parameters
- Returning errors as exceptions
- Using Context Handles
- Using Threads
- Creating threads
- Scheduling threads
- Synchronizing threads
- Using Security
- Levels of security
- Using security in clients

Audio-visual & instructional requirements for on-site classes:

- Overhead projector
- Flip chart or marker board desirable
- DCE Software
- A laptop or PC for each student
- Networked environment

You may download the datasheet for this class as PDF