

Dynamic Performance Tuning and Troubleshooting With DTrace

(SA-327-S10, 3 days)

Course Description

The Troubleshooting to Improve Performance Using DTrace for Sys Admins course provides students with the ability to use DTrace to diagnose application and system problems.

LAB INFORMATION: The hands-on labs offered in this course may involve accessing equipment that resides at a location other than where the training is delivered.

Course Objectives:

- Use DTrace to find the source of intermittent problems
- Use DTrace to look at the cause of performance problems
- Use DTrace to help debug applications
- Find System problems with DTrace
- Troubleshoot DTrace script problems

Who Can Benefit

Students who can benefit from this course are experienced system administrators, service support personnel, kernel developers, and application program developers

Required Prerequisites:

- System Administration for the Solaris 10 Operating System, Part 2 (SA-202-S10)

Suggested Prerequisites:

- Administer the Solaris 10 Operating System
- General understanding of operating systems
- Manage system processes
- Ability to read and write scripts
- Solaris System Performance Management (SA-400)

Skills Gained

Upon completion of this course, you should be able to:

- Use DTrace to find the source of intermittent problems.
- Use DTrace to look at the cause of performance problems.
- Use DTrace to help debug applications.
- Find System problems with DTrace
- Troubleshoot DTrace script problems.

Course Topics:

DTrace Fundamentals

- Describe the features of DTrace
- Describe the DTrace architecture
- Overview of how DTrace works

Using DTrace

- Examining performance problems using DTrace
- Use DTrace to obtain information about system calls
- Create D Scripts

Finding System Problems with DTrace

- Use DTrace to access kernel variables
- Use DTrace to obtain information about I/O
- Use DTrace to do anonymous tracing
- Use DTrace to do speculative tracing
- Explain privileges necessary to run DTrace

Troubleshooting DTrace Problems

- Describe how to lessen performance impact of DTrace
- Describe how to use and tune DTrace buffers
- Debug DTrace scripts

The DTrace Toolkit and Case Studies

- Overview of the DTrace Toolkit
- Top 10 most useful scripts
- Case Study - Application using excessive CPU time
- Case Study - Application Throughput is Slow