

# Performance Analysis and Tuning for HP NonStop Systems

## U4195S



**Delivery Type:** Classroom

**Duration:** 5 days

### Overview

Become familiar with the system load balance approach and performance tuning concepts for your HP NonStop system. Learn how to capture and analyze performance data, then adapt the adjustments to maximize performance and increase system Utilization. Topics include Measure, Measure Subsystem Entities, queuing theory, TPM, RPM, ViewSys, Web ViewPoint practical approaches to system tuning, and using performance tools. The five-day course is 60 percent lecture and 40 percent hands-on labs using NonStop servers.

### Target Audience

This course is suitable for System managers, technical support, performance analysis personnel and Systems and application designers and developers.

### Pre-Requisites

- ✓ Concepts and Facilities for NonStop Systems (U4147S) or
- ✓ NonStop S-series Server Administration I (U5448S) and
- ✓ NonStop S-series Server Administration II (U5449S) or
- ✓ NonStop NS-series Server Administration I (U8528S) and
- ✓ NonStop NS-series Server Administration II (U8638S) or
- ✓ NonStop NB-series Server Administration I (HG776S) and
- ✓ NonStop NB-series Server Administration II (HG777S) or
- ✓ Two years equivalent NonStop system management experience

### Objectives

- ✓ Apply a basic tuning principle
- ✓ Analyze Measure's CPU entity
- ✓ Describe the processor's memory

subsystem

- ✓ Apply several basic queuing theory formulas
- ✓ Analyze disk cache-hit ratios and fragmentation
- ✓ Calculate a volume's true write cache-hit ratio
- ✓ Use Reload Analyzer
- ✓ Analyze process priorities
- ✓ Analyze process memory consumption
- ✓ Identify processes with long \$RECEIVE queues
- ✓ Evaluate TCP process and server class parameters for best performance
- ✓ Be familiar with the functionality of NonStop system utilities: ViewSys, Web ViewPoint, Peek, Enform, GPA, TPDC, TPM, ASAP, APB, Diskpro, RPM, and TCM
- ✓ Use Measure and SQLCI to analyze NonStop SQL/MP performance
- ✓ Identify positive and negative factors in application performance
- ✓ Use Measure entities for application analysis: DISCOPEN, FILE, PROCSH, USERDEF, and TMF

### **Follow on Courses**

- ✓ Consider attending the other optional and advanced learning courses in the HP NonStop Operations Management curriculum