

WMQ33 IBM MQ for z/OS - Debugging

Course description	This course teaches the problem determination and debugging skills required by IBM MQ administrators on z/OS platforms required to resolve day-to-day problems.
Who Should Attend	Technical personnel such as systems administrators, operations analysts, operators and anyone else who may be responsible for providing day-to-day support of IBM MQ on z/OS platforms.
Pre-Requisites	Students are expected to be already quite familiar with IBM MQ, and will have attended WMQ20 and/or WMQ31 or gained the equivalent knowledge
Duration	3 Days

Problem Determination

Introduction

WMQ Architecture
PD terminology
Formal PD procedures
Categorising problems

Debugging Output and Tools

WMQ address space job logs
WMQ ISPF admin interface
WMQ Dumps
WMQ tracing & IPCS basics
SMF tracing
The dead letter queue
The dead letter queue handler
WMQ commands

System Related Problems

Typical system related problems
Typical queue related problems
Installation issues
Buffer management
Page set management
Storage class management
WMQ Logging
Backup and recovery
Starting and stopping qmgrs

Intercommunications

Why distributed ?
Review of the components
Channel types
Channel states
Channel status
Starting and stopping channels
Channel failures at startup
Channel failures during operation
Keeping channels running
In doubt channels
Channel performance
Remote administration

Security

Security mechanisms
RACF classes and profiles
Enabling / disabling security
Access control
Application oriented security
Channel security
Security exits
SSL overview
Implementing SSL in WMQ
Client security

Transaction Related Problems

Terminology and concepts
Syncpoint vs No_Syncpoint
Single phase commit
Two phase commit
Rollback
Poisoned messages
In doubt units of work
CICS / IMS / RRS co-ordination
The WMQ log

Triggering Problems

Triggering review
IBM supplied trigger monitors
Triggering checklist
Triggering at depth
Triggering and the DLQ
Triggering and units of work

Application Related Problems

Queue depth problems
Message expiry
Dynamic queues
Missing messages
Report messages
Data conversion