

IBM MQ Administration Foundations

Queue managers, messaging objects and operational troubleshooting

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Mainframe & Enterprise Systems · DevOps, Cloud & Infrastructure

Introduction

Explore IBM MQ messaging and core administration through selected supplied examples. Learn queue-manager and object concepts, command-line operations, client/server connectivity and how to inspect configuration, logs and delivery failures.

The course is language-neutral at the conceptual level; any application exercise uses a supported client and compatible runtime rather than assuming every programming language has identical APIs. Version-specific options are checked against the selected training environment.

Learning outcomes

- Explain queue-manager, queue and channel roles in point-to-point messaging.
- Inspect and manage selected MQ objects and properties in the supplied lab.
- Trace a distributed messaging example and basic client connectivity.
- Explain triggering, dead-letter handling and cluster concepts.
- Use configuration, reason codes and logs to investigate a selected failure.
- Describe how a client channel definition table supports configured client connections.

Prerequisites

- Basic command-line, client/server and file-management familiarity.

- Access to an approved compatible IBM MQ training environment with the required administration permissions.
- Programming familiarity is helpful for optional application examples; select a supported client/library rather than assume unrestricted language support.

Training outline

1. Module 1 — Messaging and MQ operations

- Point-to-point messaging, queue managers, objects and properties.
- Distinguish client connections, local queues and channels; inspect the supplied environment.
- Use selected MQ command-line tools and verify the resulting object state.

2. Module 2 — Distributed setup and triggering

- Trace a small distributed messaging example and inspect configuration dependencies.
- Introduce triggering and related queues/process definitions in the selected environment.
- Run a supplied message flow and review expected versus observed behaviour.

3. Module 3 — Errors, logs and dead-letter handling

- Interpret selected reason codes and operational logs; distinguish a client problem from a delivery or queue-manager problem.
- Inspect a dead-letter queue and a controlled handling example; review recovery before replaying messages.
- Document evidence, configuration and remaining failure conditions.

4. Module 4 — Clusters and client configuration

- Introduce queue-manager cluster roles and distribution concepts; distinguish clustering from a complete high-availability design.
- Inspect a client channel definition table (CCDT) and how clients locate connection definitions.
- Check client/server compatibility and the authentication/permissions required by the example.
- Review the operational workflow and identify deeper administration or application-development study.