DELL NETWORKER 19.XX ADMINISTRATION

3-Day Technical Training Program

1. Course Overview

This three-day instructor-led training program is designed to provide participants with practical knowledge and administration skills for Dell NetWorker 19.XX. The program covers NetWorker architecture, installation, configuration, backup administration, storage management, data recovery, disaster recovery, troubleshooting, and operational best practices. The training combines technical concepts, architecture discussions, demonstrations, and hands-on exercises to help participants manage enterprise backup and recovery environments effectively.

2. Learning Objectives

1. Understand Dell NetWorker architecture, components, and enterprise backup and recovery concepts.
2. Install, configure, and administer NetWorker Server, Storage Nodes, and Clients.
3. Configure protection policies, workflows, groups, schedules, and backup operations.
4. Manage storage devices, media pools, volumes, and Data Domain integration.
5. Execute full, incremental, and scheduled backup operations.
6. Configure cloning, retention policies, and save set management.
7. Monitor backup operations, analyze reports, and identify backup failures.
8. Perform file-level recovery, save set recovery, and disaster recovery operations.
9. Use NetWorker command-line utilities for administration and troubleshooting.
10. Apply security, performance optimization, and operational best practices.

3. Prerequisites

- Basic understanding of Windows Server and/or Linux operating systems.
- Familiarity with enterprise IT infrastructure and server administration.
- Basic knowledge of networking concepts, DNS, IP addressing, and connectivity.
- Understanding of backup, restore, and disaster recovery fundamentals.
- Basic knowledge of storage technologies, disk storage, and tape libraries.
- Prior exposure to enterprise backup solutions is beneficial but not mandatory.

4. Detailed Training Table of Contents (TOC)

Day 1 – NetWorker Architecture, Installation & Configuration

Module	Topics / Detailed Coverage	Duration
1	Introduction to Dell NetWorker – Overview, features, use cases, backup and recovery concepts, NetWorker 19.XX architecture	1 Hr
2	NetWorker Architecture & Components – NetWorker Server, Storage Node, Client, NMC, Data Domain integration, communication and data flow	1.5 Hrs
3	Installation & Initial Configuration – Prerequisites, server installation, client installation, licensing, service management and initial setup	1.5 Hrs
4	NetWorker Administration & Management – NMC navigation, resource management, user roles, authentication and access control	1 Hr
5	Backup Configuration Fundamentals – Clients, Groups, Policies, Workflows, Actions, Protection Policies, Schedules and retention configuration	1 Hr
	Total	6 Hrs

Day 2 – Backup Operations, Storage & Media Management

Module	Topics / Detailed Coverage	Duration

6	Backup Operations – Full, Incremental and Differential backups, save sets, backup levels, manual and scheduled backups	1 Hr
7	Storage Management – Storage Nodes, Devices, Disk-based storage, Tape Libraries, Media Pools, Volume Management and Label Templates	1.5 Hrs
8	Data Domain Integration – DD Boost architecture, DD Boost devices, deduplication, storage configuration and backup integration	1 Hr
9	Backup Cloning & Retention Management – Clone operations, clone policies, browse and retention periods, save set management and data lifecycle	1 Hr
10	Backup Monitoring & Reporting – Monitoring backup jobs, sessions, alerts, logs, job status, failed backups and reporting	1.5 Hrs
	Total	6 Hrs

Day 3 – Recovery, Troubleshooting & Advanced Administration

Module	Topics / Detailed Coverage	Duration
11	Data Recovery & Restore Operations – File-level recovery, save set recovery, directed recovery, point-in-time recovery and recovery validation	1.5 Hrs
12	Disaster Recovery & Server Protection – NetWorker Server backup, bootstrap backup, client index backup, server recovery and disaster recovery planning	1 Hr
13	Advanced Administration – Command-line utilities, nsradmin, mminfo, nsrinfo, nsrwatch, nsrclone and administrative operations	1 Hr
14	Troubleshooting & Performance Optimization – Backup failures, connectivity issues, device errors, resource constraints, performance tuning and log analysis	1.5 Hrs
15	Security & Administration Best Practices – User privileges, authentication, security configuration, audit logs, operational best practices and maintenance	0.5 Hr
16	Hands-on Lab & Practical Assessment – Configure backup policies, execute backups, monitor jobs, perform restore operations and troubleshoot failures	0.5 Hr
	Total	6 Hrs

5. Recommended Hands-on Labs

Lab No.	Practical Exercise
1	NetWorker Server and Client installation and configuration
2	Configure Storage Nodes and backup devices
3	Create protection policies, workflows, groups, and schedules
4	Execute full and incremental backup operations
5	Configure Data Domain integration using DD Boost
6	Perform backup cloning and retention management
7	Monitor backup jobs and troubleshoot backup failures
8	Perform file-level and save set recovery
9	Execute NetWorker administrative commands
10	Perform a basic NetWorker Server disaster recovery exercise

6. Expected Training Outcomes

Outcome Area	Expected Capability
Architecture Understanding	Explain the NetWorker architecture and identify the responsibilities of its core components.
Installation & Configuration	Perform basic NetWorker installation, configuration, and administration tasks.
Backup Administration	Create and manage backup policies, workflows, schedules, and backup operations.
Storage Management	Configure and manage storage devices, media pools, volumes, and Data Domain integration.
Data Protection	Implement backup, cloning, retention, and data lifecycle management practices.
Recovery Operations	Execute file-level and save set recovery and understand server disaster recovery procedures.
Troubleshooting	Diagnose common backup and recovery issues using NMC, logs, and command-line utilities.
Operational Readiness	Apply security, monitoring, performance optimization, and administration best practices.

7. Training Delivery Methodology

- Instructor-led technical sessions.
- Architecture-based explanations and real-world enterprise scenarios.
- Live demonstrations of NetWorker administration.
- Guided hands-on practical exercises.
- Troubleshooting scenarios and operational discussions.
- Knowledge validation through practical assessment.

8. Training Summary

Parameter	Details
Technology	Dell NetWorker 19.XX
Duration	3 Days
Total Training Hours	18 Hours
Training Level	Administrator / Intermediate
Delivery Mode	Instructor-led Training
Methodology	Theory + Demonstrations + Hands-on Labs
Target Audience	Backup Administrators, Storage Administrators, Infrastructure Engineers, System Administrators
Assessment	Practical Exercises and Knowledge Validation

Note: The curriculum is designed for the Dell NetWorker 19.x product family. Specific features, installation procedures, commands, and lab configurations should be validated against the exact minor release deployed in the participant environment.