

# MongoDB DBA Training Plan – Linux & MongoDB Fundamentals

**Organization:** Toucan DBA Support

**Duration:** 8 Weeks

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This document outlines a structured 8-week training plan designed to help new team members with no prior experience in Linux or MongoDB to develop the essential skills required for MongoDB DBA activities within the Toucan DBA Support environment.

## Phase 1: Linux Fundamentals (Week 1–2)

- Linux overview, file system hierarchy, users and permissions
- Basic commands: ls, cd, cp, mv, rm, grep, vi, etc.
- Process and service management (systemctl, ps, top)
- Networking basics (ping, netstat, ssh, scp, rsync)
- Disk and log management (df, du, logrotate)
- Crontab, scheduling, and basic troubleshooting

## Phase 2: MongoDB Fundamentals (Week 3)

- MongoDB architecture and installation
- Configuration and mongod.conf overview
- Mongo shell basics – CRUD operations
- Authentication and user roles
- Replica set concepts and setup

## Phase 3: MongoDB DBA Operations (Week 4–5)

- Backup and restore using mongodump/mongorestore
- Monitoring using db.serverStatus and logs
- Performance tuning and slow query analysis
- Log rotation, WiredTiger cache, and disk management
- Failover and high availability concepts

## Phase 4: Advanced DBA Topics (Week 6–7)

- Upgrades and patching
- Automation scripting (Bash, cron jobs)
- Cluster and sharding overview
- Troubleshooting replication, disk, and connection issues
- Integration with Grafana, Prometheus, and S3

## Phase 5: Review & Evaluation (Week 8)

- Scenario-based exercises: backup restore, failover testing
- Monitoring metrics interpretation

- Mini-project: backup automation & monitoring setup
- Review session and readiness evaluation

**Progress Tracking Table**

| Week | Phase                  | Status | Remarks |
|------|------------------------|--------|---------|
| 1–2  | Linux Fundamentals     |        |         |
| 3    | MongoDB Fundamentals   |        |         |
| 4–5  | MongoDB DBA Operations |        |         |
| 6–7  | Advanced DBA Topics    |        |         |
| 8    | Review & Evaluation    |        |         |