

# MongoDB DBA

## 1. Introduction to MongoDB

- Architecture
- MongoDB Tools
- Types of Data
- Database, Collection, Documents
- Create, Insert, Update, Delete, find
- Data Types
- Mongo Shell

## 2. Installation

## 3. Create Update and Delete Documents

- Inserting & Saving Documents
- Batch Insert
- Insert Validation
- Removing Documents
- Remove Speed
- Updating Documents
- Document Replacement
- Using Modifiers
- Upsert
- Updating Multiple Documents

- Setting Write Concern

#### **4. Querying Documents**

- Introduction to find method
- Query Criteria
- Type Specific Queries
- Cursors
- Database Commands
- Getting Help

#### **5. Indexing**

- Introduction to Indexing
- Query Execution Plan
- When not to index
- Types of indexes
- Index Administration
- GeoSpatial support in MongoDB

#### **6. Replication**

- Introduction to replication
- Setting up a Replica Set Part 1
- Configuration Options
- Network Consideration
- Security Consideration
- Setting up a Replica Set Part 2
- Observing Replication

- Testing automatic failover
- Changing Replica Set configuration

## **7. Sharding**

- Introduction to sharding
- Components of a cluster
- Sharding on a single machine cluster
- Configuring sharding
- Shard chunks
- Querying from the shard
- Choosing a shard key
- Sharding across multiple servers
- Databases in the config server
- The mongos Processes

## **8. MongoDB Security**

- Enable authorization and enforce authentication
- Built-in roles
- Creating users
- Creating user-defined roles
- Granting roles to users
- Revoking roles from users
- Dropping Roles
- Dropping users
- Displaying the privileges of a Role

## 9. Backup & Recovery

- Introduction to backup
- Data File Backup
- Mongodump
- Mongorestore
- Mongoimport
- Mongoexport