

Prerequisites

- AWS CLI configured with appropriate permissions
- Terraform v1.0+ installed (if using Terraform)
- Valid AWS credentials with EC2, VPC, and IAM permissions
- SSH key pair for EC2 instance access

Deployment Steps

1. Create VPC and networking components
2. Set up security groups and NACLs
3. Deploy compute resources (EC2 instances)
4. Configure load balancers
5. Set up database instances
6. Configure monitoring and alerting
7. Perform deployment verification

Post-Deployment Verification

1. Verify all services are running and healthy
2. Test application endpoints and load balancer
3. Confirm database connectivity
4. Validate security group configurations
5. Check CloudWatch metrics and alarms