Disaster Recovery Runbook - EPH System

Document Control

- **Document Owner**: John Doe (DR Manager)
- **Issue Date**: 20/12/2024
- **Revision History**:
    - Version: 1.0
    - Author: Jane Smith
    - Revision Date: 20/12/2024
    - Initial Draft

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1. Application Overview

Application Name: EPH System
Environment: Production

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2. Infrastructure Details

Primary Instance

Server Role	Hostname	IP Address	Operating System	Ports	Owner
Application Server	eph-primary01	192.168.3.10	Linux RHEL 8	8080, 8443	Alex Johnson
Database Server	eph-db01	192.168.3.20	Windows Server 2019	1433, 3306	Maria Lopez
Web Server	eph-web01	192.168.3.30	Linux Ubuntu 20.04	80, 443	Richard Kim
Load Balancer	eph-lb01	192.168.3.40	Linux RHEL 7	80, 443, 22	Kevin Wright

Secondary Instance

Server Role	Hostname	IP Address	Operating System	Ports	Owner
Application Server	eph-secondary01	192.168.4.10	Linux RHEL 8	8080, 8443	Alex Johnson
Database Server	eph-db-secondary1	192.168.4.20	Windows Server 2019	1433, 3306	Maria Lopez
Web Server	eph-web-secondary1	192.168.4.30	Linux Ubuntu 20.04	80, 443	Richard Kim
Load Balancer	eph-lb-secondary1	192.168.4.40	Linux RHEL 7	80, 443, 22	Kevin Wright

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3. Communication Matrix

Role	Name	Phone	Email
DR Manager	John Doe	+1-555-123-4567	john.doe@example.com
Application Owner	Alex Johnson	+1-555-987-6543	alex.johnson@example.com
Database Owner	Maria Lopez	+1-555-234-5678	maria.lopez@example.com
Network Administrator	Kevin Wright	+1-555-345-6789	kevin.wright@example.com
Functional Tester	Richard Kim	+1-555-456-7890	richard.kim@example.com

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4. Recovery Procedure

Step 1: Disaster Declaration

- Notify the DR Manager (John Doe) upon detecting a failure in the primary site.
- Verify the issue using monitoring tools.
- Trigger the disaster recovery plan if the downtime exceeds RTO (60 minutes).

Step 2: Failover Activation

1. **Pre-Failover Validation**:
    - Confirm data replication status between primary and secondary databases.

    - Ensure all secondary servers are operational.
    - Validate DNS readiness for secondary site.
2. **Failover Process**:
    - Stop primary application services.
    - Update DNS to point to secondary site IPs:
        - Application: 192.168.4.10
        - Web: 192.168.4.30
    - Start secondary application services.
3. **Post-Failover Checks**:
    - Verify application accessibility.
    - Validate dependent systems (e.g., database, APIs).

Step 3: Communication

- Inform all stakeholders about the failover.
- Share expected timelines for recovery.

Step 4: Post-Recovery Validation

- Perform sanity tests on application functionality.
- Reconcile any discrepancies in data.
- Document observations and lessons learned.

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5. Dependency Mapping

Dependent System	Direction	Dependency Type	Responsible Owner
Authentication Service	Outbound	API Integration	Alex Johnson
BI Reporting Tool	Inbound	Data Feed	Maria Lopez
Campaign Management	Bidirectional	API Integration	Richard Kim

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6. DR Drill Schedule

- Next Scheduled Drill: 15/01/2025

- Drill Scope: Full failover from primary to secondary site.
- Drill Duration: 4 hours.

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7. Post-Drill Documentation

- Prepare a report summarizing:
    - Time taken for failover.
    - Observations and errors.
    - Recommendations for improvement.
- Responsible: John Doe (DR Manager).