**Configuration and Deployment Documentation**

**Project:** Odoo ERP Integration for Safaricom Telecom  
**Version:** 1.0  
**Date:** [Insert Date]

**A. Purpose**

To provide detailed guidance on configuring and deploying the customized Odoo ERP system and its integrations, ensuring consistent, repeatable, and error-free releases across environments.

**B. Configuration Documentation**

**1. System Configuration**

| **Component** | **Description** | **Configuration Details** | **Owner** |
| --- | --- | --- | --- |
| Odoo ERP Modules | Configuration of Billing, CRM, Finance, Inventory | Module settings, workflows, user roles | ERP Configuration Lead |
| Middleware / APIs | API endpoints, security tokens, throttling policies | API Gateway setup, OAuth2 configurations | Integration Lead |
| Database Settings | PostgreSQL tuning parameters, backups, replication | Connection pools, indexing strategies | DBA |
| Security Settings | RBAC, encryption keys, firewall rules | User permissions, SSL certs | Security Officer |
| Network & Infrastructure | Load balancers, DNS, cloud instance sizing | Cloud VM specs, Kubernetes settings | Infrastructure Lead |

**2. Environment-Specific Settings**

| **Environment** | **Configuration Parameters** | **Notes** |
| --- | --- | --- |
| Development | Debug mode enabled, verbose logging | For developers |
| Testing/QA | Test databases, simulated external integrations | Limited access |
| Staging | Mirror of production, performance monitoring enabled | Pre-release validation |
| Production | High availability, disaster recovery setup | Strict security, backups |

**C. Deployment Documentation**

**1. Deployment Strategy**

| **Deployment Type** | **Description** | **Tools & Techniques** |
| --- | --- | --- |
| Initial Deployment | Fresh installation of ERP and integration layers | Terraform/IaC, Docker Compose |
| Incremental Updates | Patch releases, hotfixes, minor enhancements | CI/CD Pipelines (Jenkins, GitHub Actions) |
| Major Releases | New module rollout or major feature addition | Blue/Green or Canary Deployment |

**2. Deployment Process**

| **Step** | **Description** | **Owner** | **Artifacts / Deliverables** |
| --- | --- | --- | --- |
| Pre-Deployment Checks | Environment validation, backup confirmation | Release Manager | Pre-deployment checklist |
| Code Deployment | Deploy code to target environment | DevOps Engineer | Deployment scripts, logs |
| Configuration Apply | Apply environment-specific configs | System Admin | Config files, parameter logs |
| Database Migration | Run DB schema updates and data migration scripts | DBA | Migration scripts, change logs |
| Post-Deployment Testing | Smoke tests and functionality validation | QA Team | Test reports |
| Release Sign-off | Stakeholder approval for live system usage | Project Manager | Sign-off document |

**D. Rollback and Recovery Procedures**

* Automated rollback scripts to revert to previous stable release.
* Database backup and restore instructions.
* Disaster recovery drills and validation schedules.

**E. Documentation Maintenance**

* Version control with Git.
* Regular updates aligned with new releases or patches.
* Change logs and audit trail for all configuration and deployment changes.