

Release Management Process (Standard Feature)

Department: R&D, Operations, Product, Marketing

Version: 3.0

Scope: Standard (non-emergency) deployment of major or minor features to the production environment.

Phase 1: Planning and Approval (T-7 Days)

1. **Release Candidate Selection:** Product Manager (PM) selects approved feature branches for the upcoming release train.
2. **Release Plan Creation:** R&D Lead creates the **Release Plan Document (RPD)**, including: affected services, new environment variables, necessary database migrations, and rollback instructions.
3. **CAB Review:** The RPD is submitted to the Change Advisory Board (CAB) one week prior to deployment.
 - **Go/No-Go:** CAB provides final approval, checking for operational readiness, security review completion, and impact assessment.

Phase 2: Staging and Pre-Flight Checks (T-3 Days)

1. **Staging Deploy:** The Release Candidate is deployed to the Staging environment (staging.nexacore.com).
2. **QA Sign-off:** QA Team executes mandatory regression testing and the specific feature test plan. The R&D Lead only proceeds with QA Sign-off confirmation.
3. **Operations Readiness:** Operations team pre-provisions necessary resources (e.g., new database replicas, cloud functions) and confirms all new monitoring alerts are configured and firing correctly in Staging.

Phase 3: Production Deployment (T-0 - Change Window)

1. **Notification:** Operations sends an internal notification: "Production Deployment starting: [Feature Name]."
2. **Deployment (Phased):**
 - **Canary Deployment:** Deploy to of the production cluster (or 1 non-critical region).
 - **Monitor (15 minutes):** Monitor key SLOs (latency, error rate).
 - **Full Rollout:** If Canary is stable, deploy to the remaining .
3. **Verification:** Operations runs the pre-defined smoke test checklist to confirm basic functionality post-deployment.
4. **Completion:** Operations sends final notification: "Deployment complete. Monitoring for

stabilization."

Phase 4: Post-Release Monitoring (T+0 to T+7 Days)

1. **Hypercare:** R&D and Operations teams maintain an elevated monitoring state (Hypercare) for 48 hours following the release, focusing on the new feature's performance.
2. **Success Validation:** Product Manager monitors the Success Metrics (KRs) defined in the PRD for the first week to detect any immediate negative user impact.
3. **Review:** A mandatory Post-Release Review meeting is held (T+7 days) with Product and R&D to discuss lessons learned and any technical debt created.