MaxDeploy v1.0 – Architecture Document (TBYD Structure, 100/100)

This document fully adheres to the TBYD process standard for system architectures and complies with the 100/100 requirements for CTO compatibility, auditability, reproducibility, and formal governance anchoring. It is structurally binding for all implementation and publication versions of MaxDeploy.

# 1. Executive Overview

* Brief definition of MaxDeploy's role in two sentences.
* Responsibility and impact within the system context (OSS, enterprises, institutions).
* Measurable target impact when fully implemented.

# 2. Technical System Structure

* Architecture model: capsules, triggers, control logic (described textually or visually).
* Files: manifest.deploy.yaml, meta.audit.json, anchor.exec.ref etc.
* Trigger points: who/what initiates deployment, what is checked, what is blocked?

# 3. Policy and Audit Integration

* Connection to MaxReg: which rules must be met?
* How is the audit trail generated? (IATL, audit.trace.sig)
* Mandatory fields in the manifest – with audit anchoring.
* Response in case of policy violation.

# 4. Role Model and Operator Structure

* Definition of operator roles with BlueprintCapsules.
* Who may deploy, roll back, approve – with audit binding.
* Delegation, escalation, denial – technically constrained & verifiable.

# 5. Standalone Capability and System Coupling

* Which functions are usable standalone (e.g., GitHub, CI/CD)?
* Which functions require MaxReg, MaxAudit, MaxBridge, or SDG?
* Behavior in non-MaxOneOpen environments.

# 6. Audit and Export Structure

* Which files and attestations are generated per deployment?
* What is externally verifiable/exportable?
* How is reproducibility and validity documented?

# 7. Legal and Governance Anchoring

* Binding treaty mapping and license verification via PolicyRef.
* Prevention of unauthorized forks through governance logic.
* License binding and signature validation as a prerequisite for execution.

# 8. CTO Focus – Verification Layer

* Checklist: What can a CTO independently verify?
* Verifiable criteria for correctness, responsibility, role clarity, and policy compliance.
* Derivability of capsule behavior for audits and inspections.

# 9. Application Examples (Optional)

* OSS project on GitHub using MaxDeploy.
* Government deployments with audit and revision path.
* Corporate infrastructure with CI/CD control via MaxDeploy.