MaxDeploy v1.0 – DevTrace Flowchart (Execution Lifecycle Overview)

This document visualizes the technical flow of a deployment capsule in MaxDeploy from trigger to completion, highlighting all validation, role, policy, and audit checkpoints along the process.

# Execution Flow Summary

Each deployment passes through the following stages:  
  
1. Deployment Trigger → by signed operator  
2. Policy Check via MaxReg  
3. Audit Capsule Prepared  
4. Trust Anchor Verification (if anchor.ref)  
5. Execution Capsule Issued  
6. Ledger Registration (IATL)  
7. Optional Public Export

# Step-by-Step Capsule Flow

[1] Operator Capsule Signed  
 ↓  
[2] manifest.deploy.yaml parsed  
 ↓  
[3] MaxReg checks policy.ref compliance  
 ↓ ↘︎ if failed: BLOCK + REJECTION capsule  
[4] Audit trace created (meta.audit.json)  
 ↓  
[5] anchor.ref validated (if present)  
 ↓  
[6] Execution capsule emitted (with xID)  
 ↓  
[7] Log stored in IATL (immutable ledger)  
 ↓  
[8] Audit export available (trace.sig + audit.json)

# Legend

BLOCK = Deployment denied  
xID = Execution ID (hash-based)  
IATL = Immutable Audit Trail Ledger