

Supplementary: Deployment Guide and Integration

This supplementary material provides deployment considerations and integration examples for production CIF deployment.

Production Deployment Checklist

Before deploying CIF in production environments, verify completion of all items:

Table 1: Production deployment checklist.

| Phase | Item | Verification |
|--------------------|-------------------------------|-------------------------------|
| Pre-Deploy | Dependencies installed | pip check passes |
| | Signing keys generated | Key files exist |
| | TLS certificates valid | <code>openssl verify</code> |
| | Secrets management configured | Vault health check |
| Config | Trust parameters set | $\alpha + \beta + \gamma = 1$ |
| | Firewall thresholds tuned | $\tau_1 > \tau_2$ |
| | Canary beliefs defined | ≥ 3 per agent |
| Post-Deploy | Consensus configured | $n \geq 3f + 1$ |
| | Functional tests pass | 100% test coverage |