

Post-Quantum Cryptographic Time Migration

by [Nick Clark](#) | Published April 25, 2026

PQC Migration Reality

NIST Post-Quantum Cryptography standards (CRYSTALS-Kyber, CRYSTALS-Dilithium, FALCON, SPHINCS+) establish the technical substrate for post-quantum migration. Federal mandates (NSM-10, OMB M-23-02) drive timeline pressure for federal systems.

Time-signing operations are part of the migration scope; current GPS time, PTP time, and similar timing systems use ECDSA or RSA-class cryptography.

Technology-Neutral Architecture

Mesh-time consensus uses governance-chain primitive that is signature-scheme-agnostic. Migration from ECDSA-signed time observations to Dilithium-signed observations requires credential rotation, not architectural change.

Hybrid operation during migration (some attestors using legacy schemes, some using PQC) admits through declared admissibility profiles.

Operator Migration Path

Federal systems facing NSM-10 deadlines, financial-systems facing FFIEC PQC guidance, and critical-infrastructure operators facing CISA PQC alignment all benefit from architectural technology-neutrality.