**Data Migration & Synchronization Logs**

**Title:** *Network Data Synchronization & Migration Validation Logs*

**A. Purpose**

To validate that data from legacy network systems and real-time sources has been correctly migrated, synced, and transformed without loss or corruption.

**B. Log & Validation Structure**

| **Phase** | **Description** | **Tools Used** | **Sample Log Output** |
| --- | --- | --- | --- |
| Data Extraction | Pull from OSS/BSS, inventory DBs, network slices | Talend, Apache NiFi, SQL scripts | Records Extracted: 1,250,000 |
| Transformation | Normalize formats (e.g., JSON → Avro, timezones) | Python ETL scripts, Pandas | Null checks passed, 12 columns cleaned |
| Loading & Syncing | Stream/Batch updates into 5G platform data lake | Kafka, Spark, Delta Lake | Sync status: SUCCESS (latency <5s) |
| Verification | CRC/hash checks, record count match, schema alignment | Custom diff scripts, dbt | Checksum match: TRUE |