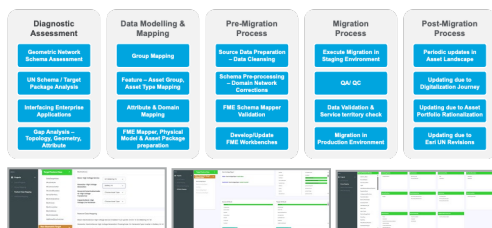


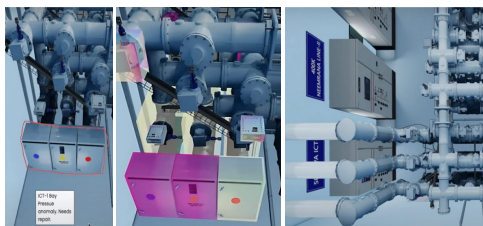
Digital Twin For Utilities

LEVEL-1: DIGITAL DATA TWIN



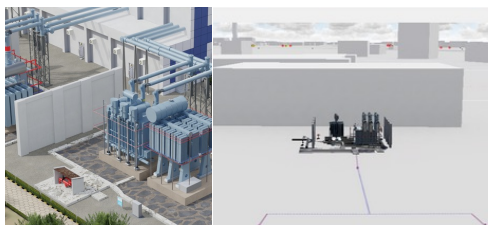
- Creating real world assets in digital format on Esri ArcGIS platform
- Migration of legacy utility network data to Esri UN model
- Process of UN migration using proprietary software **UN Bridge**
 - Pre-Assessment: Clean and authenticated legacy utility data for migration
 - Data Modelling: Esri unified UN model and modifications as per need
 - Pre-Migration: Mapping of legacy utility data with Esri UN model
 - Migration: Migration of legacy utility data to Esri UN environment
 - Post-Migration: Post migration check on rules, associations and topologies

LEVEL-2: COMPONENT TWIN



- Development of 3D model of components using Cloudworx platform
- Linking components with larger critical assets
- Linking critical components with sensors / IoTs
- Recording of historical data of components
- AI analysis on historical data for predictions
- Alerts for proactive actions

LEVEL-3: ASSET TWIN



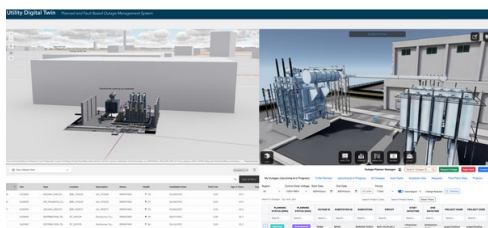
- Export 3D models to ArcGIS Enterprise platform
- Integrations of alerts and component status with Esri ArcGIS enterprise
- Integration of 3D models with Esri Utility Network
- Based on 3D alerts – stimulate actions like impact on outage, location and customer impacts
- Visual analysis on map for outage impacts
- Generate trace networks and reports on ArcGIS UN platform
- Collect information of faulty assets / planned shutdown

LEVEL-4: SYSTEM TWIN



- Esri Integration with ServiceNow Work Order Management
 - Provide location and asset information to Work Order Management platform
 - Generate work order
 - Update workorder information to Esri ArcGIS platform
- Esri Integration with Network Vision Outage Management System
 - Outage due to planned maintenance vs faulty assets
 - Record all related information on outage like asset location, impacted area, customers, traces
 - Disseminate the information/reports with 3rd parties including customers, contractors, dependent divisions

LEVEL-5: OPERATIONAL TWIN



- Enhanced Network Visibility
Esri ArcGIS Platform
- 3D and Real-time Monitoring and Detection
Cloudworx Cognitive Digital Twin Platform
- Reduced Downtime and Improved Reliability
ServiceNow Asset & Work Order Management System
- Data Analytics and Reporting
Network Vision Outage Planning & Information System

**Enhanced
Customer
Satisfaction**

Why Cyient?

With decades of engineering experience and deep utility domain expertise, Cyient brings together proven platforms like Esri, Cloudworx, and ServiceNow into a cohesive, outcome-driven solution. Our robust Digital Twin framework doesn't just visualize the grid—it empowers smarter, faster, and predictive operations across it.

Digital Twin intelligence starts here!

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