

CASE STUDY

ILLUMINATOR

Engineering Configuration database



GD
PROGRESSIVE
SOFTWARE
SOLUTIONS

CASE STUDY

ILLUMINATOR & Engineering configuration database

Problem

The client is responsible for the operation of a large number of television and radio broadcast transmission networks throughout the UK. These comprise many diverse network systems and components including – allocated spectrum, baseband encoding/multiplexing, telecom contribution/distribution, transmitters, antennas, electrical plant and telemetry platforms. The cascaded nature of the end to end transmission paths (studio to set top box reception) involves many technical system interdependencies. Antenna system configuration will have a direct impact transmitter configuration and equipment settings for example. These parameter settings are complex and need to be managed for a very large number of transmission network elements.

Solution

The initial task required a full assessment of the technologies inherent in the terrestrial networks described above. This was necessary to fully understand the inter-system dependencies from a configuration perspective. Graphical Data's data analysts examined the individual parameters associated with each of the identified digital broadcast elements and technologies. These included Digital Video Broadcast configurations for baseband programme streams, spectrum occupancy standard requirements, antenna operational performance needs, transmitter set up parameters and system configuration.

A GD ILLUMINATOR architect worked with client technologists to specify the appropriate workspace design for each of the end to end network components. This included data structures which could correctly manage the configuration requirements identified. The technical parameter interdependencies were engineered to auto-cascade updates within the ILLUMINATOR workspace environments. ILLUMINATOR generates configuration change notifications to appropriate personnel. Design authorities are prompted for change or parameter settings approval for all elements comprising overall design configuration.

Benefits

- Single, centrally managed configuration database available for use by all relevant work-streams.
- Seamless cascaded technical parameter interdependency management.
- Major reduction in time spent searching document repositories for appropriate approved configuration data.
- Risk of using incorrect or out of date configuration settings mitigated.
- Auto notification and approval and system engagement audit trail facilities.
- Verified configuration data export facilities for engineering implementation project phases.

For more information contact us on info@graphicaldata.co.uk