

CASE STUDY

iBISS – GIS Web Platform

Client Requirement

One of top cable operators in the US, this southern system of this fortune 100 company has over 1.7 million homes passed, over 30,000 miles of strand and 6,000 miles of fiber. The system data was acquired and consolidated from multiple CATV operators and hence the data was a mix of many drafting standards, spec and cell libraries. Some were in old AutoCAD or legacy Bentley data and so were not geo-correct. Customer didn't want to spend the money to redraft the entire system as a single project in Bentley Comms but wanted to work with the data seamlessly.

Challenge:

The mix of data had to be geo-corrected by rubber sheeting or geo-positioning and overlaid with the latest landbase to enable a single view of the systems data that was all a mosaic of multi-scaled, multi projection, multi-positioned.

IMMCO Approach & Solution:

iBISS-Net (V.3.0) is a web-based, GIS-enabled decision support system powered by Oracle 11g Spatial. This allows import of engineering maps into a single data warehouse and enables faster updates. The Oracle Viewer version provides enterprise-wide access to and analysis of latest network asset information at your fingertip.

iBISS solution - Version One (2004-5): Version One translated & positioned Bentley v8.5 and the legacy data (FocusOne and Focus 95) to Mapinfo Tab by rescaling, rubber sheeting and other data complex translation processes using tools like FME. System data converted to GIS format was integrated into a Web Application using apache tomcat in MapXtreme Viewer. This was made available to 40 concurrent users and 200 registered users. The application was hosted and maintained with the database in IMMCO's data center. Locate address, features, equipments and location reports can be generated. Geo-coding on the fly, analysis, and trouble shooting failures, are some of its most sought-after features. 40 reports can be generated.

iBISS solution - Version two (2010-12): The V8.5 Bentley and V8i data are loaded to Oracle spatial database together, integrated using Oracle viewer and hosted and deployed at the IMMCO data center and in the Google cloud as web application for 50 - 100 concurrent users and 200+ registered users. The new solution enhanced its functionality greatly with oracle viewpoint. Locate features could be integrated with third party data. Sales and marketing analysis, serviceability analysis, modem monitoring, OTDR trace, Bandwidth management, CRM, Google Earth integration, avoid out-of-franchise truck rolls, etc are in use today. 50 reports and many custom queries can be made.

Project Status:

The seven years of experience in creating seamless viewer Cable outside plant has increased out clientele to multiple systems and multiple customers. GPS/AirCard Enablement, integration of Network health monitoring, ISP module integrations are some of our latest enhancements.

