



ONSET DESIGN UTILITY CASE STUDY – ACTEWAGL



CUSTOMER PROFILE

ActewAGL provides electricity, natural gas, water and wastewater services to customers in the Australian Capital Territory.

ActewAGL Distribution is Australia's first multi-utility to offer electricity, natural gas, water and wastewater services. The company has 1,100 employees and provides services to more than 170,000 households throughout the Australian Capital Territory (ACT).

ActewAGL Distribution's electricity network connects to approximately 156,000 customers in the ACT and the gas network connects to around 107,000 customers in the ACT and the surrounding region. Within electricity networks, ActewAGL owns the sub transmission and distribution networks within the ACT and is responsible for planning, developing, maintaining and operating these networks. In terms of the water network, the ACT draws supplies from three separate catchments – the Cotter River catchment, the Googong system and the Murrumbidgee River. Water is delivered to 47 service reservoirs in the Canberra water supply system. Consumers receive water through a network of reticulated pipes divided into pressure zones served from one or more local service reservoirs.

INDUSTRY VERTICAL

Energy & Utilities

MOVING TO AUTOCAD AND MERIDIAN

During the nineties the company used the GDS system from McDonnell-Douglas for CAD drafting and GIS mapping. In 1999 the company migrated around 80,000 drawings to DWG format for editing with AutoCAD Map and Raster Design and, at the same time, the asset mapping was migrated to ESRI. 2003 saw the introduction of Meridian Enterprise for engineering content management and vaults were established to cater for Electricity Networks and Water Division. With around half of the drawings existing as images scanned from hardcopy, one of the key factors in selecting Meridian was its ability to manage hybrid files. Rather than requiring a drawing to be saved entirely in CAD or image format, the hybrid format facilitates gradual vectorization during the revisioning process. Combined with the ability to automatically retain previous revisions, this immediately improved the efficiency of the drafting process. The ability to compare drawing revisions provided identification of duplicates during the initial import and visually overlaying these changes delivers an ongoing benefit during the review and approval workflow stages.

ONSET ECM SOLUTIONS

- BlueCielo Meridian Enterprise

KEY BENEFITS

- Working with hybrid documents
- Full revision history
- Revision comparison
- Customizable workflows
- AutoCAD integration
- Flexible system



ENERGY NETWORKS UTILIZES DOCUMENT WORKFLOWS

Soon after the introduction of BlueCielo Meridian, Energy Networks realised the potential to emulate their hardcopy workflow and approval process by implementing this electronically within Meridian. Signed hardcopy had proven to be difficult to reproduce with digital documentation until Meridian workflows provided for drawings to be reviewed and released with email notifications and AutoCAD integration allowed approval dates to be automatically synchronized to the drawing title block. Additionally, a full audit trail provided instant verification.

As the other divisions within ActewAGL saw the success of BlueCielo Meridian within Energy Networks, this led to its adoption in other areas and the creation of drawing vaults for Properties (Facilities Management) and Ecowise (water monitoring).

EXTENSIVE DATA STORAGE IN BLUECIELO MERIDIAN ENTERPRISE

Currently, ActewAGL manages over 100,000 drawings and images using BlueCielo Meridian Enterprise, with a total volume of some 60 gigabytes in drawing data. This is made up of scanned, hybrid and AutoCAD drawings. The company chose to implement the Meridian database in MS-SQL format, taking advantage of existing infrastructure and leveraging their high level of existing corporate resourcing in this area. While more than one hundred drawing editors have Meridian installed on their desktop, most reviewers and approvers access Meridian via a Citrix client interface. Similar to starting a standard Desktop application, users select Meridian from the available Citrix applications in a Desktop menu. With comparable performance, this has proven a simpler method of standardized deployment to the enterprise.

Project teams working on site also access BlueCielo Meridian via its standard web interface. This approach was utilised by Water Division during the design of the enlarged Cotter dam to provide external consultants with access to drawings.

A FLEXIBLE SYSTEM

Whilst Energy Networks has drawings categorized into areas such as Distribution and Zone Substations, Mains Construction (by suburb) and Public Lighting, BlueCielo Meridian had to be flexible enough to cater for a range of utility segments. In Water Division drawings are divided into Dams, Water Treatment Plants, Sewage and a number of other areas. Customized navigation views also allow drawings to be viewed in relation to a project or geographical area, such as a Division or Suburb.





SYSTEM INTEGRATIONS

Within ActewAGL, the BlueCielo Meridian Enterprise software is referred to as the Electronic Drawing Management System (EDMS). The EDMS incorporates additional elements to make the system flexible, portable and robust. The Meridian data and drawings are synchronized to regional servers for remote download and this read-only format is downloaded to notebooks. The bushfires of 2003 highlighted the benefit of having the switching schematics available in a portable manner for field staff. An in-house development, referred to as the Drawing Viewer, allows these critical drawings to be found and viewed in a standalone manner on isolated notebooks in the case of network or Internet availability failure. Further in-house development includes CADGrab, which allows ESRI GIS data to be extracted to AutoCAD for the generation of new mains construction drawings.



CONCLUSION

According to Steve Thompson, the Manager of the Drawing Management System, *“ActewAGL, with the support of Onset Design, implemented BlueCielo Meridian Enterprise in 2003 which has proven to be an extremely reliable EDMS since going into production. BlueCielo Meridian Enterprise is very configurable and comes with many standard features. With the assistance of Onset Design we have designed and developed an environment that is highly respected by ActewAGL staff and meets our current business requirements. BlueCielo Meridian Enterprise has provided ActewAGL with a very successful EDMS for managing our drawings and images”.*

CONNECT WITH US

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