Cloudis

CMPIC was used in the design and build of the Type 45 vessels built by BAE Systems

BAE Systems have been a user of our software since 1996

Cloudis Limited is an independent UK-based software company specialising in applications developed around the Oracle database. It has been developing database applications since 1994 and count among its clients some of the largest engineering companies in the world. Director Ian Barnes discusses the company's niche, how it entered the market and the company's complementary directions.

When you hear the phrase "cable management software" it rarely conjures up enthusiasm, or even recognition, in the uninitiated and, to some extent, this has worked in our favour. Electrical engineering is not one of the "sexier" disciplines and, as such, is not at the top of the list for investment in software or services. At Cloudis, however, we have always found this area of engineering both fascinating and challenging, and we have been able to build our business around it. Although the sector could accurately be described as "niche", it is *our* niche and, unlike other technology companies who regard cable management as something they are obliged to address, it is our primary focus.

Our niche

We have been in business since 1994, initially as a consultancy company working with companies like Land Rover and BAE Systems, providing engineering and database assistance. Alongside our services business, in the early days we started looking at areas where we had expertise and where there was a gap in the market for applications software. Cable management and document management were our chosen target sectors. Since several of us had previously been employed in large engineering and software companies, we had good grounding in what was expected both from a functional and a computing point of view.

FACTS ABOUT CLOUDIS

- Headed by Ian Barnes and Ian Darbyshire
- Established in 1994
- Based in Runcorn, Liverpool
- Specialises in engineering applications for large projects
- 5 employees
- Cloudis software has been used to route and manage a total of over 2 million cables on over 150 major projects
- www.cloudis.com

CMPIC is being used in the design of nuclear and thermal power stations

> "In short, the greater the complexity of the project, the more likely you would be to talk to us"

After market analysis, we concluded that an out of the box offering would not meet the needs of the companies we planned to address. Although there is a large element of standardisation in terms of the cable management process, individual companies diverge in many ways. This can be for many reasons: staffing, skills, certifications, internal processes etc. So, although we have standard products, we have built into them the facility to easily create a high degree of customisation. We work with customers to ensure that people, process and technology are all working to the same end.

Looking at target markets, we decided to concentrate on the requirements of large engineering projects, particularly shipbuilding and power generation. To give some context, a naval vessel typically will have 25000 to 75000 cables, a power station a similar number.

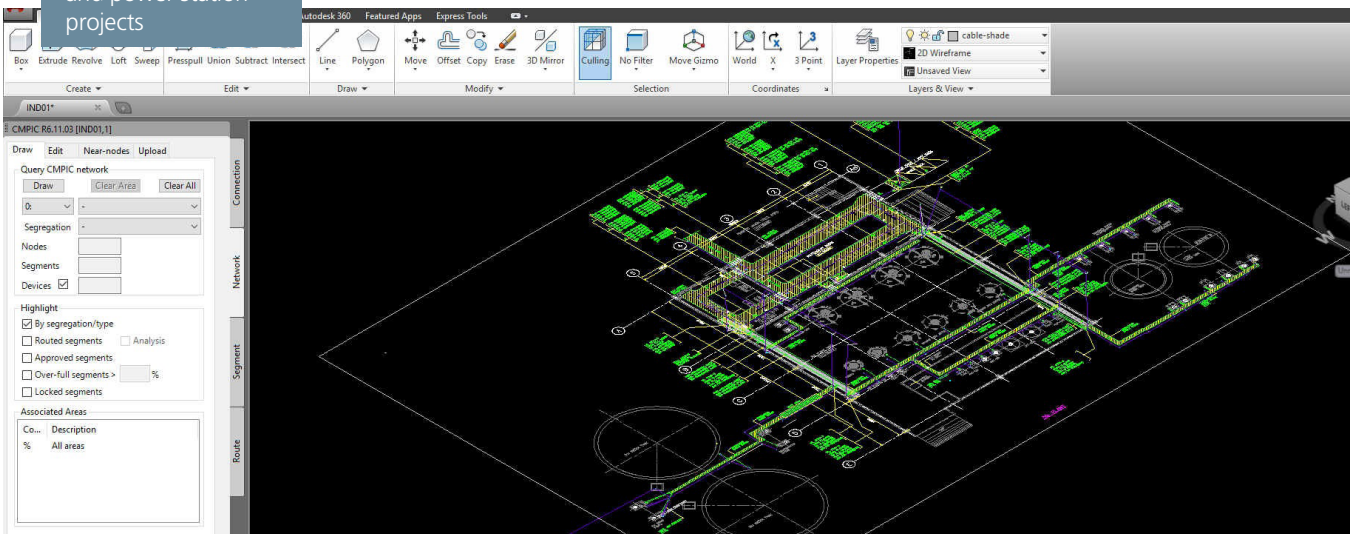
Add to this the complexities of routing these cables to ensure technical integrity and material cost optimisation, calculating weight distribution and other such factors, you begin to see the need for a way of managing this entire process. In short, the greater the complexity of the project the more likely you would be to talk to us.

Entering the market

In 1996, we installed our cable management software application at BAE Systems, Barrow in Furness. Shortly afterwards, we started working with BAE Naval Ships at their sites in Scotland. BAE Systems has since used the software on numerous projects, including the Landing Platform Docks, Auxiliary Oilers, Type 45 Destroyers, Type 26 Frigates, Astute submarines and on the two new Queen Elizabeth class aircraft carriers.

Our involvement with shipbuilding has not been limited to the UK, however. International customers include Fincantieri Marinette Marine and Austal USA, who design and build Littoral Combat Ships for the US Navy, and Gibbs and Cox who are involved in the design. DCNS in France has used our software on Delta and FREMM vessels and Scorpène Submarines. In Canada, we have Seaspan and Irving.

CMPIC can be used with 3D or 2D CAD for shipbuilding and power station projects



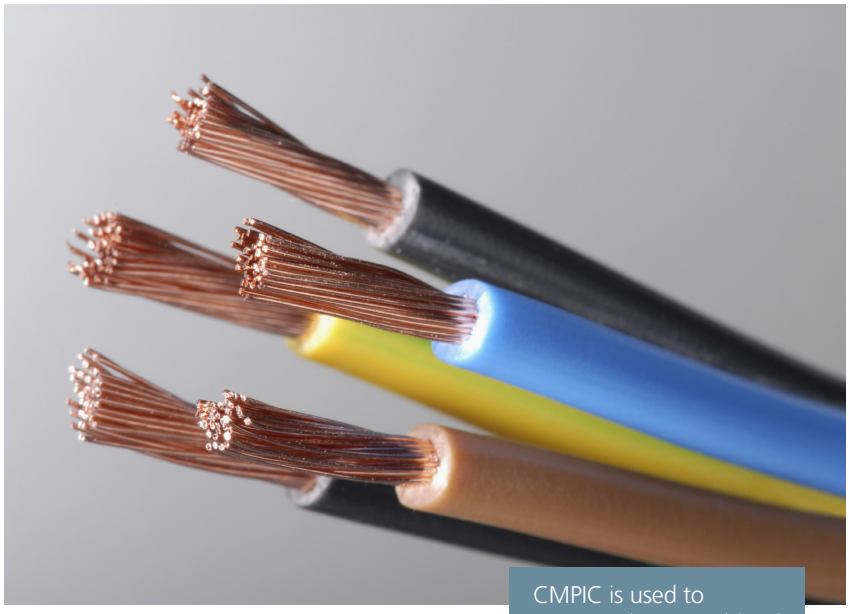
Away from shipbuilding, we are involved in providing software and services to support engineering services in the power sector. Over the last couple of years, we have begun working with the Balfour Beatty Bailey Joint Venture company, who are responsible for the cabling of Hinkley Point C, the UK's current nuclear plant project. Our software is also used on several power station projects in India through the Nuclear Power Company of India and Tata Consulting Engineers.

Our other major concentration has been on providing document management technology. Sellafield Ltd (and previously BNFL) has been using our icePAC application for 20 years for their document records management, with some four million document records being handled.

Complementary directions

Ten years ago, we became involved in a project with Rutgers University in the USA. Rutgers has three main campuses across the state of New Jersey, with many hundreds of buildings, and is continually investing in new technologies – such as security systems, video, TV, computer networks and VOIP telephones – leading to a complex and sophisticated network of copper and fibre optic cables being installed to link the proliferation of equipment. The problem was how to document this ballooning infrastructure. To answer this, we worked with their staff to customise our Cabcentric application to create their own management system. Now, Rutgers University has a comprehensive database to help them trace all their cables from source to destination in addition to being able to view and generate graphical reports showing connection points, device locations etc.

Most recently, we have expanded the application of Cabcentric to manage "blown fibre" cabling. Fibres are literally blown using compressed air through a complex pre-installed network of microducts. The layout of these microducts and the various patching equipment that connect them is held in the Cabcentric database, which can then be used to determine and record the best pathway for each blown fibre.



CMPIC is used to manage the entire life of the cable: from routing to installation and terminating

To continue to be at the top of the game in a technology company has involved looking to see where and how our technology could be applied and, of course, having excellent development people to carry these innovations forward, even though this might be slightly tangential to our main business. The scale and longevity of many of our customers' projects means that proven reliability is often more important than using the very latest software technology.

What does the future hold?

As we say to prospective customers: we have been in the business a long time and have 90 per cent of the answers. Each customer adds the 10 per cent based on their own needs and expertise. As such, we are in a continuous cycle of improvement. Long may it last.

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