

/ CASE STUDY: BAE SYSTEMS

BAE use Celsius Core to document the ICT Infrastructure on new Royal Navy Super-Carriers



/ THE RESULT:

Pinacl-GDA provided BAE systems with an industry leading infrastructure management application called Celsius™.

The effective and efficient management of ICT infrastructure in today's organisations is becoming increasingly difficult as networks become more complex and geographically dispersed, to deliver your business critical applications and services.

This enables BAE systems to centrally document, design, manage, monitor and troubleshoot their ICT infrastructure, providing a complete inventory of cables, patching and assets plus a full record of end-to-end circuit connectivity.

/ THE PROJECT:

BAE Mission Systems are implementing a ship wide Internal Network, comprising blown optical fibre and copper Ethernet. This is the largest ICT infrastructure ever deployed on a Royal Navy ship and consists of:

- 118Km of protected microduct
- 17000Km of optical fibre
- 800 Fibre Outlet Points
- 200 Fibre Patch Panels
- 800 network switches

The documentation of such a unique and complex environment as an Aircraft Carrier has never been attempted in the UK before and presented a number of challenges, but the flexibility and comprehensive customised scripting and reporting capabilities of Celsius™ Core allowed BAE and Pinacl to address these challenges.

/ KEY BENEFITS OF CELSIUS:

> CAPTURE THE INTERNAL NETWORK DESIGN

- Protected Microduct Connections
- Fibre Terminations within Fibre Outlet Points and Patch Panels
- End user devices connected to Network Switches

> PRODUCE INSTALLATION INSTRUCTIONS

- Patching Reports
- Fibre Blowing Reports
- Fibre Termination Reports
- Switch Configuration Data

> PROVIDE DESIGN/INSTALLATION COMPLIANCE EVIDENCE

- Diverse Routing of Microducts
- Fibre Test Results
- Quantify Future Growth

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/ THE SOLUTION:

Celsius™ Core is the latest development of Pinacl-GDA's industry leading infrastructure management application, Celsius™. Providing an extremely powerful and flexible database application, Celsius™ Core provides organisations with the ability to centrally document, design, manage, monitor and troubleshoot their ICT infrastructure, providing a complete inventory of cables, patching and assets plus a full record of end-to-end circuit connectivity.

During the initial consultation with BAE it became clear that Celsius™ Core would provide an effective solution for documenting both blown fibre and structured cabling networks. This also provides a cost effective and comprehensive tool to help document the design.

Celsius™ Core was selected to support the detailed design of the Internal Network as it could handle both traditional copper and blown fibre optic cabling.

/ THE CLIENT:

BAE Systems is a premier defence, aerospace and security company delivering a full range of products and services for land, naval and air application on a global scale.

The Queen Elizabeth Class aircraft carriers will be the biggest and most powerful surface warships ever constructed for the Royal Navy, representing a step change in capability, enabling the delivery of increased strategic effect and influence around the world.

The aircraft carriers HMS Queen Elizabeth and HMS Prince of Wales are being delivered by the Aircraft Carrier Alliance, a unique partnering relationship between BAE Systems, Thales UK, Babcock and the UK Ministry of Defence.

/ CLIENT TESTIMONIAL

"Celsius is providing an important component of the Aircraft Carrier Alliance integrated design and delivery Architecture Framework toolset, enabling the management of the highly complex dataset that describes the ship's network infrastructure".

DAVID BASS, HEAD OF SUPPLY CHAIN, COMBAT SYSTEMS, BAE SYSTEMS

"Pinacl are extremely happy to be working in partnership with BAE systems on this landmark project. The unique capabilities of Celsius Core make it the obvious choice to fully document the design of the complex infrastructure for both the HMS Queen Elizabeth and HMS Prince of Wales and we look forward to working on similar projects in the future".

PAUL SCARBOROUGH, SENIOR CELSIUS CONSULTANT PINACL-GDA