

# CAPABLE

BRING US YOUR TECHNICAL CHALLENGE

## Flight Simulation Systems



Modern flight simulators for commercial or military aircraft impose high demands on the system provider. Projecting real time cockpit images requires extremely high-end processing power and very demanding graphic capabilities.

Supplying simulators for deployment in multiple countries puts further stringent demands on the design. Maintenance in the field is costly and time consuming. The solution must be highly reliable, reducing the need for on-site servicing.

Independent of any single component supplier, Captec chose the best of breed in processing power and graphical interface, designing the system around state-of-the-art technologies while keeping in mind the longevity of the project. The thermal management of such a demanding system was paramount so introduced Power Budget calculations at the outset, ensuring the final solution would endure the demanding requirements of deployment. With full EMC certification and detailed documentation, the Captec systems were ready to be deployed worldwide.

By outsourcing the computer hardware and rack integration to Captec, the customer was free to concentrate on their core value add.



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The  
**Newsletter**  
From

**CAPTEC**

Tried, Tested and Trusted



## Canadian Port Automation

Vancouver's Deltaport is the city's largest container terminal, importing and exporting cargo for all western Canada. The terminal is designed to handle the largest container ships afloat within its two berths. Manual intervention is not an option.

With so much traffic arriving and departing, an automated system is needed to provide information on which container needs to be transferred, moved or picked up in the yard. The solutions, based on Captec's computers, are greatly enhancing the speed and accuracy of distribution.

Goods In : Goods Out : Good Business.

## Easing London's Commute

London's Oyster Card scheme needs to be reliable. Imagine the chaos it would cause were it to go down, especially



during the infamous London rush hour. The underlying systems need to operate reliably in equipment rooms specified to operate within the range of -10 to +55°C and subjected to constant vibration of the rolling stock.

Our customer specialises in this field – designing the infrastructure to run the Oyster Card system. Captec's flexibility in system design enabled us to embed appropriate computing technology to deliver a robust, rack-mounted solution able to withstand the operating environment.

Following stringent compliance testing, our customer is now delivering the next generation of Oyster Card systems. London Commuting is still not hassle free – but at least it's moving.

## Trains don't Stop at Borders! Signal Communications for European Safety Legislation

The European Railway task force has realised that trains don't stop at borders! The introduction of GSM-R (Railway) supports the operation of cross-border rail traffic without replacing equipment.



Our customer is a leading supplier to this market with their GSM-R radio technology. Core to the solution is one of Captec's computers which enables the signalman/dispatcher to communicate with train drivers and other railway staff.

Planning a trip across Europe? Check GSM-R is active at your destinations and let the train take the strain!

## Voyage Data Recorder for Seafaring Vessels



Black boxes are not only used on airplanes. Increasingly, Voyage Data Recorders (VDRs) are mandated on seafaring vessels both as safety recording devices and proactive management tools. Our customer's VDRs are being deployed on cargo vessels and passenger cruise liners. Being at sea, the cost impact of any failure is substantial. Since implementing Captec's computer solution (certified to the IEC 60945 standard), failure rates have been minimized substantially. Our customer is now happily sitting on terra firma – sea-sickness is a thing of the past.



## Ultra-rugged Technologies for Extreme Environments

Computing technologies relentlessly accelerate processing power at ever decreasing price points. With this, more and more computers are being deployed in ultra-extreme environments to solve increasingly challenging engineering and scientific problems.

As specialists in extreme environments, we have leveraged our partnerships with experts in the field to introduce the latest CORE Systems™ product line technologies from US based Octagon. Packaged compactly in a space no larger than a shoebox, the CORE series comprise rugged mobile computers designed for applications where severe environments and high



performance meet. It tightly integrates the electrical, thermal and mechanical components into a complete system with no compromise.

Long term reliability is at the core of the design philosophy, adopting best of breed components to provide reliable fanless operation over a -40 to +75°C change, whilst packing a 1.5GHz CPU under the hood.



## Going Underground?

Efficient transport services rely on highly dependable communications systems. These enable the driver to communicate regularly with central control, ensuring reliability of service and, most importantly, security of the passengers.

Our customer won the award to provide these on the London Underground. The infrastructure involves 4 different Captec computing configurations, from slim-line units around the station to fully loaded controller systems in the server rooms. All with full compliance testing for EMC and environmental requirements.



## MP Visits Apprentices

Our apprenticeship training scheme has received yet again attention and praise - most recently from Southampton Test MP, Alan Whitehead, accompanied by Martin Lamb, Area Director of the LSC for Hampshire and the Isle of Wight.



The apprentice training scheme has been in operation for well over 20 years and has produced a regular stream of talent to fill the organisational needs organically. Such has been its success that it is the focus of regular attention by government and training organisations keen to duplicate its success. Our apprentices regularly complete NVQ schemes substantially faster than the national average as well as progress into higher levels of education, most



recently up to BEng. We are extremely proud of our training achievements and constantly invest in its development.

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*Celebrating 25 Years of  
Industrial Computer Innovation*



INVESTORS IN PEOPLE



**Strenuis Ardua Cedunt** - Difficult things fall to the strong

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## Expanding again... Production and Repair Footprint Increased

Our expansion and growth continue unabated. Having doubled our facility space only a few years ago with a move to our Fareham facility, we ran out of space earlier than expected.

Our new mezzanine floor extension has alleviated the pressure by adding over 7,000sqf, taking the overall facility to just under 25,000sqf. The mezzanine extension has expanded the production areas as well as increased the space available for the test and repair facility.

The open plan floors have enabled highly efficient and effective lean manufacturing principles to be applied in both production and repair facilities, thereby increasing productivity and reducing operational costs.



## Come Learn with us Seminars

As experts in industrial computing we have considerable knowledge and experience of the core technologies which are constantly advancing, at a rate faster than ever. To keep up with all the changes and leverage their competitive advantage is a hugely time consuming exercise, requiring research in lots of different areas. Even with the internet it can take a considerable amount of time to get the latest on all the core technologies of the PC architecture. We have harvested and distilled the most relevant information and together with our technology partners, including Microsoft and Intel we will deliver it to you in an information packed seminar. You will learn all you need to know in a matter of a few hours.

The next 2 seminars will be held at the Hilton Cobham, Surrey on Wednesday 24th November and the second at the Holiday Inn, Borehamwood on Thursday 25th November. Please register at: [www.captec.co.uk/seminar-registration.php](http://www.captec.co.uk/seminar-registration.php) or look at our website [www.captec.co.uk](http://www.captec.co.uk) for further details.

**OUR PURPOSE** - To be the recognised global leader in the design and manufacture of reliable and affordable industrial computers fit for demanding environments.

**OUR VISION** - A world where computers can operate reliably in any environment for the benefit of mankind.