

# ISLE OF MAN GOVERNMENT

## EMC helps Government consolidate all critical applications in a single shared virtual cloud environment



### ESSENTIALS

#### Challenge

- To improve service levels and performance in a cost-efficient manner

#### Solutions

- EMC VPLEX Metro
- EMC Celerra Flash drives
- EMC Celerra NS-120 and Celerra NS-480
- EMC Centera® File Archiver

#### Key benefits

- Increased performance by eight times
- Improved storage utilization
- Data recovery for key applications—60 seconds or less
- 15 percent decrease in operating costs
- Synchronized realtime data relocation for virtual machine environments
- Solid-state data storage performance for high availability
- SAN capacity has tripled
- Automatic failover
- Automatic scale up

Located at the very mid-point of the Irish Sea, 31 miles from the coastlines of both Ireland and the United Kingdom, the Isle of Man is renowned for the beauty of its capitol city Douglas, Manx Cats, and its exceptional lifestyle—to name only a few points. With a population of just over 80,000, and a landmass of only 221 square miles, the Isle of Man has also become recognized for its efficient, customer-led delivery of public services.

Everything from healthcare to education to social services is driven by the Isle of Man Government's commitment to leading edge technology. Its public-focused strategy recognizes that citizens and businesses expect public services to be built around their needs, and delivered at their convenience, rather than being organized around historic Government processes.

To expedite that strategy, the Isle of Man Government embarked on an ambitious ICT program that has led to significant transformation—not only to its IT infrastructure, but more critically, as to how the Government delivers public services to the people that it serves. In addition, it has significantly increased performance, while reducing costs.

### IMPROVING SERVICE LEVELS AND PERFORMANCE

Peter Clarke, chief technology officer, is driven by the search for technologies that provide practical tools to expedite the reliable delivery of customer-focused Government services.

“The Isle of Man Government has worked with EMC for 15 years and we have a strong partnership with them,” says Clarke. “We made the decision to virtualize our IT environment some time ago. This has resulted in a consolidated infrastructure that has virtualized 1,000 critical government applications including email, CRM, financials, health services, and similar.”

As part of its IT consolidation efforts, the Isle of Man Government's Information Systems Division had significantly reduced its number of software platforms, and is now committed to Microsoft.

“We stay constantly abreast of new technologies to increase performance and service delivery, while reducing costs,” says Clarke. “We are constantly seeking to increase data reliability for anytime/anywhere data delivery, but not at any cost. When we learned of EMC® VPLEX™ and its flash drive components, we did not consider other competitive solutions. VPLEX hooks into Microsoft, and no other competitor offered such a competitive advantage.”

- Supports cloud infrastructure
- Backed by the EMC commitment to robust IT design and support

To further increase service levels, performance, and data reliability, Clarke and his team analyzed the benefits of VPLEX.

“We assessed organizations that were using VPLEX in the United States,” says Clarke. “We examined its performance metrics, its input/output characteristics, and the added value that it could provide.”

Clarke’s department had changed its financial investment and analysis models from a capital spend basis to an operating cost basis some time ago.

“Our analysis indicated that VPLEX would reduce operating costs by 15 percent,” explains Clarke. “We wrote our business plan around this. It was a compelling argument. The Isle of Man Government is an early adopter of new technologies. Having recognized that VPLEX could further increase service levels while reducing IT costs, we made the decision to purchase.”

## THE SOLUTION: VPLEX METRO

Over a five-month period, the Information Systems Division migrated all data and critical applications from its legacy storage solutions to VPLEX, and then integrated EMC Celerra® NS-120 and NS-480 storage systems and Celerra Flash drives. The results have been satisfying.

“Performance has increased by a factor of eight in terms of data availability and speed,” says Clarke. “We’ve increased our storage utilization to 70 percent while using the same amount of hardware.”

Data recovery speed in the event of a failover has also been reduced dramatically.

“Our legacy solution’s data recovery was somewhat slow and used a tape drive replication infrastructure,” says Clarke. “With the old solution, some of our applications could take up to four hours to recover. However, data recovery with VPLEX is much faster due to its automatic failover capability: all applications are restored in no more than 30 minutes, while key applications can take less than 60 seconds. This is also due to load balancing characteristics within VPLEX.”

Operating costs have also been reduced as anticipated—with a five percent decrease in energy costs alone—while SAN capacity has been tripled. Additionally, flexibility has been significantly enhanced.

“VPLEX, together with our virtual environment, gives us the ability to shift services from one data center to another in real time,” says Clarke. “Other services could take hours to achieve the same thing.”

## CELERRA FLASH DRIVES AUTOMATE SCALE UP

Application and data availability are further increased through integrated Celerra Flash drive technologies.

“Our legacy solution was solely disk-based and provided us with three tiers of data storage,” says Clarke. “However, this legacy tiering meant that as increased demands were made upon applications, we would have to manually move those applications up to higher tiering levels.”

Like many organizations, IT and data demand can change quickly. In the case of the Isle of Man Government, factors such as seasonality (tourism and the start and end of the school year), shift work in government offices and subsequent increases in workloads, and annual events (such as the island’s famous TT race) place varying demands on IT infrastructure and its applications.

“If you visualize our new EMC solution, Flash sits on top of VPLEX, providing solid-state storage capabilities that yield high data availability and performance,” says Clarke. “More critically, these EMC technologies automate data tiering requirements. In that we only have 58 people employed in our IT department, Flash and automatic scale-up increases productivity, enabling our staff to use their time and energies in other critical areas.”

VPLEX Metro with Flash continually analyzes application and data usage patterns. Should demand grow, requiring higher levels of processing power, applications as well as relevant data are automatically moved to the solid-state Flash environment. When demand slackens, relevant applications and data are moved back onto disk arrays.

“In many ways, we no longer have a ‘tiered’ data environment,” notes Clarke. “Now, applications and associated data are treated in the same way. Those applications that are in demand by the public are served with higher levels of performance and processing power.”

## CONSOLIDATED CLOUD FOR FLEXIBLE, ALWAYS AVAILABLE SERVICE

EMC VPLEX together with its integrated Flash and Celerra storage solution infrastructure supports the primary mission of the Isle of Man Government: the implementation of demand-led public services. Virtualization, together with cloud, helps to drive that mission.

“We have now virtualized our entire server platform and all service applications,” says Clarke. “We have also moved to a complete cloud service. Cloud, and the IT infrastructure that supports it, have enabled us to significantly increase our level of service as well as data flexibility and availability. Consequently, this positively impacts the methods with which our customers use and access data and applications.”

As an example, Clarke notes that Isle of Man health services have significantly increased in their effectiveness due to new cloud and IT capabilities. Individual patient data is now aggregated within the cloud environment and made available instantly to doctors, EMT specialists, surgeons, nurses, and other relevant users.

“For instance, ambulance technicians can gain access to patient historical data instantly through laptops that have been virtualized,” says Clarke. “In the event of an emergency, the instant availability of such data can save lives. The provision of such relevant information, through the implementation of cloud technologies, is particularly satisfying.”

Clarke highly recommends VPLEX and EMC to other organizations that want to increase performance while reducing costs.

“We have partnered with EMC due to their knowledge and constant stream of new developments in technology,” says Clarke. “We have direct access to EMC engineers who can dial in remotely and recommend solutions for our EMC infrastructure—and that service level is as good as it gets. That said, we rarely have to use EMC support because their solutions are so reliable.”

“We recommend VPLEX for some straightforward reasons: it does what it says on the tin,” concludes Clarke. “It is well designed and robust. It delivers high performance, cuts operating costs, and yields the data availability that we require to provide customer-driven public services. To other organizations we can only recommend that they get rid of paper stores. Go electronic and operate in real time. Use all the IT infrastructure you have and drive down costs.”

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PETER CLARKE,  
CHIEF TECHNOLOGY OFFICER

## CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at [www.EMC.com](http://www.EMC.com).

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