nlyte Software
ENLIGHTEN YOUR DATA CENTER

Computacenter
Services & Solutions

CASE STUDY

Computacenter

Summary

Industry
Information Technology including data centre managed services

Business Needs
- Integrating the data centres of a newly acquired data centre services company
- Planning for and supporting increased business demand for data centre services including cloud initiatives (C3)
- Managing effective use and cost of data centre capacity, space, power and cooling
- Differentiation in a highly competitive marketplace

Solution
nlyte DCIM suite

Business Benefits
- Customers' service tailored to meet individual needs including charging according to exact power usage and carbon footprint measurement
- Data centre infrastructure and layout designed for optimum performance and maximum efficiency
- Data centre maintenance planned and scheduled immediately instead of requiring a 2 week audit time
- Data accuracy driving improved and faster decision making and cutting the risk or errors
- Audit time cut from 3 weeks to less than 1 week

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Introduction to Computacenter

Computacenter, with more than 10,000 employees and revenues of over £2.5 billion, is Europe's leading independent provider of IT infrastructure services. The company advises customers on their IT strategy, implements solutions and manages their technology infrastructures, helping them to remove IT cost, complexity and barriers to change.

Computacenter delivers managed hosting services from highly available Tier II to Tier IV data centres in Romford, Manchester, Leeds and Nottingham in the UK and in Frankfurt, Germany. These services cover everything from rack design and cabling, remote management, 24x7 incident/change/access requests and on-site support, detailed asset and power reporting to carbon monitoring and optimisation services.

In January 2011, Computacenter launched Computacenter cloud computing (C3) to offer organisations the ability to adopt the cloud, using an optimal blend of onsite and offsite IT delivery models.

The Data Centre Challenge

Computacenter first started to think about data centre infrastructure management (DCIM) when the company acquired Digica (a provider of data centre services) at the end of 2006. Digica focused on providing SAP outsourcing services and had data centres in Warrington, Leeds and Nottingham plus an off shore operation in Cape Town South Africa.

Simon Brickett, Head of Data Centre Services at Computacenter was responsible for managing the integration of all of Digica's data centres into the existing Computacentre estate. His challenge was that Digica did not have effective data centre management systems in place so could not tell him centrally what assets or capacity availability they had.

"Being successful in the managed services business is all about driving down the cost of delivery by managing space, power, cooling and capacity while continuing to offer excellent service" said Simon. "This meant that I had to integrate the Digica estate and make it effective very quickly. Collecting and managing the data centre infrastructure with Excel spreadsheets was too slow and unreliable.".

From a wider perspective, Computacenter was opening a number of new data centres and Simon wanted a tool that would enable him to plan and forecast the most effective use of both new and existing data centres to meet growing business demand. He also needed to track and manage the ever increasing costs of power through accurate metrics rather than manufacturers' specifications. With a goal of having any new data centre operational on the 1st day of opening, starting with one in Manchester, he needed to know precise weight and heat measurements to plan floor layouts and power and cooling requirements in advance.

The Decision Making Process

Simon decided that to achieve his goals he needed a fully functional DCIM solution. He felt sure that there must be a better solution than the Microsoft Excel spreadsheets they were currently using and started to research DCIM tools. His searches via the Web and industry colleagues led him to a short-list of 3 possible solutions – continuing to use Excel, Vista from Aperture and nlyte's DCIM suite.

According to Simon, nlyte's solution stood out through its ease of use, impactful visual representation, flexibility for integration with existing toolsets and rapid implementation potential. There was also felt to be a good cultural fit between nlyte and Computacenter. Simon felt that nlyte would listen to Computacenter and to the wider demands of the data centre industry and do whatever was needed to deliver a solution that supported Computacenter's goals.

The Implementation

nlyte was initially installed into Computacenter's Manchester data centre which was a green field site. The implementation process was so straightforward that Computacenter staff managed it themselves after attending the standard nlyte training course. nlyte supported Computacenter for the slightly more complex Leeds and Nottingham data centre installations.

The Benefits

Saving Time - The nlyte solution has drastically cut the time it takes to do many common data centre tasks. Computacenter no longer has to undertake a manual two week audit every time maintenance work needs to be scheduled. Maintenance can be planned and scheduled immediately using accurate and up-to-date information. Full data centre estate audit time has been cut from three weeks to less than one week and saved the costs of temporary resource to perform the audits.

Data Accuracy - Instant Key Performance Indicator (KPI) audit reports are available for each data centre, giving staff 100% confidence in the status of all their data centre equipment and enabling more effective planning and decision making while cutting the risk of error. The data is accurate because it's based on real-time information rather than static and almost immediately out-of-date spreadsheets.

Optimum Utilisation and Power Management - nlyte's capacity planning and management functionality enables rapid understanding of hall thresholds and ensures that cabinets and floor standing assets are placed in the most suitable locations. With this level of information, Computacenter can plan for optimum data centre utilisation while drawing the minimum amount of power and cooling.

Having access to power draw and historic power information over a period of time through integration with power strips enables Computacenter to have an almost real-time (30 minute) view of the running cost of each asset in the data centre. Usage and lifecycle replacement can be planned accordingly.

Customer Service - Immediate visibility of data centre power and floor space capacity gives Computacenter the ability to map capability against overall revenue and revenue per rack. Customers can be charged for their actual power usage rather than an estimated share of overall data centre power consumption. This will become even more important when data centres have to start paying their share of the UK Government's Carbon Reduction Commitment Energy Efficiency Scheme (CRC EES) carbon tax bill.

Customers have also benefitted because Computacenter's service managers have access to bespoke nlyte reports for each customer. These highlight potential issues and areas where improvements can be made and facilitate discussion of service and planning at an individual customer level.

In addition, data centre staff have been freed from spending hours producing management reports. The nlyte solution provides immediate access to a wide range of tailored graphical reports including real time power, remaining cooling, cabinet heat load and free space.

Computacenter has since used the nlyte Open Web Services API to develop integration between the Intermec CK3 Barcode Scanner running Microsoft Windows Mobile and nlyte. The integration enables information collected from on-site scans of data centre equipment to automatically update the nlyte database. This information is used to raise discrepancy "red flags" into Computacenter's Incident Management system, to audit cabinet and chassis placement against the nlyte database and to immediately query, update, add and remove asset information from within nlyte, providing fast and effective tracking and correlation between physical assets and the master nlyte system.

Summary

"With nlyte, and its advanced analytic capabilities, we have been able to gain control over our data centres. The ability to view, model and predict our data centre power, cooling and space requirements in near real-time enables us to make the most effective use of our distributed estate" said Simon. "In addition, we can deliver our customers with services tailored to meet their exact requirements and help them to minimise their data centre energy usage and carbon footprint."

Computacenter has seen huge value from the implementation of their nlyte DCIM solution and it has changed the way they operate, enabling the introduction of organisation-wide best practice processes for data centre management. The new appointment of an nlyte design consultant will help to continue the development and implementation of nlyte and the introduction of DCIM across the company.

Simon's message to anyone looking to implement DCIM is to treat it as both a solution and a process change. To ensure success, a company must have the right processes in place to support DCIM adoption and must also make sure that the solution and accompanying processes are adopted by everyone involved.

"It never ceases to surprise me that there are major data centres in operation today that don't have a DCIM tool like nlyte." said Simon. "Many data centres are designed using theory by data centre architects who use manufacturers' specifications. Unlike people operating those data centres, we know what is really happening in our data centres. This means that we can run them to the optimum efficiency and pass these benefits on to our customers."

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