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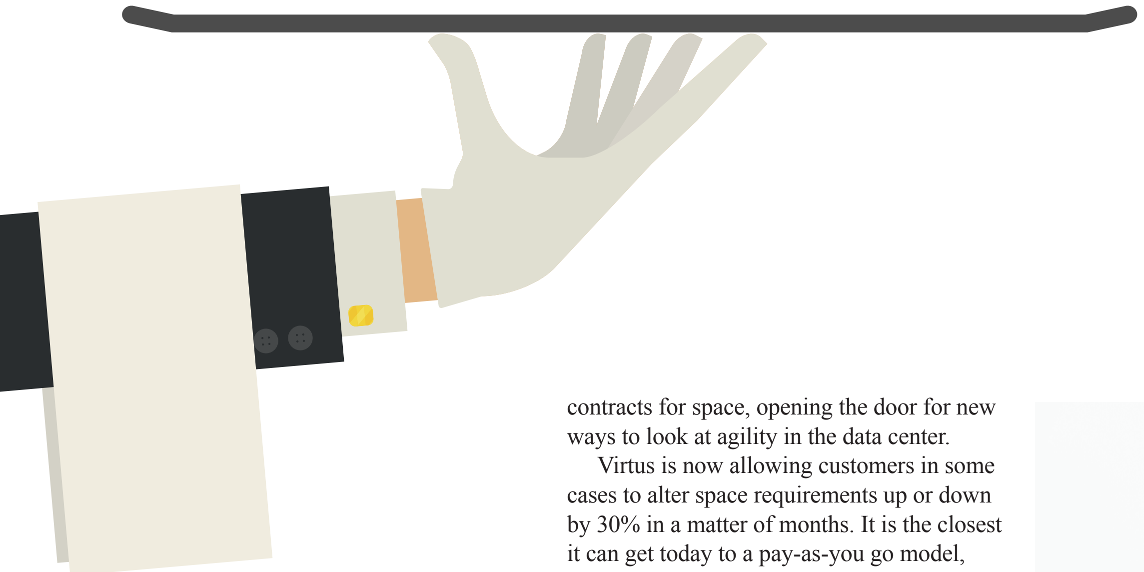
FOCUS DCIM

DCIM AT YOUR SERVICE

UK colo player Virtus says it is differentiating by opening up DCIM to its users, which can team capacity management with flexible pricing. By Penny Jones



Matthew Larbey, the director of product strategy for relatively new London colocation company Virtus, rattles off buzzwords 'agile', 'connected' and 'efficient' when we meet to discuss data center infrastructure management (DCIM). And while he admits they are words the industry uses without much thought these days, he says he believes Virtus has something up its sleeve that lends weight to the words – and it is all to do with transparency.

Technology teams at Virtus have been tinkering away with help from communications vendor CommScope and IT management solutions company TDB Fusion to integrate new capabilities to CommScope's iTracs DCIM platform.

The result is a DCIM-based service that can now offer customers a view of their own environment, reaching beyond the rack to maintenance logs and even customer relationship management and sales platforms. It offers the ability for colo users to control their environment as if it is their own purpose-built data center.

This, teamed with flexible pricing models, according to Larbey and CTO Robbie McGhie, is helping to lay a new foundation for colo services that moves the industry away from long-term inflexible pricing contracts for space, opening the door for new ways to look at agility in the data center.

Virtus is now allowing customers in some cases to alter space requirements up or down by 30% in a matter of months. It is the closest it can get today to a pay-as-you go model, Larbey says, which he believes will one day be the standard for colocation.

"We came up with the idea during a meeting 12 months ago in which we positioned the market in five years' time, McGhie says. "We put a wish list together of customer requirements. We had always wanted to share our information with customers but we never had a tool to do this, at the same time Virtus was growing so fast internally and we needed a management tool so we could deliver features internally."

THE SOFTWARE SOLUTION

Sharing information from DCIM tools with customers is something that goes against the grain of most colo providers. Space and power – and use of both – are what contracts are usually based on. While some colo providers will offer flexible contract terms, and others levels of transparency, Larbey (who previously worked at Equinix) says the industry rarely combines the two as part of a customer offering.

He says being such a young company, however, has allowed Virtus to design a business model that can build off of new levels of transparency. And as a result, Larbey expects the company see benefits that will go beyond goodwill.

Internally, Virtus can use the new tool to manage its own sales, customer relationship and billing systems and it believes it will also help lower power usage effectiveness (PUE), leading to more efficient operations by customers and in turn maximizing the use of space and power secured for its operations. "By letting customers have full visibility we expect to use 80 to 90% of contracted power as opposed to 50 to 60%," McGhie says.

Virtus director of product strategy Matthew Larbey

Virtus CTO Robbie McGhie

DCIM EVOLUTION

The platform also offers some insight into how the DCIM market could eventually progress.

The Virtus Intelligent Platform (VIP) is a web-based portal that allows programs such as SAGE accounting, Salesforce, Trend building management and Schneider Electric power monitoring to all be plugged into iTRACS. It provides users with a single pane of glass for facility insight, automation and management.

Customers can integrate data from their own IT assets and even control their facility from a remote office while 3D visualization has also been built in to help with deployments. The system Virtus has helped build can even track trouble ticketing and invoicing and monitor SLA performance.

The open format of the platform means more modules can be added as the industry evolves – "this will be quite likely as we move forward, both with DCIM and as the industry changes," Larbey says.

THE VIP SERVICE

Virtus currently operates out of a 33,000 sq ft data center opened in 2011 on the outskirts of London in Enfield. It plans to bring its second data center, with 65,000 sq ft of data center space, online in September.

CEO Neil Cresswell said Virtus was established to cater to new demands in the industry. "Our market has always been mid market, which size wise is mid to large solutions, not massive wholesale power shell deals and server-by-server rack to rack for hosting. That is way the market has moved in the last few years. We are seeing smaller more distributed workloads as a result of the difficulties customers have in predicting [what operations will be required] in three months, let alone five or ten years," Cresswell said.

"In London we have seen three big growth areas, cloud – in all areas, lots of rich content and digital media that want to be in or around London but have quite big requirements. Interestingly, in last six months, corporate or enterprise IT has also risen again."

As a result, Virtus has seen a number of cloud providers enter its facility. In March it signed four deals alone – ERA, Inatech, OryxAlign and L3C. Cloud and other service providers are now expected to white-label Virtus' VIP solution, passing the benefits on to their own customers and using it as part of their own SLA.

And as the market heats up for cloud and other ecosystems, the DCIM service could be pushed out to other parts of the world. Cresswell says Virtus is in talks with other "best-in-breed" providers in other locations which could eventually band together to create a global footprint.

But for now, DCIM is about opening up new conversations with customers in London. "If a customer wants to sit down with us and say they are not using as much as they thought they would, they can ask to move their contract down. On the other hand, they may use the predictive modelling and find they need additional capacity somewhere else. Previously colo was a bit of a black box, now you can put colo into a much wider context," Larbey says. ■

DOES THE DATA CENTER INDUSTRY NEED A CAPACITY GOD?

The divide between facilities and IT teams within the data center created some lively debate at DatacenterDynamics Converged Santa Clara in June. The conversation circled around unused capacity, cost and risk. Judging by the thoughts of those working on the US West Coast, the overall responsibility for managing these areas is a real 'hot potato' that is turning efforts to drive efficiency and reduce costs to mash.

But it appears to be the fault of no single team or technology. What it really boils down to is a lack of education, or even an ensuing candidate position to assume such a role. It seems IT teams have enough on their plates to start learning facilities, and facilities the same regarding IT. And finance, well they often have other parts of the business to think about, despite paying the power bill. But when things go wrong, this hot potato can cause havoc for all teams involved.

Most agree that the main reason there is stranded capacity in the data center is that the industry has created so many silos – teams working on individual projects inside the facility – that there is rarely someone tasked with looking at the farm from the top of the mountain.

Dr Jon Koomey, research fellow at the Steyer-Taylor Center for Energy Policy and Finance at Stanford University, said only when you know the physics of the situation inside the data center, and the effect of changes you are likely to make in future, can you remove the problem of stranded capacity, and in turn drive better levels of efficiency through reduced power use. "The goal, ultimately, is to match energy services demanded with those supplied to deliver information services at the total lowest cost. The only way to do that is to manage stranded capacity that comes from IT deployments that do not match the original design of the facility," Koomey said.

He likened the situation today to Tetris, drawing on the analogy of the different shaped blocks in the game. "IT loads come in to the facility in all different shapes, leaving spaces. Those spaces are capacity, so that 5MW IT facility you think you have bought will typically have 30% to 40% unused."

Despite the obvious draw for making maximum use of the data center many attendees agreed that predictive modelling, and even data center infrastructure management (DCIM) tools that offer more clarity on the individual situation at real time, can be a difficult sell. Once again, the hot potato (of no one tasked with complete responsibility) often gets in the way.

Mark Thiele, EVP of data center technology at Switch, who has also worked for ServiceMesh, VMware and Brocade, said in most cases there is not a single person in the data center with a vision or understanding of the facility's entire operations – from design and build to IT, facilities and even economics.

"Today 75 to 80% of all data centers don't have a holistic person that knows and understands everything about the data center, so the target opportunity for [sale of] these tools is often someone that has no responsibility for managing this in their job description," Thiele said. "We also find that a majority of facilities today are still bespoke – they are designed to be repaired after they are created. These are serious thresholds that have to be overcome in the market on the whole."

The issue of stranded capacity can also cause pain for a provider offering space according to consultancy Hooked Communications' David Holub. "We spend a great amount of time and energy optimizing around PUE (power usage effectiveness) and power costs but utilization rates and the ability to optimize around utilization will have a much greater impact on cost," Holub said.

He said for those using colo or wholesale data center space, the benefits of capacity management could go to waste if flexible contracts that allow the scaling up or down of space are not offered.

Data center end user specialist Scott Stein, of Cassidy Turley, even discredited the benefits of capacity planning altogether. "To me, capacity planning is the biggest amount of voodoo and uncertainty a company can have – it is typically a function for P&L but it is often instead mapped into IT teams and engineering teams. I rarely see it done accurately, and it is such a moving target," Stein said. "It can leave you with a vast amount of unused resources."

Sean Ivery, senior director at Cushman&Wakefield said he agreed capacity planning is near impossible. He said instead users of colocation or wholesale space should be focussing on negotiating as much flexibility into their contracts as possible, instead of focussing on cost.