Tuangru propels DCIM reach into cloud instances

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The company has added monitoring of cloud instances to its DCIM platform to help operators improve transparency and management of their various datacenter infrastructure assets. Its asset management services now reach from the cloud down to hardware procurement.

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Datacenter infrastructure management (DCIM) software is utilized to monitor, manage and optimize critical power and thermal systems, and is increasingly being integrated with other IT management tools. However, DCIM uptake has been relatively disappointing owing partly to long sales cycles, drawn-out implementations, unclear return on investment and uncertainty over on-premises datacenter capacity in the future.

Tuangru Holdings aims to make DCIM implementation easy and affordable by providing a SaaS-based model with a simple pricing scheme targeting enterprises and the SMB providers. Following the integration of software assets it acquired from No Limits Software a year ago, as well as new enhancements, the company's latest release of its RAMP DCIM suite adds the capability to monitor cloud instances.

THE 451 TAKE

More organizations are adopting a hybrid datacenter approach, meaning a mix of owned on-premises datacenters and off-premises services including colocation and public clouds. Therefore, datacenter managers are challenged to find software tools that provide greater visibility across this type of environment. We believe DCIM will play an enabling role as part of a software-defined operational and services strategy. Tuangru looks to provide a low-friction deployment option for enterprises and service providers to attain the benefits of DCIM to monitor and manage their datacenter capacity, including a view into their public cloud capacity, which is a fairly unique feature within DCIM. However, there is a growing field of competitive DCIM and cloud management software tools available today, with some systems using DCIM-based cloud services for data analytics that deliver new types of insights and predictive outcomes.

CONTEXT

Vancouver, Canada-based Tuangru was founded in 2012 as a group-buying service to aid hosting and cloud service providers in procuring datacenter hardware at competitive and often discounted prices. Through internal software development, the company transitioned to a cloud-based B2B marketplace to buy and sell datacenter hardware.

In September 2016, the company acquired the assets of No Limits Software, a small and longstanding DCIM software supplier founded and backed by industry veteran Dave Cole. The transaction fit with Tuangru's strategy to add value and depth to its asset management and procurement services using more software tools, including its internally developed business intelligence software.

Tuangru does not disclose revenue, but in 2016 we estimated RAMP DCIM software revenue in the range of $6-10m. Its B2B marketplace records an undisclosed amount of gross hardware sales, with net revenue after Tuangru's margin contributing to the company's bottom line. The company currently has a total of 25 employees and plans to more than double its workforce with 25-35 new hires over the next year to accommodate projected growth in business, ongoing R&D and platform expansion.

Tuangru ported the No Limits Software DCIM suite, called RAMP, to a SaaS-based offering and kept the brand name. The company says its value proposition is to provide customers with an easy-to-deploy, consumption-based DCIM model that increases insight into their datacenter operations and performance. RAMP DCIM software customers include Snapfish, Cloudera, Michigan State University, HOSTING and Ascent. Customers have the option to integrate the DCIM system with Tuangru's procurement platform.

The company says its B2B marketplace customers tend to be hosting service providers in the $10-100m revenue range, with a few of its largest clients in the $150-200m range. The marketplace earns a mid to low single-digit-percent margin on all hardware transactions (servers, components and network equipment). Its hardware vendor partners include Arista, Cisco, Cumulus Networks, Dell, Intel, Juniper Networks, Lenovo, NetApp, Nutanix, Quanta Cloud Technology, SolidFire, Supermicro and Tegile. According to management, vendors value the service because they can address a large volume of service providers without working through additional channel steps.

Tuangru is self-funded, and has not taken on outside investment. Its business is primarily in North America, with approximately 70% in the US, 10% in Canada and 20% in Europe. It has no immediate plans to expand into Asia or Latin America.

STRATEGY

Tuangru's strategy looks to address some of the hurdles presented by DCIM deployments by offering its SaaS that operators will find easy to install and manage. An on-premises deployment option is also available. The company's pricing model is relatively simple because it centers on the number of datacenter assets covered.

An asset is defined as a physical device (UPS, CRAC, server, network device, etc.), a virtual machine or a cloud instance. Its public pricing plans range from Small IT (up to 500 assets) at $7 per datacenter asset per month, to as low as $3 or less per asset per month for Enterprise accounts (customers with 5,000 or more assets).

All plans have access to the entire feature/function suite of the RAMP DCIM system including IT asset management, power monitoring, auto-change management, datacenter visualization, capacity planning, cloud instance monitoring and reporting tools.

The company designs its services around helping customers maximize performance according to several key performance indicators, and helps customers benchmark for these KPIs using insights from its DCIM software for infrastructure management and optimization of hardware purchasing. Data collected from DCIM such as energy usage and utilization is leveraged to improve Tuangru's capacity planning offerings.

TECHNOLOGY

Tuangru's RAMP DCIM suite has extensive asset tracking and management functions, including a robust auto-discovery feature for facility equipment (power, cooling and connectivity). It can also drill down to IT asset configurations, and interrogate hypervisors (such as vSphere and Hyper-V) to capture virtual machine data. This capability can be integrated with Tuangru's procurement system and extended into automated change and workflow management (moves, adds, changes).

The upshot for customers is more comprehensive asset lifecycle management (from order placement to deployment to decommissioning). In addition, Tuangru's DCIM has granular monitoring features, including for server processor utilization and power consumption. Tuangru believes these features make capacity planning easier for customers, and helps them reduce over-provisioning.

One of the key new features in the latest version of RAMP is cloud instance monitoring in AWS, Azure and Google Cloud Platform. Tuangru uses a number of approaches to collect data from cloud services: a VPN between a customer's on-premises datacenter and the cloud with proprietary Tuangru 'connectors'; installing a data collector application on the servers in the cloud; or installing an observer virtual appliance that uses proprietary scanner software to scan and catalog cloud assets.

In development is its multi-cloud-instance monitoring technology that will allow customers to automatically add compute instances in remote public clouds and monitor the applications as if they were on-premises instances.

With this release, RAMP is now also capable of tracking physical connectivity down to each network port, as well as connections between sites, which can be useful for redundancy audits, for example. Other reporting capabilities include views into different power layers, PUE and energy costs with dashboards available for actual power usage, power capacity and projected power usage among others.

The company's roadmap for RAMP for 2018 includes network performance monitoring including bandwidth and packet loss detection, microservices integration and more data management functionality. The platform will move from a Windows stack deployment to a Linux containerized stack (in the cloud and on-premises).

Further out, its roadmap contains the use of artificial intelligence to determine relationships between data for root cause analysis, preventative maintenance and automation. At the server level, security enhancements will detect software changes, patches and abnormal performance. The company does not have plans to develop a cloud-based service to aggregate and anonymize customer data in a pooled data lake for analysis at this time.

COMPETITION

In the DCIM arena, Tuangru competes with about 70 suppliers that range considerably in size and scope, and with DCIM products that vary in function and application. Increasingly, a greater portion of DCIM sales is being won by a relatively small group of the larger suppliers that include leaders Schneider Electric, Nlyte Software and Vertiv.

There are several other DCIM suppliers that have strong technology and the resources to remain competitive, including ABB, Baselayer, Eaton, FNT, Panduit, Siemens and Sunbird Software. Others are pursuing more niche strategies. A growing number of DCIM suppliers integrate their software with ITSM and other management tools. Like Tuangru, they have a mix of formal integrations with third-party suppliers and API environments (including some based on open source code).

Tuangru is fairly unique in its B2B marketplace and group-buying proposition. However, as a reseller of hardware to service providers, it competes with the large VARs and distributors that deliver into the space, such as Arrow Electronics, Avnet, Ingram Micro, Tech Data, and SYNNEX.

SWOT ANALYSIS

STRENGTHS
Tuangru focuses on service providers and enterprises with a value proposition in data-center infrastructure and asset lifecycle management. It extended its DCIM suite capabilities to monitor public cloud instances.

WEAKNESSES
Tuangru is a relatively small supplier with a low profile. The company is not particularly known outside of the hosting space, and its international presence remains limited.

OPPORTUNITIES
The datacenter sector is slowly moving toward more software-driven (and ultimately automated) critical systems. Tuangru's DCIM provides complementary functions for its existing customer base, while also creating an avenue to address new customers in a focused niche market.

THREATS
The DCIM market is intensely competitive, including from much larger rivals, some of which have extensive hardware and software portfolios and engineering resources to develop competitive offerings. Larger rivals have also rolled out cloud-based datacenter management-as-a-service offerings.