NEXT-GENERATION DATACENTER MANAGEMENT

From DCIM to DCSO

Sometimes described as the operating or ERP system for the datacenter, datacenter infrastructure management (DCIM) is a technology that helps operators manage their datacenters more effectively. But in order to help customers fully optimize and leverage their investments, deliver better services, and manage their resources in real time, suppliers are introducing new classes of software tools that 451 Research is calling datacenter service optimization (DCSO).

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KEY FINDINGS

- A considerable number of innovations in datacenter management are discussed and categorized in this report. Key trends are greater automation, greater control, and integration with associated systems to achieve business and service-level control.

- Most datacenter operators will increasingly be forced into comparisons with the most competitive public cloud service providers, which can operate at very high levels of efficiency and benefit from scale, high utilization, and orchestration and automation tools. The value of DCIM is partly, if not largely, as an enabler for datacenters to use such approaches and technologies.

- Suppliers of DCIM and other related systems that want to sell large deployments with advanced capabilities need to more effectively demonstrate the value of DCIM not just for today's datacenter, but for tomorrow's. This is not something most suppliers have done well.

- Current DCIM products are powerful, but their capabilities are increasingly pushing beyond the definitional scope of DCIM, including further up the IT stack and beyond the datacenter walls. In this report, we describe a new overarching category of software – known as DCSO – that is inclusive of DCIM yet extends beyond it. Independent functions include datacenter business planning, costing, energy resource management, and converged physical/virtual datacenter management.

- DCSO systems will provide a more business-, cost- and service-oriented view of the datacenter, drawing on external resources, integrating with multiple systems, and enabling the optimization of datacenters services in real time and throughout the lifecycle of a facility. DCIM systems managing the underlying facilities infrastructure are a critical and subsidiary function.

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REPORT SNAPSHOT

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ABOUT THIS REPORT

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This report describes a new overarching category of software that 451 Research is calling datacenter service optimization (DCSO), which is inclusive of DCIM yet extends beyond it. Independent DCSO functions include datacenter business planning, costing, energy resource management, and converged physical/virtual datacenter management. In the market for datacenter management systems, the shift from DCIM to DCSO reflects an evolution toward a more service-oriented and business-oriented view of datacenters.

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