CA Capacity Management

Improving End-to-End Data Center Efficiency

At a Glance

CA Capacity Management enables customers to optimize their existing IT environment as well as transition to cloud computing by providing an understanding of their near and long term capacity needs and how IT assets perform relative to those needs. Customers can use their generated performance data to accurately forecast and analyze capacity allocation to balance loads across the data center and meet their capacity needs in a cost-effective manner, while aligning IT to the business to ensure business requirements and demand trends are met and managed in near real time. CA Capacity Management uniquely provides advanced scalability and capacity analysis with end-to-end, cross-enterprise support and capabilities in order to provide the prescriptive insight needed to make informed business decisions.

Business Challenges

Effective capacity planning and optimization is becoming a pivotal necessity in IT management. Today most data centers are severely under-utilized and server over-provisioning has become the norm as an expensive means to ensure SLAs in order to keep up with increasing business demands for faster delivery of IT services. Data center growth can cause significant strain on IT budgets and management overhead. IT organizations bear the capital expenditure and operating costs of this equipment and are looking for safe, predictable and cost-effective ways to consolidate and optimize their data center infrastructure. Many organizations have turned to virtualization to consolidate servers and reclaim precious data center space in hope to realize higher utilization rates and increased operational efficiency. Without proper tools and processes, IT organizations are experiencing “VM sprawl,” increasing software license costs and complexity.

Considering converged infrastructure as the platform for a private cloud initiative or evaluating public cloud providers to offload commodity services brings with it additional questions like, “How much hardware do I need to maintain SLAs?,” “How will my applications perform and how much will they cost in a public cloud provider’s environment?” or “How do I modernize application architectures and infrastructure to support business growth?”.

Solution Overview

Maintaining appropriate capacity and constant IT availability while containing costs is a challenging task, especially as you increase your virtualization and cloud adoption. Capacity Management solutions from CA Technologies can give you the insight and tools needed to run an efficient and cost-effective data center. CA Capacity Management makes it easy to evaluate the current state of capacity utilization. And at the same time achieve data center efficiency across high-volume physical, virtual and cloud environments while helping to reduce capital expenditures (CapEx) and operating expenditures (OpEx) associated with hardware, software, power and cooling. In addition, our solutions help IT organizations predict capacity needs and increase the performance of data center resources to support the changing IT environment and meet SLAs. CA Capacity Management can also help manage your data center operations more effectively, mitigate risks, make informed IT decisions and improve business agility.

Key Benefits/Results

- **Reduce capital expenses** for new physical servers and facilities.
- **Reduce operational expenses** associated with VM licensing fees, power, leased spaced, maintenance and labor.
- **Identify opportunities** for consolidation or virtualization in order to maximize ROI and IT asset utilization.
- **Accurately identify** future workload needs and addresses variable demand to achieve accurate SLA results.

Key Features

- Assess server consolidation candidates to help reduce energy, license, maintenance and other operating costs while maintaining service levels and solve for business objectives.
- Understand how re-hosting, consolidation and workload stacking will affect application performance and infrastructure utilization.
- Evaluate virtualization alternatives such as hardware vendors, hypervisors, system configuration, operating systems and VM size.
- Understand ideal physical and virtual machine placement, in addition to configuration settings, required to support expected demand changes.
- Recommend architecture and configuration to optimize infrastructure and application performance.
CA Capacitiy Management provides the ability for customers to leverage their existing monitoring solutions to help better align the IT organization with the business and plan for change.

- Supports some of the world’s largest IT environments with enterprise level scalability and performance.
- Ability to manage the capacity prediction needs for your multi-tiered application environments from mainframe to distributed and to the cloud.
- Enterprise-class centralized repository that collects and normalizes performance data from multiple sources without needing agents or additional instrumentation.
- Extensive catalog of close to 7,000 infrastructure components to help customers compare and evaluate alternative platforms—public to private cloud, operating system to hypervisors and distributed to mainframe.
- Robust normalization methods that aggregate performance data and show the customer the power of new hardware, understand capacity consumption and workload impact.
- Advanced modeling function that can perform non-linear growth calculations to show the effect new demands will have on available capacity.

CA Capacity Management helps accelerate:

- **Successful Business Service Delivery** – Accurate predictions of capacity needs for application launches removes unnecessary risk of infrastructure bottlenecks and guarantees an exceptional customer experience.
- **IT Alignment** – Informed capacity management helps to deliver a new model for communicating with the business about how IT supports business services, manages its budgets and avoids unnecessary costs.
- **Cloud Initiatives** – Move to the public or private cloud with predictable risk, cost, performance and return with the ability to efficiently and accurately evaluate both on-premises and public cloud options, and minimize SLA violations due to unforeseen capacity limitations.
- **Cost Reduction Initiatives** - Quickly identify consolidation candidates to reduce the capital and operating expenses associated with hardware and software licenses, maintenance, power and cooling.