

**Capacity planning** is a solution to maintaining business service quality and avoiding the consequences of downtime and brownouts.

— “*The Capacity Planning Software Market,*”  
Forrester 2007

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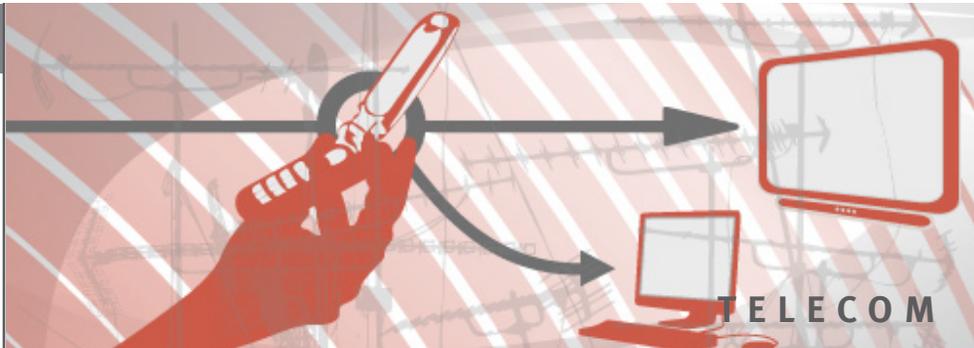
**We are able to do capacity planning** without suspending production. We can keep our customers happy without the fear of the sky falling. We’re able to stay ahead of the curve.

— *Verisign Director of Operations*

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**TeamQuest software saved us \$4 million** in one year by helping us better utilize existing infrastructure and avoiding unnecessary purchases.

— *Fortune 500 Telecom capacity manager*



**itso**

**Ensuring Service Availability**

### **The Challenge**

The telecommunications industry continues to experience tremendous growth in the face of many challenges — mega-mergers, increased competition, an unstable economy, and the Internet. Consumers and businesses continue to drive greater demand for broadband data, Web 2.0, VoIP, IPTV, unified communications, collaboration services and more.

Bandwidth consumption quadrupled in 2007. The growth in network traffic and data applications in the wireless and landline arenas remains explosive. The processes, data, applications and technology of the telecommunications infrastructure will be taxed at a higher rate as service providers continue to grow their business.

Technology advancements, consolidation, privatization, and convergence have forced the telecom industry to change. As a result, industry lines have blurred, services are no longer owned by traditional telcos, and large telcos are not the only companies delivering popular services. Cable isn’t cable anymore and the telephone has morphed into a multi-service machine. IT organizations are increasingly challenged to ensure high availability for their systems and services at the lowest possible cost.

As subscriber growth increases and the demand for services accelerates, it is imperative that Operations Support Systems (OSS) applications perform optimally and enable service providers to support flow-through provisioning; exceed service levels; provide revenue assurance; and manage customer relationships. Faced with increasingly complex IT environments, IT operations professionals must:

- Right-size IT infrastructure per each OSS specification
- Minimize application slow-downs or stoppages
- Accurately predict capacity requirements for mission-critical applications
- Report OSS performance metrics in terms meaningful to business units

### **Ensure Availability**

Availability is a key indicator of how successfully an IT organization is supporting the company’s business objectives. Without properly forecasting growth rates and gauging the resulting impact to IT infrastructure, how will a company understand what is needed to meet future demands?

## World-wide Telecom Customers

Belgacom  
Bell Canada  
Bell Mobility  
CenturyTel  
China Telecom-Guangzhou  
Deutsche Telekom (T-Systems)  
Ericsson AB  
GrameenPhone  
GuangDong Mobile  
Hainan Mobile  
KTF  
Orange France  
Polska Telefonia  
SingTel  
SK Telecom  
Sprint Nextel  
StarHub  
Syniverse Technologies  
Telefonica España  
Time Warner Cable  
T-Mobile (T-Systems)  
Uraltel  
Virgin Mobile USA  
Verisign  
Verizon Wireless  
Vodafone Group  
Vodafone Omnitel

The 3G technologies that enabled services such as wide-area wireless voice telephony and broadband wireless data transmissions are making way for fourth-generation communications systems that allow users to access voice, data, and multimedia anytime, anywhere. The shift enables telecommunications companies to provide new services and generate new revenue streams. This in turn amplifies the need to properly plan for the deployment and migration of these new technologies, services and the supporting OSS applications.

Without proper planning, significant business and technical problems may occur. The failure of just one server can result in service disruption, lost transactions, dissatisfied customers, reduced revenues, and damage to the company's reputation and brand.

### Minimize Costs

Already struggling to meet current and future availability and growth objectives, service providers are also under considerable pressure to control operating and capital costs. What's more, resources and budgets are diminishing as computing environments are expanding in size and complexity.

To make the best use of limited resources, IT professionals must:

- Improve hardware-to-personnel ratios
- Maximize the use of existing infrastructure
- Deploy applications into a shared environment
- Right-size hardware investments for new applications
- Forecast future hardware investments needed to handle growth

### Why TeamQuest?

TeamQuest's performance software solutions enable telecom companies to plan for future capacity while optimizing the use of existing infrastructure investments. How? TeamQuest's solutions identify underutilized or idle resources for redeployment and pinpoint where and when additional resources will be needed.

With TeamQuest, IT organizations can use expected growth rates to create "what if" scenarios that accurately predict when a multi-tiered, distributed environment will reach capacity — enabling them to provision accordingly to maintain service levels. For example, one TeamQuest telecom customer was able to show that CPU utilization of their existing servers was not only meeting required service levels but that performance would not degrade despite higher forecasted usage rates. This analysis saved the company \$4 million by avoiding unnecessary hardware purchases.

Telecommunications companies must predict IT service performance and determine optimal configurations to assure availability and minimize cost while meeting demand. TeamQuest can help.