

**TEAMQUEST CMIS®**  
(CAPACITY MANAGEMENT INFORMATION SYSTEM)

Data collection, event monitoring,  
distributed performance database &  
automated analytics

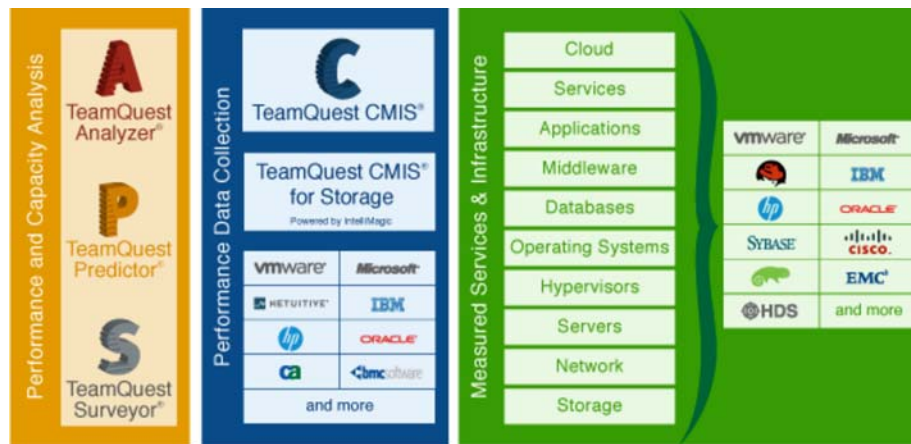
- ✓ Designed for virtualized & cloud computing
- ✓ Scales to over 40K servers, 100K elements
- ✓ Supports multi-vendor environments
- ✓ Includes efficient agent & agentless collection

## Benefits

- Automates sophisticated analytics, saving you time and helping you avoid performance and capacity issues.
- Reduces time to resolve cross-silo problems, with vendor-agnostic solution for physical servers, virtual servers, and storage systems.
- Performance data management perfect for both high-level dashboards and detailed analysis, efficiently facilitating high-level business service drill-down to detailed data.
- Analyze performance and capacity through all the tiers of your computing infrastructure, from services and applications all the way to your underlying storage systems.
- Reliably and accurately measures production applications in real-time with extremely low overhead; capable of collecting and managing more detail, more efficiently.
- Frees staffing resources from the need to maintain multiple, disparate data repositories, by providing one virtual performance database with everything you need.
- Grows with you and your infrastructure, with a scalable distributed architecture and policy-based administration.
- Delivers information in a form that is meaningful to business and IT managers, determining what portion of each IT resource is contributing to each business or IT service, and managing financial and business process performance together with IT infrastructure performance.

## How it works

The diagram below shows how the other products in the TeamQuest Performance Software suite interact and integrate with TeamQuest CMIS. In addition to TeamQuest products shown in the diagram, third party tools can exchange data and information with the TeamQuest CMIS using a variety of mechanisms.



*TeamQuest Performance Software Architecture Diagram*

TeamQuest CMIS supports complex, multi-vendor environments, and includes flexible agent and agent-less data collection, reduction, and aggregation capabilities. Native data collectors are available for a wide range of technologies, but TeamQuest CMIS can be further extended to other data sources through the use of "user agents." User agents can augment TeamQuest CMIS data with information about business process performance, custom application performance and more.

For efficiency, TeamQuest CMIS can store detailed performance data near the source of the data being collected. This data can be analyzed at a fine granularity, if necessary, to identify the cause of bottlenecks or slow response. Retention periods for such locally-stored detailed databases are generally shorter to keep database size more manageable.

TeamQuest CMIS can also employ one or more "Enterprise Databases" to enable efficient combined analysis of the performance of many distributed, heterogeneous infrastructure elements. By centralizing only key performance parameters and aggregating the data into a coarser time granularity, network traffic and storage requirements are minimized for enterprise reporting. But with TeamQuest CMIS, there is no need to sacrifice the details you need for problem solving. TeamQuest CMIS seamlessly manages drill-down from high-level performance data kept in a more centralized Enterprise Database to the fine-grained details kept closer to the source.

### TeamQuest CMIS for Storage

If you are using SAN storage systems, there is a TeamQuest CMIS for Storage option which incorporates technology created by IntelliMagic for collecting and managing performance data from popular storage systems, such as those from EMC, Hitachi, HP, and IBM. With this option added, TeamQuest Performance Software can perform a combined capacity analysis of everything from apps and services down to the storage systems, and everything in between.

### Why it's better

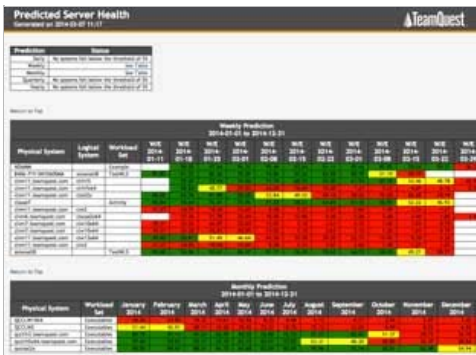
- Automates sophisticated analysis functions used by other TeamQuest products, enabling powerful, yet highly scalable analytics.
- Provides event monitoring. And with TeamQuest Predictor, these events can be based on predictive analytics, giving you advance notice of problems that have yet to occur.
- Efficiently stores all the data you need, using a distributed architecture to store the right data in the optimal place.
- Selectively aggregates and summarizes; does not force you to throw away important data to get enterprise reporting.
- Provides seamless and automated access to data; quickly fetching the details you need regardless of where they are stored.
- Efficiently gathers data from a wide variety of infrastructure, using out-of-box collectors for applications, middleware, databases, operating systems, hypervisors, storage systems and other sources.
- Allows you to create "user agents" for gathering virtually any type of performance data, including information about business performance, custom applications, power consumption or cooling.
- Minimizes the overhead and uses the most efficient means available to gather the most comprehensive, accurate and up-to-date measurements possible.
- Permits both agent and agent-based collection, depending on the requirements of the situation.

### Features

TeamQuest CMIS provides efficient data collection, event monitoring, a distributed performance database and automated analytics. TeamQuest CMIS provides these services in tight integration with TeamQuest Analyzer, TeamQuest Surveyor, and TeamQuest Predictor.

TeamQuest Analyzer uses TeamQuest CMIS to view events, isolate root cause, and seamlessly drill down to details needed for advance trouble shooting. TeamQuest Surveyor can use TeamQuest CMIS as one of many data sources when performing its automated analytical reports. And TeamQuest Predictor uses TeamQuest CMIS to perform automated predictive analytics.

The following screen shots and examples provide examples of what can be accomplished when TeamQuest Surveyor and Analyzer are used in conjunction with TeamQuest CMIS.



This Predicted Server Health report was produced by TeamQuest Surveyor. The report uses TeamQuest Risk Prediction analytics that were automated by TeamQuest CMIS and powered by TeamQuest Predictor. The report predicts what server health will be in the future, using our exclusive TeamQuest Performance Indicator. With information from this report, you can focus your efforts to avoid future outages and bottlenecks.

**Detailed Inventory**  
Generated on: 2013-10-27 11:07

This report shows a detailed table of server configuration items. The table includes columns for System, CPU Type, OS Version, CPU, CPU Speed, CPU Temp, CPU Usage, Memory, Network, System ID, Model, Memory, and Price. The data is organized into a grid with alternating row colors for readability.

This TeamQuest Surveyor report shows detailed information regarding the configuration items discovered by TeamQuest CMIS. With this report you know precisely what resources you have on hand. It's up-to-date information that you might use to populate or update a CMDB.

**High Growth File Systems**  
Generated on: 2013-10-22 13:40

This report displays a table of high-growth file systems. The table includes columns for System, File System, Percent Growth, Free Space (GB), and Percent Used Space. The data is presented in a simple table format.

System	File System	Percent Growth	Free Space (GB)	Percent Used Space
dir12.teamquest.com	/	31.69	3.78	
dir16e4.teamquest.com	/	11.02	3.01	
dir1e44	/	7.44	1.49	
dir12.teamquest.com	/	6.52	2.06	

You need to know which file systems are likely to become a problem in the future. This report uses TeamQuest CMIS to show which file systems are growing the most rapidly, giving you time to take action before services are adversely affected.



Was yesterday a "typical" processing day for a given server? With this report, you will know. It shows typical against actual for CPU, memory, I/O, and network utilization. This report uses TeamQuest CMIS and is available from both TeamQuest Surveyor and TeamQuest Analyzer.

**Peak Usage**  
Generated on 2013-10-22 10:24

Peak CPU Usage Details      Peak IO Usage Details  
Peak Memory Usage Details      Peak Storage Usage Details

**Peak CPU Usage**  
2013-09-01 to 2013-09-30

System	30 Minute	Utilization (%)	1 Hour	Utilization (%)
ASCNLE1	2013-09-30 12:30	6.54	2013-09-20 00:00	27.30
CLMHW2	2013-09-30 20:30	6.64	2013-09-18 17:00	6.64
SEW1	2013-09-23 05:30	27.83	2013-09-14 17:00	85.89
clatn11	2013-09-30 21:30	5.86	2013-09-13 12:00	48.49
clatn13	2013-09-30 13:30	21.45	2013-09-04 12:00	100.00
clatn4	2013-09-30 18:30	7.46	2013-09-25 05:00	8.57
clpau11	2013-09-30 19:00	25.05	2013-09-20 12:00	32.61
clpau3ia64	2013-09-30 18:30	2.91	2013-09-16 12:00	2.98
cln3	2013-09-30 08:30	100.00	2013-09-29 21:00	100.00
cln3apoc	2013-09-30 18:30	3.98	2013-09-09 10:00	6.68
cln7x64.teamquest.com	2013-09-30 15:30	17.06	2013-09-27 11:00	41.19
clnat11	2013-09-30 11:30	82.73	2013-09-09 10:00	85.32
clnat4	2013-09-30 16:30	24.49	2013-09-09 12:00	42.13
clnat7	2013-09-30 15:00	15.32	2013-09-04 13:00	15.41
qcdm3.teamquest.com	2013-09-30 15:30	0.48	2013-09-30 16:00	0.42
qcdm4.teamquest.com	2013-09-25 04:30	66.15	2013-09-28 05:00	57.85
sew2a6.1	2013-09-19 07:00	4.36	2013-09-14 16:00	18.05

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**Peak IO Usage**  
2013-09-01 to 2013-09-30

System	30 Minute	I/O Rate (KB/s)	1 Hour	I/O Rate (KB/s)
ASCNLE1	2013-09-30 20:30	54.80	2013-09-27 00:00	207.80
CLMHW2	2013-09-30 20:30	12.43	2013-09-25 11:00	18.90
SEW1	2013-09-23 06:30	76.44	2013-09-21 17:00	95.11
clatn11	2013-09-30 21:30	250.03	2013-09-25 12:00	245.49
clatn13	2013-09-30 17:30	656.54	2013-09-25 10:00	733.18
clatn4	2013-09-30 18:30	36.33	2013-09-26 04:00	506.36

You had a performance issue yesterday at 18:30; were any servers extremely busy at that time? With this report using TeamQuest CMIS, you can get the answer to that question. You can also spot other potential problematic patterns in the peak usage levels for various infrastructure items.

## Compatibility

### TeamQuest CMIS Analyzes:

...both IT and business performance using a wide variety of data sources, including:

- Operating Systems
  - AIX (including WPARs)
  - HP-UX
  - Linux
  - Solaris (including Zones)
  - Windows
- Hypervisors
  - IBM PowerVM
  - Microsoft Hyper-V
  - Oracle VM Server for SPARC (LDOMs)
  - Red Hat Enterprise Virtualization (KVM)
  - VMware vSphere (ESX/ESXi)
- Databases
  - DB2
  - Oracle
  - SQL Server
  - Sybase
- Web Servers
  - Apache
  - IIS
  - Others
- Storage Systems \*
  - EMC
  - Hitachi
  - HP
  - IBM
- Network devices via SNMP
- Network traffic between tiers
- Custom applications
- Management Console Integration
  - HP Openview
  - IBM Tivoli Netview
  - CA Unicenter TNG
  - Tivoli/Enterprise Console
  - IBM Tivoli Netcool
  - CA Aprisma
- Any management console which accepts SNMP Traps
- And more...

\* Requires the TeamQuest CMIS for Storage license option

Customers using TeamQuest Products

