

Unisys Real-Time Chargeback



Visibility in a Virtualized, Consolidated World

Enterprise virtualization capabilities bring new levels of agility, economics, and quality of service to organizations. Server resource usage is maximized through consolidation and the ability to run multiple applications on a single platform. Data center floor space and power consumption challenges are minimized. New business processes can be quickly deployed and sudden peaks in demand addressed by sharing existing system resources.

With the demise of the “single application/single server” scale-out technology model in favor of virtualization, consolidation, and the sharing of IT resources, it’s important that IT and business managers retain visibility into how resources are consumed. With enterprise virtualization, answers are needed to such questions as:

- What resources are being consumed by a particular business process?
- Where are the best opportunities for further reducing processing inefficiencies across the entire IT infrastructure?

- How can the costs associated with common, shared processes be fairly allocated across the supported applications?
- What is the total cost of a particular solution when its user interface, application, and database components are spread across multiple tiers of a heterogeneous environment?
- What insights can be gained from historical usage and trends to better respond to high-priority resource demands?

Traditional resource allocation and chargeback tools and approaches can’t answer these questions. They lack the ability to create a consolidated view across a variety of operating systems, multiple solution tiers, and heterogeneous environments. They are unable to fairly allocate shared resource usage. And, they can be overly complex to install and difficult to manage.



The Case for IT Resource Governance

What's needed is the ability to oversee the environment with a holistic perspective – regardless of the underlying technologies. To develop a comprehensive and highly accurate view of how business processes consume IT resources. And, to use this information to do more than allocate costs. With IT resource governance, organizations can more closely align business objectives and strategies with IT investments. Better prioritize how IT resources are allocated. And, justify new expenditures going forward.

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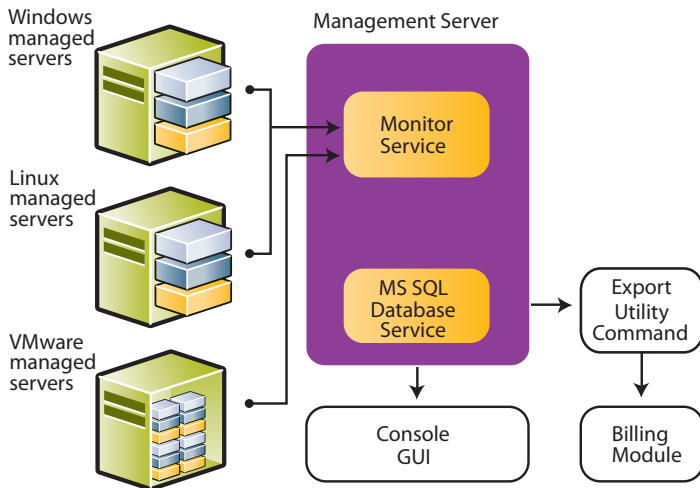
Unisys Real-Time Chargeback gives organizations visibility and insight into the IT costs associated with business processes – across virtualized, heterogeneous environments. It unifies and simplifies data collection and analysis. And does so seamlessly – minimizing the workload on operations personnel.

Unisys Real-Time Chargeback offers a number of unique features, including:

- Data collection across physical and virtual environments, from both Microsoft® Windows™ and Linux® operating environments – all within a single toolset

What's needed is the ability to oversee the environment with a holistic perspective – regardless of the underlying technologies.

- Automated “unification” of distributed application data to present a complete picture of the resources consumed – across tiers, operating systems, and even shared resources
- The ability to normalize costs across diverse server platforms, with varying cost bases and processing power
- Simple, non-intrusive managed data collection with two options:
 - Agent-less, server-centric collection of processor metrics from VMware® Virtual Center
 - Agent-based, application-centric collection of processor, I/O, and memory metrics; agents are deployed from a central management server across the network to managed servers
- Flexible, efficient, and scalable data management featuring:
 - Low-impact snapshots that capture consumption, rather than rate-of-consumption
 - Implicit data reduction, which improves efficiency without sacrificing information usability
 - Hourly, daily, and/or monthly resource usage reporting options
 - User-directed retention periods for historical data



Unisys Real-Time Chargeback's Management Server monitors Microsoft Windows, Linux, and VMware managed servers. Information is captured and stored in a Microsoft SQL Server database for further analysis and reporting. Its integrated, flexible graphical console supports standard and “what if” analysis of the information. In addition, data can be easily exported to your choice of financial/billing applications.

Making Chargeback Work for Your Enterprise

“The ever-increasing size of the IT budget is forcing many organizations to look at chargeback as a way to justify the continuing investment in IT services. Also, as the IT organization matures and operates more as a business-within-a-business, it is appropriate that it charges other business units (BUs) for services provided.”¹

Developing a comprehensive and accurate view of the real costs associated with supporting business processes is essential to sound IT resource governance practices. How this information is used will differ – but many organizations use chargeback data in one of three ways:

- To influence end-user/consumer behavior by providing straightforward, departmental reporting of the IT resources consumed
- To justify IT's budget to other business units
- To formally charge departments for the IT resources consumed

Real-Time Chargeback provides the information needed to support all three approaches.

1. Gartner. "Tiering Requirements Simplify Application Chargebacks." Gartner ID Number G00143226. 26 September 2006.



- The ability to accurately measure and fairly allocate shared resources across applications and processes running in a mixed workload environment – via Unisys patent-pending Deductive Workload Profiling
- Graphical, user-defined reporting capability, which allows application, server, and user information to be tailored to any level of detail according to business needs and audience
- Powerful analysis features, including graphical, point-and-click query construction, that sort, filter, and graph resource usage highlights anomalies – without the need for specific knowledge regarding a server’s workload on the user’s part
- Flexible utility to export data to your choice of financial/billing applications

Deductive Workload Profiling: Powerful Insight for Consolidated Application Environments

Unlike traditional mainframe environments, Windows and Linux operating systems lack the ability to track and align resource utilization across shared processes.

In response, Unisys has leveraged our more than 60 years of engineering experience in mission-critical, complex operating environments to develop new, patent-pending Deductive Workload Profiling technology that:

- Identifies every process associated with an application running in a consolidated, mixed-workload environment
- Allocates shared processes back to the applications that use them

This innovative profiling capability is used in Unisys Real-Time Chargeback to facilitate resource allocation in consolidated physical and virtualized server environments, supporting heterogeneous application workloads and distributed applications.

Deductive Workload Profiling can also be used to perform a wide range of analyses, including capacity planning, system health monitoring, and data center auditing.



Key Benefits

Unisys Real-Time Chargeback helps organizations better govern their IT resources by:

- Improving visibility into IT usage and cost
- Creating a stronger correlation between the resources consumed by business functions and the IT budget so that:
 - IT resources are used more cost-effectively by business units
 - The business value provided by IT investments is clearly established
- Improving the ability to “right-size” the supply of IT resources to meet demand, while eliminating inefficiencies that result from purchasing “just-in-case” capacity
- Reducing costs by exposing areas where resources are underutilized
- Facilitating the ability to price IT services based on actual usage

Getting Started with Unisys Real-Time Chargeback

Unisys Real-Time Chargeback fits seamlessly into your existing IT environment. Its simple-to-use features help new users become productive quickly. And, its powerful data management capabilities allow organizations to “start small,” while preserving historical information for more complex analyses in the future.

In addition, Unisys offers a wide range of professional and technical services to help you begin to build an effective IT resource governance program using Real-Time Chargeback. Specifically, our experts can assess your current environment and business needs and develop an implementation plan to get you up and running quickly and easily.

Unisys Enterprise Virtualization Solution

Taking full advantage of virtualization requires a solution that offers more than virtual server technology.

Unisys Enterprise Virtualization solution helps organizations identify the best candidates for virtualization, automate the physical-to-virtual implementation process, and addresses complex resource governance issues. It offers mission-critical-class virtualization technology, tools, cost allocation software, and services, including:

- VMware ESX Server™ 3.0
- Unisys Real-Time Consolidation Accelerator
- Unisys Real-Time Chargeback
- Unisys Assessment, Implementation and Quick Start professional services

Technical Specifications and Minimum System Requirements

Host Environment for Unisys Real-Time Chargeback Management Server

- Server Hardware: Intel® 2.4-GHz Pentium® III processor-based systems (and compatible) with 512 MB RAM, 200 MB disk space (additional disk space required for database), network interface card 100 MBPS or higher, Super VGA color monitor with 1280x1024 resolution
- Software Operating Environment:
 - Microsoft Windows Server 2003 with Service Pack 1 (SP1) or later
 - Microsoft Windows Installer 3.1 or later
 - Microsoft .NET Framework 2.0
 - Microsoft SQL Server 2000 with Service Pack 3 (SP3) or later

Supported Managed Server Host Environments

- Microsoft Windows 2000 and later operating environments
 - Microsoft .NET Framework 2.0
 - Microsoft Windows Installer 3.0
 - Microsoft Windows 2000 Service Pack 4 (SP4) or higher (only needed for Windows 2000 servers)
- Microsoft Windows NT® 4.0 operating environments
 - Microsoft Windows NT 4.0 with Service Pack 6 (SP6) or higher
 - Microsoft .NET Framework 1.1
 - Microsoft Windows Management Instrumentation (WMI) runtimes
 - Microsoft Internet Explorer 5.01 or higher (required by .NET Framework 1.1)
 - Microsoft Windows Installer 3.0
- Linux operating environments
 - SUSE Linux Enterprise Server, SLES 9.0 and higher
 - Red Hat Enterprise Linux, RHEL 4.0 and higher
 - Samba (a networking services package)
 - Java Runtime Environment, JRE 1.5
- VMware hosts and virtual machines
 - VMware Virtual Center 2.0 (included with VMware Virtual Infrastructure 3.0)

For more information, contact your Unisys representative.

Or call Unisys today at: 1-800-874-8647, extension 927 (U.S. and Canada)
00-1-585-742-6780, extension 927 (Other countries)

If you're in a hurry to learn more, visit our Website at: <http://www.unisys.com>

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