

Solution brief



# Transactions power your business.

Manage them wisely.

The pressure to reduce costs while delivering high-quality services has made the importance of improving transaction performance crystal clear to business and IT decision makers alike. Managing transaction performance is not an easy task, however, because transactions depend on a bewilderingly complex mixture of technology and processes. Transactions that flow consistently and predictably are the common thread that supports lines of business, propels operational processes, and moves the business forward. And as such, they are a key goal of a successful application performance management strategy.

## Tracking a moving target: the transaction management challenge

Our increasingly complex environments significantly impact the performance of critical business transactions. You can say two things conclusively about transaction performance failures: The consequences are serious and fixing them isn't easy.

A malfunction or slowdown at any point on the intricate path a transaction follows can cause customer satisfaction and loyalty to drop, interfere with revenue flows, tarnish your company's reputation, and run up operational costs as IT managers throw resources into diagnosis and repair efforts. In the worst-case scenario—say a stock brokerage whose customers miss out on big profit opportunities because the firm is unable to execute trades—transaction problems can even turn into legal problems.

But in spite of the obvious, urgent need to efficiently manage transactions, many organizations still rely on traditional tools and processes that make it extremely difficult, if not impossible, to repair faults quickly based on business impact. Adding to the challenge, many transaction management products are inflexible (agent-based only or agentless only) and limited in the scope of data they provide. But simply providing more data won't solve the problem.

Line of business managers don't need more infrastructure data without context. They need to work smarter with their partners in IT operations, monitoring the flow of all transactions and following specific transaction instances through all application and infrastructure tiers to ensure performance.

HP Transaction Management does just that. It dynamically combines the critical end-user perspective, near-real-time diagnostic data from

the supporting applications themselves, and traditional infrastructure performance and availability information into a common, unified transaction model. This model provides an actionable, role-based view of the entire lifecycle of all transactions. Offering unmatched flexibility with both agentless and agent-based technologies, HP Transaction Management can be implemented in a modular fashion, providing immediate value while enabling future capabilities.

## How HP Transaction Management works

### Transaction monitoring

Transaction monitoring (composed of HP Real User Monitor and HP Diagnostics) combines both end-user (agentless) and instrumentation-level (agent-based) perspectives of transaction volume and paths as they flow across applications and infrastructure—uniquely providing an end-to-end view of transaction performance and enabling you to:

- Discover automatically and classify all transactions across both synchronous and asynchronous protocols, all the time
- Visually discover performance bottlenecks instantly
- Access historical data and trend details to focus IT investment on improving transaction performance

### Transaction tracing

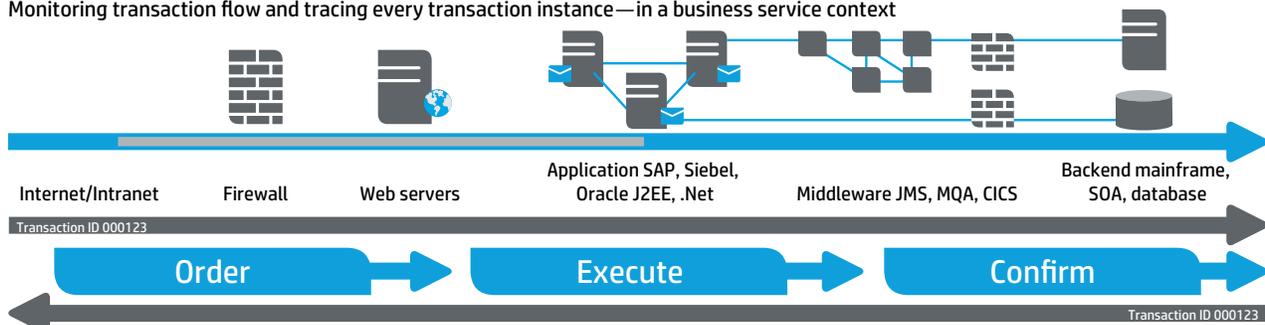
Transaction tracing (composed of HP TransactionVision, HP Diagnostics, and HP Real User Monitor) provides you with the ability to definitively trace, manage, and help enable the end-to-end performance of your critical, unique business transaction instances. Transactions are the lifeblood of business for financial institutions, which need to track and confirm not just the path, but the content or payload of every single transaction. Transaction tracing gives you the complete and granular picture of transactions as they traverse from end users to the mainframe back end, enabling you to:

- Dramatically reduce mean time to repair (MTTR) for your critical business transactions
- Definitively track both synchronous and asynchronous transactions as they span distributed and mainframe infrastructure
- Effectively collaborate with application development teams to successfully resolve application and transaction issues

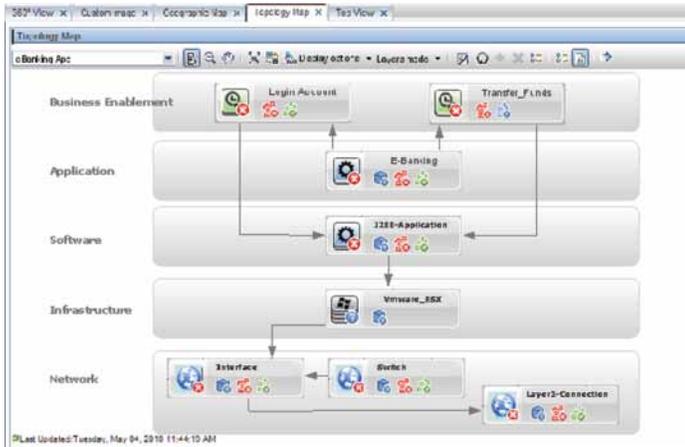
**Figure 1.** Today's complex, multi-tier transactions require dynamic, integrated, and flexible transaction management.

## HP Transaction Management

Monitoring transaction flow and tracing every transaction instance—in a business service context



**Figure 2.** Transaction Management automatically discovers and classifies transactions.



### Business process monitoring and tracing

Using business process monitoring and tracing, you can gain the appropriate level of visibility into business processes and their key performance indicators. With business processes often composed of multiple transactions including those that are manual and outside of the organization, it becomes even more important to have a comprehensive view at the business process level. This process visibility enables you to:

- Translate IT service impacts into business/financial impact information
- Manage business process health with an up-to-the-minute view of performance at all stages
- Support business process re-engineering and enhancement

## The HP Transaction Management solution

### HP Diagnostics software

HP Diagnostics software enables you to seamlessly monitor, triage, and diagnose critical problems in composite applications with an eye toward transactions—in both pre-production and production environments. Through web client monitoring, HP Diagnostics supports mobile application monitoring by collecting end-to-end performance measurements as experienced by customers using browser-based applications, measuring from server or back-end through client or front-end. HP Diagnostics software collects performance and availability data from Java, .NET, and SAP platforms and offers a way to visually analyze thread states, allowing you to quickly and easily isolate performance and availability problems resulting in reduced MTTR.

HP Diagnostics software is also an integral part of “DevOps”, otherwise known in the industry as the bridging of development and IT operations teams. Diagnostics is used as a common tool between these two teams and can be used in conjunction HP LoadRunner and HP Performance Center software to further enhance DevOps.

### HP Real User Monitor

HP Real User Monitor (RUM) software lets you manage the performance of all transactions as they flow across business-critical applications, including client/server (TCP/IP), Web services (SOAP/XML), and Web-based (http and https) applications from a true end-user perspective. RUM listens to every request and response sent over the network, organizing the data by session for analysis. It also shows each navigation path and tracks the number of users, enabling application support teams to quickly identify and replay transactions to speed issue resolution. Additionally, development teams can replay the interactions to see specific application error codes and to determine what user actions trigger specific transaction and application behavior.

### HP TransactionVision

HP TransactionVision software has complete visibility into the paths transactions take across distributed and mainframe infrastructures. It allows you to track and measure individual transactions as they progress through your enterprise. You can know where every transaction is at every second of every day. When there is a problem, you can drill down into the tracking information and see the breakdown of processing time at each step, pinpointing the location of the problem. To speed transaction performance restoration, you can use HP TransactionVision to aggregate individual transaction data for an operational view of your entire transaction-processing infrastructure and to isolate potential trouble spots.

### HP Business Process Insight

HP Business Process Insight gives you the appropriate level of visibility into business processes and their key performance indicators. The “appropriate level” means the ability to focus just on the key milestones of a business process without having to worry about all the intricate details of every other area. Once you have business process visibility, you can measure the performance and health of the key performance indicators within the business processes as well as automatically monitor and escalate any violations of these indicators, along with the business processes.

HP Business Process Insight also enables you to understand and quantify the business impact on business processes should there be a computing infrastructure or application performance problem. It also gives you the ability to more accurately plan for the future by measuring process peak loads or service over subscriptions.

## A key component of HP Application Performance Management

HP Transaction Management is an integral component of HP Application Performance Management. HP Application Performance Management is a comprehensive solution that helps you proactively identify and resolve problems quickly and efficiently before users or the business are impacted. Using HP Transaction Management with other products within the HP Application Performance Management solution can help your IT organization align its efforts with business priorities. By linking consolidated HP BSM Run-time Service Model monitoring data with HP Configuration Management System (CMS) software, HP Transaction Management helps your IT staff keep the transactions that power your business moving quickly and reliably.

HP Application Performance Management can be deployed in house using HP and partner services or through HP Software as a Service (SaaS).

Key features and benefits:

- Prioritizes IT response based on customer and business impact
- Identifies application performance and availability issues proactively before they impact the customer
- Provides early warning and real-time alerts for application performance and availability issues
- Monitors the end-user experience of business applications, including those deployed to virtual and cloud environments
- Manages the customer's quality of experience
- Enables "drill down" into HP infrastructure monitoring, application diagnostics, and transaction tracing capabilities to resolve problems more quickly
- Measures application performance and availability from outside your company's firewall and from multiple locations using HP Business Availability Center Anywhere SaaS offering

## An example of proven HP Transaction Management success

HP Transaction Management is helping large enterprises in a range of industries around the world to manage business impact and accelerate problem resolution. A European telecommunications company, for example, utilized HP Transaction Management to establish tight coordination between business processes and IT services while providing the fastest and best activation experience in its market. It enabled a UK bank to deploy a payments dashboard that continuously displays payment-processing status, allowing more timely and effective decision-making and contingency action. And another telecommunications company gained enough visibility into transaction performance across an integrated Customer Relationship Management (CRM) system to reduce mean time to repair by 50 percent.

It also avoided increasing infrastructure and licensing costs by identifying and fixing bottlenecks rather than adding capacity.

To learn more about HP Transaction Management, and how it keeps your transactions moving, visit [hp.com/go/apm](http://hp.com/go/apm).

## A complete solution

### Comprehensive training

HP provides a comprehensive curriculum of HP software and IT Service Management courses. These offerings provide the training you need to realize the full potential of your HP solutions, increase your network optimization and responsiveness, and achieve better return on your IT investments.

With more than 30 years of experience in meeting complex education challenges worldwide, HP knows training. This experience, coupled with unique insights into HP Software and Solutions products, positions HP to deliver an outstanding training experience. For more information about these and other educational courses, visit [hp.com/learn](http://hp.com/learn).

### HP Financial Services

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## HP Services

### Get the most from your software investment.

HP provides high-quality software services that address all aspects of your software application lifecycle needs. With HP, you have access to standards-based, modular, multi-platform software coupled with global services and support. The wide range of HP service offerings—from online self-solve support to proactive mission-critical services—enables you to choose the services that best match your business needs.

For an overview of HP software services, visit [managementsoftware.hp.com/service](http://managementsoftware.hp.com/service).

To access technical interactive support, visit Software Support Online at [hp.com/managementsoftware/services](http://hp.com/managementsoftware/services).

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