HP Business Availability Center software

Optimizing business-aligned service and application health management

Today, IT organizations are under growing pressure to optimize the availability and performance of key business services. This includes both front-end transactions and back-end business processes. Enter HP Business Availability Center, a comprehensive application management solution that helps you proactively identify and resolve problems quickly and efficiently, before the business is impacted. This HP Software offering allows 360-degree monitoring and management of business services and application health from the point of view of key stakeholders—the business, its customers, and its partners. HP Business Availability Center is also integral to IT Service Management processes so IT operations can effectively and cost efficiently provide closed-loop incident, problem, and change management.

HP BSM: Analyze the business impact of IT problems

HP BAC is a key component of the HP Business Service Management (BSM) solution initiative. BSM directly associates business services with their underlying applications, infrastructure, and network components to help you analyze and report the business service impact of IT problems and reduce the potential costs of IT service downtime and staff inefficiencies.

Unlike other solutions, HP BSM delivers high-quality operations with both a top-down and bottom-up approach, combining HP BAC with HP Operations Center software and HP Network Management Center software, as well as integrations with HP Service Manager and supported by a single version of the truth in HP Universal CMDB software.

HP Business Availability Center

HP Business Availability Center (BAC) allows you to optimize the availability, performance, and effectiveness of business services and applications. It helps you understand the business impact an outage or degradation may have on business services and applications. Using information gathered by HP BAC, you can quickly pinpoint the area and root cause of problems creating IT domain collaboration and efficiency.

HP BAC allows you to:

• Provide end-to-end visibility into business transactions and transaction value, all the way to back-end systems and mainframes

• Understand key business metrics of individual business processes that fail, such as order backlog or dollars impacted

• Monitor the end-user application experience and services using both synthetic and real-user performance monitoring

• Manage infrastructure and business-based service levels

• Triage and analyze the root cause of problems in complex and composite applications across J2EE, .NET, SAP, Oracle®, Siebel, service-oriented architecture (SOA), and other environments

• Quickly find and resolve application performance problems, using guided workflows that enable accurate problem assignment responsibility to the appropriate subject-matter expert

• Integrate and correlate application performance data with network performance metrics to rapidly isolate problems and accurately perform incident management

HP BAC architecture

The HP BAC architecture includes a comprehensive dashboard, a group of related components or products, and a powerful data model to clean, correlate, and verify collected component and service-related data across IT domains.

HP BAC dashboard

A role-based, user-based, and customizable business service dashboard provides a common environment that brings together real-time service health, business impact, incidents, and historical performance data from the underlying products in HP BAC. You can create personalized views from dozens of predefined components, enabling you to focus on the key performance indicators (KPIs) for your critical business services.
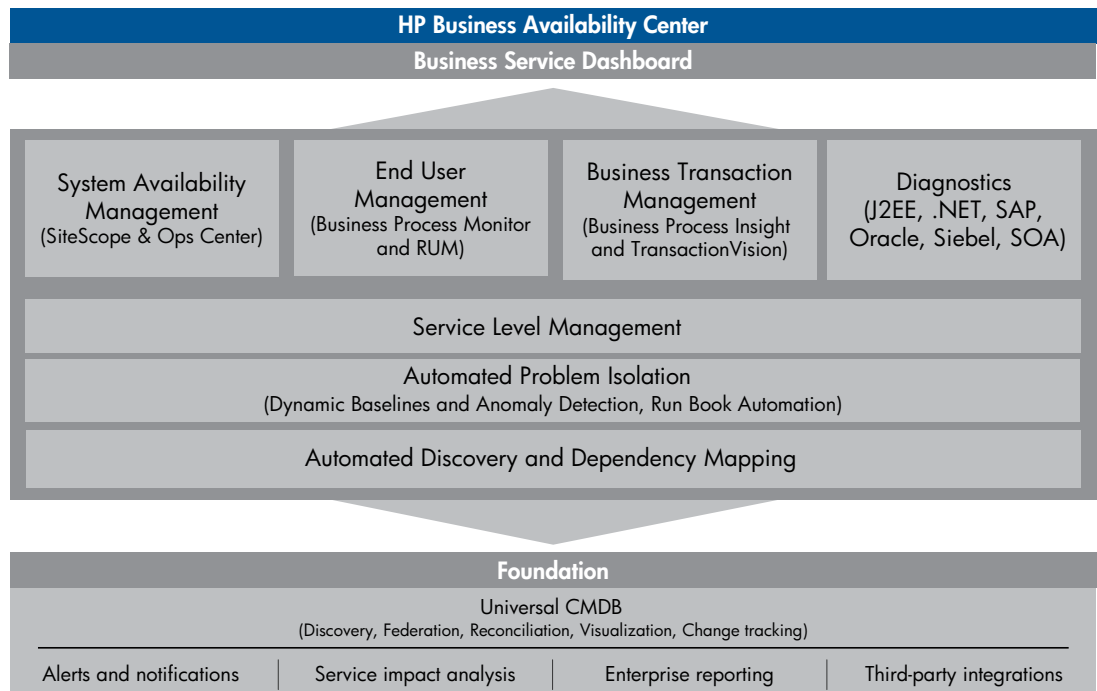
HP BAC components

HP BAC contains the following components for managing and optimizing business services and applications:

• **HP end user management software** enables you to monitor applications and business services from the end-user perspective, using passive, or active monitors.

  – **HP Real User Monitor (RUM) software** provides complete visibility into the experience and behavior of users accessing critical client/server (TCP/IP), Web services (SOAP/XML), and Web-based (http and https) applications. HP RUM integrates with HP Network Node Manager (NNM) for in-context performance data exchanges occurring in real time.
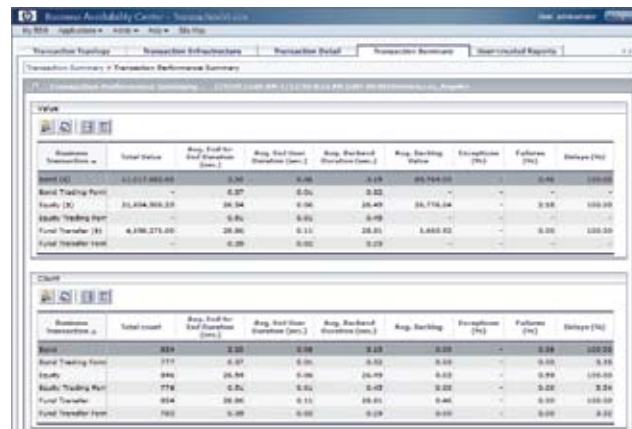
HP Business Availability Center
Business Service Dashboard

System Availability Management (SiteScope & Ops Center)	End User Management (Business Process Monitor and RUM)	Business Transaction Management (Business Process Insight and TransactionVision)	Diagnostics (J2EE, .NET, SAP, Oracle, Siebel, SOA)

Service Level Management

Automated Problem Isolation
(Dynamic Baselines and Anomaly Detection, Run Book Automation)

Automated Discovery and Dependency Mapping

Foundation
Universal CMDB
(Discovery, Federation, Reconciliation, Visualization, Change tracking)

Alerts and notifications	Service impact analysis	Enterprise reporting	Third-party integrations

- **HP Business Process Monitor software** executes synthetic transactions from multiple locations inside or outside your firewall to identify availability and performance issues before they impact your customers and business.

- **HP business transaction management software** enables you to detect and resolve problems at the granular level of interactions between IT elements that form a business transaction (for example, online stock trade, travel booking).

  - **HP Business Process Insight software** enables you to correlate business health such as transaction value, revenue, number of orders, and so on with supporting applications and infrastructure—so you can assess the impact of an underlying problem in business terms.

  - **HP TransactionVision software** helps you measure transaction health by tracking and measuring individual transactions as they progress across your enterprise applications.

- **HP Service Level Management software** helps you manage service levels and provide service-level agreement (SLA) compliance reporting for complex business applications.

- **HP Problem Isolation software** helps you proactively identify and resolve application problems and prevent recurrence.

- **HP Diagnostics software** provides a top-down, end-to-end approach for monitoring, triaging, and diagnosing critical problems with .NET, SAP, Oracle, Siebel, J2EE, SOA, and Java™ applications.

- **HP Discovery and Dependency Mapping software** automatically creates and maintains complex relationships views of business services, applications, and the underlying infrastructure.

- **HP System Availability Management software** enables you to deploy and maintain an enterprise infrastructure monitoring solution to achieve broad coverage.

HP BAC foundation
HP Universal CMDB provides a single version of the truth to support key business initiatives. It is based on three key elements: a rich data model, visualization, and federation to additional data repositories. In addition, HP Universal CMDB provides impact analysis, change tracking, and reporting capabilities to transform CMDB data into comprehensible, actionable information that helps you answer critical questions and improve your incident, problem, and change management processes.

Gain deep visibility into enterprise transactions
The transaction dashboard can report performance by transaction type or by business data, such as impacted customer.

HP BAC components

HP end user management software

This software provides comprehensive, integrated user monitoring to align IT with end-user business processes. We use a combination of synthetic transaction monitoring (HP BPM) and real-user monitoring (HP RUM) from all domains to provide real-time visibility into the user's quality of experience (QoE). HP end user management software enables you to proactively identify the scope of an issue, gauge the customer and business impact, and as a result prioritize and respond appropriately. These HP Software offerings help you:

- Visualize the user experience in order to prioritize IT response based on customer and business impact

- Perform trend analysis based on end-user metrics in order to proactively identify issues before users are impacted

- Reduce the business impact of end-user outages and performance issues

- Provide real-time visibility into user behavior and experience

- Monitor and manage the performance of all business critical applications, including client/server (TCP/IP), Web services (SOAP/XML), and Web-based (http and https) applications

- Integrate application and network management to monitor and resolve performance issues quickly

HP business transaction management software

This software solution provides key information about the health, performance, and the effectiveness of business processes and transactions. You gain visibility into the end-to-end business processes (such as quote to cash) and KPIs, along with being able to track and measure individual transactions as they progress

through your enterprise. This information gives IT and operations a common understanding of how IT is meeting its operation business needs and objectives. The HP business transaction management software consists of HP Business Process Insight software and HP TransactionVision software.

Using HP Business Process Insight software, you can:

- Measure and generate alerts based on business process performance and demand

- Track each business process transaction and link business process steps to the IT services on which they run, translating IT service impacts into business and financial impact information

- Use process consoles and KPIs to provide business managers with the information they need

- Proactively alert on approaching deadlines for individual processes, such as orders or payments

- Measure process peak loads or service oversubscriptions to allow IT to better provision and budget for actual business demand levels

Using HP TransactionVision software, you can:

- Monitor business activities in real-time based on KPIs

- Monitor both transactional patterns and transaction content patterns to identify issues and trigger automated processes or notifications across all tiers in the enterprise, including J2EE application servers, messaging middleware such as WebSphere MQ and Java Message Service (JMS) implementations, and mainframe transaction monitors such as Customer Information Control System (CICS) and IP Multimedia Subsystem (IMS)

- Optimize transaction performance and improve capacity planning

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Align IT with business priorities
HP Business Service Level Management defines business-centric service levels so you can align IT with business priorities.

Identify likely causes of problems
HP Problem Isolation shows the most likely causes of problems by factoring status, changes, dependencies, and relationships.

- Capture KPIs to understand performance and availability across the enterprise
- Track Web services calls from inception through the middleware to back-end systems, in order to increase SOA manageability
- Use non-intrusive architecture and auto-discovery of transaction flows to accelerate deployment
- Tightly integrated with end user management software for more accurate drill down and data correlation
- Real front-end application to back-end business process topology view of user transaction(s)

HP Business Service Level Management software

With HP Business Service Level Management, you can compare actual application performance to business goals. This software offering helps you determine whether business requirements are being met. It sends alerts when performance is in danger of falling below agreed-upon service levels, potentially saving money by avoiding financial penalties. In addition, you can map service levels to the underlying operational level agreements (OLAs) and underpinning contracts to see which infrastructure tiers impact end-user service level achievement. With HP Business Service Level Management software, you can:

- Define realistic, quantifiable availability and performance objectives that reflect business goals
- Measure performance and availability as end users experience them
- Track service-level availability and performance, both on a real-time basis and for offline planning purposes
- Isolate and resolve performance problems before they impact service-level objectives
- Remove the need for manual, ongoing report generation, which reduces costs
- Improve the availability of revenue-producing applications, increasing productivity

- Reduce the level of effort required to produce and distribute service-level documentation

HP Problem Isolation software

HP Problem Isolation helps you proactively identify and resolve application problems and prevent recurrence. Our software acts as your single point of access for information about incidents, problems, and their resolutions. It leverages HP Universal CMDB service maps to identify, correlate, and present configuration items and changes that may cause application problems. As a result, you can proactively identify problems, efficiently assign ownership, communicate across your organization, understand business context, and correlate data from multiple systems.
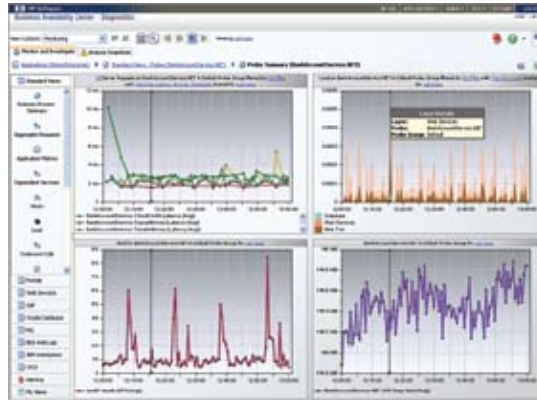
HP Problem Isolation enables you to:

- Centralize critical problem information by providing automated data collection
- Proactively identify and prioritize application problems to increase mean time between failures
- Reduce manual correlation by using an automated closed-loop isolation and resolution workflow that is integrated with HP Service Manager and HP Operations Orchestration (HP OO) to enable run-book automation
- Perform real-time problem validation and provide recommendations and advanced analysis to reduce the cost of keeping your IT infrastructure operational
- Identify and correlate end-user experience, infrastructure data, changes, and tickets within a business context through integration with the HP Universal CMDB
- Provide complete problem and incident management through HP Service Manager integration
- Integrate and leverage end user management data with Proactive Analysis to reduce problems

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Gain visibility into your .NET applications
HP Diagnostics for .NET provides comprehensive visibility into .NET applications deployed in heterogeneous composite environments.
Out-of-the-box dashboards provide quick time-to-value.

HP Diagnostics software

HP Diagnostics enables you to seamlessly monitor, triage, and diagnose critical problems in composite applications—in both pre-production and production environments. This software collects performance and availability data from Java, .NET, and SAP platforms, isolating performance and availability problems and reducing mean time to recovery (MTTR). It can be deployed with HP BAC, HP LoadRunner software, HP Performance Center software, or as a standalone product. HP Diagnostics helps you:

- Provide low-overhead monitoring, alerts, triage and diagnosis of problems in heterogeneous environments (SOA, Web services, Java, J2EE, .NET, SAP, Oracle, WebSphere, WebLogic, and other applications) in pre-production and production environments

- Automatically discover composite application topologies

- Monitor and display both synthetic and real-user data

- Trace cross-Virtual Machine (VM) instances across technology stacks (J2EE, .NET, and SAP)

- Monitor, alert, triage, and diagnose problems with databases, including wait-time analysis for Oracle 10g

- Support Structured Query Language (SQL) and method-level trending to monitor SQL and method performance over time

- Collaborate with development organizations by providing data such as CPU time by method, heap dump, thread dump, exceptions, and advanced instrumentation control

- Perform advanced memory diagnostics, including allocation analysis, heap walker, and more

HP Discovery and Dependency Mapping software

HP Discovery and Dependency Mapping dynamically discovers and maps IT service dependencies between applications and the underlying infrastructure, to provide visibility and control over business services with minimal effort and cost. It also populates HP Universal CMDB to create an accurate service model. The tightly integrated HP Discovery and Dependency Mapping and HP Universal CMDB streamline data instantiation, updates, and proactive impact analysis rather than relying upon tying together two or more separate systems. With HP Discovery and Dependency Mapping software, you can:

- Use more than 100 out-of-the-box discovery patterns and automated discovery processes to accelerate CMDB adoption

- Automate maintenance to improve the accuracy of your CMDB

- Reduce deployment and maintenance overhead typically associated with customization and updates

- Select when and which patterns to run, to control the discovery process

HP System Availability Management software

HP System Availability Management helps you deploy and maintain a cost-effective enterprise infrastructure monitoring solution. It combines agent-based and agent-less monitors to provide comprehensive coverage. By providing the ability to integrate with existing enterprise management system (EMS) products, HP System Availability Management allows you to:

- View infrastructure monitoring data within the context of your application performance

- Understand how infrastructure components affect application performance and availability

Achieve visibility and control with Siebel applications
Diagnose application problems into the specific tier—Siebel Application Server, Siebel Gateway Server, or Siebel Database—to quickly pinpoint and resolve bottlenecks.
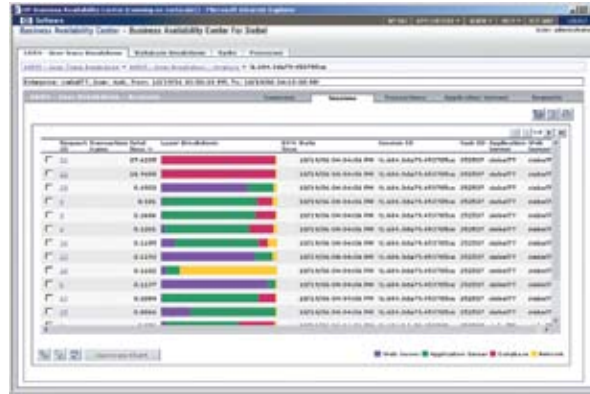
- Collect infrastructure status data, whether you have deployed multiple HP SiteScope software servers, HP OO, or use a third-party management system

- Integrate with major ticketing systems

- Leverage your current investment in infrastructure monitoring tools

HP BAC solutions for SAP, Oracle, Siebel, and SOA

HP BAC software for SAP applications
This is a comprehensive solution to help you proactively measure and manage application availability, performance, and change—increasing the value SAP applications deliver to your business. Our solution complements SAP Solution Manager and SAP NetWeaver Administrator. It includes a CMDB, a business dashboard, and an integrated set of applications that provide end-user monitoring, system availability monitoring, change impact analysis, and insight regarding business impact. With HP BAC for SAP applications, you can:

- Manage SAP service levels in real time, from a business-process perspective

- Proactively identify, diagnose, and solve SAP application issues

- Map and manage the dynamic relationships between business services applications and the underlying infrastructure

- Assess the impact of planned and unplanned changes to the SAP applications and infrastructure

- Manage business and application complexity caused by interdependencies of SAP and non-SAP applications

HP BAC software for Siebel applications
HP BAC for Siebel optimizes the performance and availability of critical Siebel business processes and provides a comprehensive change-management solution. This HP offering helps you put the user experience for each business service in context with technology metrics, manage planned and unplanned change, monitor the underlying heterogeneous infrastructure, and diagnose and solve problems. HP BAC for Siebel provides visibility into and control over Siebel business application processes, components, and the entire supporting infrastructure. With this HP offering, you can:

- Monitor Siebel application performance and availability from the end-user perspective and receive notification of problems before SLAs are broken

- Diagnose application problems into the specific tier to quickly pinpoint and resolve bottlenecks (Siebel Application Server, Siebel Gateway Server, Siebel Database, and so on)

- Detect and understand how change impacts the availability and performance of Siebel applications

HP BAC software for SOA
HP BAC for SOA helps you monitor services in production, resolve operational issues, and deal with changes to services. This HP offering includes a dashboard that delivers up-to-date business service configuration and active drill-down to application components, and it provides simple and fast access to SOA data and reports. You can deliver the following value using HP BAC for SOA:

- Gain comprehensive automated discovery capabilities and visibility into service dependencies

- Achieve real-time visibility into SOA services and non-SOA business applications and infrastructure so you can proactively manage service levels from a business perspective
- Rapidly diagnose and resolve SOA performance issues
- Quickly detect changes in your SOA environment and assess the impact of changes in services on the end users' experience

Why HP Software?

Choose the BSM leader

HP Software is uniquely positioned to deliver your application monitoring and BSM needs. As part of our BSM solution, we offer:

Top-down and bottom-up management: HP Software combines the top-down problem isolation of HP BAC with the bottom-up service impact analysis of HP Operations Center and HP Network Management Center. These feeds are then linked together in HP Universal CMDB to create a relationship view of business services and their underlying applications, infrastructure, and network components.

Service desk integration: HP BAC links service health information with service desk processes that manage incidents, problems, and change. This can quickly inform any service desk of service-affecting problems so operators can appropriately triage incidents and ultimately reduce business impact.

Delivery flexibility: HP BAC can be delivered in-house through HP Services or its partners or through HP Software-as-a-Service.

Get 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 software, optimize application performance,

increase your network optimization and responsiveness, and achieve better return on your IT investments.

HP has more than 30 years of experience meeting complex education challenges. For more information about these and other educational courses, visit **www.hp.com/learn**

Make a smart IT investment

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4AA0-9272ENW Rev. 4, January 2009