USING HP'S BTO PORTFOLIO TO OPTIMIZE NONSTOP BUSINESS TECHNOLOGY

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A NEW TYPE OF ENTERPRISE

It is here and not a moment too soon
The Instant-On Enterprise
IT turns business & government “on,” instantly

• Everything and everyone is connected
• Everyone expects immediate gratification and instant results
• Enterprise and IT are one in the same
• Respond to continuous opportunity and competition
• Anywhere, any time, any way
CUSTOMER PROBLEM
Current status

30% New IT project initiatives
70% Ongoing IT operations

Needs to be

INNOVATION OPERATIONS

Flip the ratio from operations to innovation
Flipping the ratio
What you need to do

Modernize
Architect solution for change

Transform
Break silos with a converged infrastructure

Secure
Protect assets without constricting flow

Optimize
Control and exploit information

Deliver
Right method, right time, right cost
IMPACT

HP BTO portfolio helps modernize, transform and optimize your business
HP Business Technology Optimization (BTO)

Bridges the gap between IT and the lines of business

Bridges the gaps between functional IT silos

NonStop support in most BTO Centers
Many customers using BTO products in NonStop environment
INTEGRATE, INNOVATE AND INVEST

NonStop supported in most BTO Centers
## HP BTO software support of NonStop Center

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HP Application Lifecycle Management Center

Bring predictability, repeatability, agility and higher quality to the application lifecycle.

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HP Application Lifecycle Management Center support of NonStop

Supported products

- Quality Center Software (previously known as TestDirector)
- Business Process Testing
- Test Data Management
- Requirements Management Module
- Sprinter
HP Quality Center Software (TestDirector)
Manage application quality and testing throughout the complete application lifecycle

- Implement a complete quality management infrastructure
- Establish standardized processes and best practices
- Manage requirements, tests and business components
- Prioritize testing based on business risk
- Access testing assets anytime, anywhere
- Manage Agile testing efforts with the Agile Accelerator
- Employ integrated, innovative manual testing with HP Sprinter
- Schedule and execute tests automatically, 24x7
- Analyze readiness with integrated graphs and reports
- Manage defects and trace them to tests and requirements

NonStop support available through Ascert VersaTest Automation Server Plug-in for HP Quality Center Software
HP Performance Center
A complete solution to help optimize your application performance across the lifecycle

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HP Performance Center support of NonStop

Supported products

- LoadRunner
- Performance Center Software
- Diagnostics (Coming soon)

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HP LoadRunner

Prevent application performance problems with integrated software testing tools

- TruClient technology that simplifies and accelerates scripting for complex Rich Internet applications
- Enterprise load generation that applies measurable and repeatable loads while monitoring systems and end-user transactions to identify issues
- Powerful analysis and reporting capabilities that help isolate performance bottlenecks quickly and easily
- Integrated diagnostics help pinpoint the root causes of application-level issues down to the code level

NonStop support available out-of-box
HP Diagnostics
Make sure critical problems are discovered and resolved - throughout the application lifecycle

- Identify critical bottlenecks in pre-production or production with a unified composite application monitoring, triage and diagnostic solution
- Collaborate across multiple teams with workspace sharing for analysis and quick resolution
- Reduce your fault management efforts and hardware and software expenses with application performance diagnostics functionality
- Gain visibility across multiple technology platforms, including JAVA, J2EE, .NET and ERP/CRM

NonStop support coming soon

This is a rolling (up to three year) Statement of Direction and is subject to change without notice
HP Business Availability Center

Optimize the availability, performance and effectiveness of your business services and applications

Supported today for NonStop
Looking for customer input

Industry-leading products and technology from

- HP OpenView
- Mercury
- Opsware
- Peregrine Systems
- Bristol Technologies
- Novadigm/Consera
- Talking Blocks

NonStop support in most BTO Centers
Many customers using BTO products in NonStop environment
HP Business Availability Center support of NonStop

Supported products

- TransactionVision (TV)
- Business Process Insight (BPI)
- Universal CMDB (UCMDB)
- Discovery and Dependency Mapping (DDM)

Business Availability Center Software for Composite Application Management (Coming soon)

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HP TransactionVision (TV)
Enable and speed business transaction performance

- Dynamic view of entire transaction flow from end user to back end
- Real-time transaction monitoring to instantly uncover transaction and application performance bottlenecks
- Transaction profiling to reduce mean time to repair for your critical business transactions
HP Business Process Insight (BPI)

Achieve end-to-end business process visibility

- Business process monitoring to identify process performance problems
- Application monitoring and analysis to understand the business impact of performance problems
- Business process performance analysis to measure and demonstrate improvements for the business
HP TransactionVision and HP Business Process Insight support of NonStop

- NonStop support in TV 8.0 and later
- Monitoring of audited Enscribe file access
- Audited Enscribe database access events displayed in TV event views, similar to other supported databases
- User event configuration using the user event filter settings, such as files or database tables
- Correlation of NonStop data with other data for overall business transaction view

Support of NonStop S-Series servers available now
Support of NonStop BladeSystems and NS-Series servers coming soon
Support of WebSphere MQ Series for NonStop coming soon

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HP Universal CMDB (UCMDB)
Create and maintain a business-centric CMDB

- Configuration management database (CMDB) for enterprise IT organizations to document, store, and manage business service definitions and associated infrastructure relationships
- Provides a single version of the truth to improve collaboration among IT and business teams
- Proactively analyzes change and service impact to reduce business risk
- Leverages existing investments in business and technical repositories
HP Discovery and Dependency Mapping (DDM)

Gain and maintain visibility into IT infrastructure and business service relationships

- Automatically and continuously maps IT applications and infrastructure elements providing visibility and control of your IT environment
- Integrates tightly with the HP Universal CMDB to support ITIL (Information Technology Infrastructure Library) processes
- Minimizes the finger pointing within IT by creating a common view of the services that IT delivers and how the IT infrastructure supports these services
- Accelerates incident and problem resolution through automated change tracking
- Enables understanding the potential impact of changes prior to executing them through predictive change impact analysis
- Identifies compliance issues by comparing Configuration Items (CIs) to gold standards
HP Universal CMDB and HP Discovery and Dependency Mapping support of NonStop

- Discovery of NonStop systems
  - Network interfaces
  - IP addresses
  - SQL/MP catalogs
  - SQL/MX schemas
  - SQL/MX catalogs
- Synchronization of relationships between NonStop systems and NonStop SQL databases, to enable end-to-end mapping of the NonStop SQL infrastructure in UCMDB
HP Operations Center
Consolidated infrastructure monitoring tools allow you to spend more time on strategic initiatives versus day-to-day operations

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Many customers using BTO products in NonStop environment
HP Operations Center support of NonStop

Supported products

- Operations Manager
- Operations Manager i
- Reporter
- Operations Manager Dependency Mapping Automation
- SiteScope
HP Operations Manager (OM)
Spend more time on strategic initiatives by using consolidated infrastructure monitoring tools

- Consolidated infrastructure monitoring tools to identify root-cause IT problems and eliminate duplication of effort
- A single management console for virtual and cloud (public and private) infrastructure and heterogeneous IT environments
- Dependency views for transactions, applications, business services and infrastructure - both physical and virtual
- Effectively prioritizes events based on the business impact of lower-level component failures or performance degradations
HP Operations Manager i (OMi)
Infrastructure management software for more automation, collaboration, and dynamic discovery of your physical and virtual environment

- Real time detailed and accurate views of infrastructure, application, and service health
- Advanced visualization and correlation facilities for cross-domain event management – even within virtualized and cloud-based infrastructures
- Topology-based event correlation (TBEC) that automatically isolates causal events for more efficient, effective problem resolution
HP Operations Manager and HP Operations Manager i support of NonStop

<table>
<thead>
<tr>
<th>HP Operations Agent for NonStop (OVNM)</th>
<th>HP Performance Agent for NonStop (OVNPM)</th>
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</thead>
<tbody>
<tr>
<td><strong>Object monitoring and event processing</strong></td>
<td><strong>Real-time performance monitoring</strong></td>
</tr>
<tr>
<td>- Automatically discovers NonStop objects</td>
<td>- Monitors business applications</td>
</tr>
<tr>
<td>- Detects infrastructure and application failures and problems</td>
<td>- Real time graphs and drill downs</td>
</tr>
<tr>
<td>- Provides customized threshold settings</td>
<td>- Web-based, with optional Windows-based data analysis</td>
</tr>
<tr>
<td>- Supports automated actions and event escalations upon violations</td>
<td>- Analyzes historical trends for capacity planning</td>
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</table>

- Support ACI Base24, Telco (HLR, INS) and MQ Series
- Interface with HP Operations Manager and HP Operations Manager i
- Integrate with IBM Tivoli, Netcool, BMC Patrol or any other SNMP-based enterprise management application
- Support homogenous NonStop environments as well as larger, cross-platform enterprise environments

**NonStop Tivoli Adapter**

Optional adapter for NonStop event monitoring through Tivoli

Event details and types mapped to corresponding Tivoli event space and severity slots
**Recent enhancements**

- Support of HP Integrity NonStop NB54000c
- Support of CLIM monitoring
- Support of HP Operations Version 9 for Windows, Linux and HP-UX
- Support of SNMP Adapter for Red Hat Enterprise Linux ES

**Future enhancements**

- Support of IPv6 addresses
- Data Analyzer support of accessing OVNM/OVNPM data from SQL/MX
- SNMP Adapter support of SNMPv3
- Installation enhancements

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HP Operations Agents Bundle

OVNM Console

OVNM Agent

OVNPM Event Data

TCP/IP

MEASURE data

OVNPM Event Data

TCP/IP

HP OM/OMi Plug-in

Tivoli Adapter

SNMP Adapter

HP Operations Manager/Operations Manager i

Tivoli

Patrol/Netcool/Network Node Manager/Unicenter

25% discount off the total price of the individual products
HP SiteScope

Maintain the availability and performance of your distributed IT infrastructure

- Agent-less monitoring software that helps maximize the availability and performance of physical and virtual infrastructure - servers, operating systems, network devices, network services, applications and application components
- Complete out-of-the-box support of over 100 applications
- Integration with the complete Operations Manager environment, including automatic root cause analysis and remediation
- Secure access any time, from anywhere via your iPhone or iPad

Monitoring
Continuously collects system, network and application data

Alerting
Based on configured thresholds, sends alerts to notify administrators of failures

Reporting
Real and over-time detailed analysis of system/application performance

Baselining
Adjusts thresholds based on “Normal” behavior and alerts abnormal behavior
HP SiteScope support of NonStop

- NonStop support in SiteScope 10.10 and later
- NonStop supported in following monitors:
  - CPU monitor
  - Memory monitor
  - Disk space monitor
  - Directory monitor
  - File monitor
  - EMS log monitor
  - Script monitor
  - Port monitor
  - Ping monitor
  - Telnet monitor
  - FTP monitor
  - SNMP monitor
  - Service monitor
  - Link monitor
  - URL monitor
  - URL content monitor
- Ability to set error and warning thresholds for any statistics for any monitor
HP Data Center Automation Center

Automate IT management, provision new infrastructures and manage change and compliance in your data center.

Supported today for NonStop
Looking for customer input

NonStop support in most BTO Centers
Many customers using BTO products in NonStop environment
HP Data Center Automation Center support of NonStop

Supported products

- Operations Orchestration (OO)
- Storage Essentials
- Release Control
HP Operations Orchestration (OO)

Automate incident resolution, change orchestration and routine maintenance tasks in your data center

- Provides out-of-box operations and flows and integration with many other products
- Automates incident resolution to increase service availability
- Implements best practices for change management and provisioning
- Automates simple tasks such as file archiving and complex tasks such as disaster recovery planning - consistently and without errors
- Manages a virtual infrastructure, including self-service provisioning and day-to-day maintenance, consistent with a physical infrastructure

NonStop content available now for download for OO versions 7.60 and 9.0

Out-of-box NonStop operations and flows, with facility to add any new flows and integrate them with existing flows

NonStop content for OO version 9.10 coming soon

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<th>State Change</th>
<th>Specialized Flows and Ops</th>
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<tr>
<td>- Display All Ethernet Interface Status</td>
<td>- Abort Guardian Persistent Process</td>
<td>- Check Guardian Process by File Name</td>
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<tr>
<td>- Display All Provider Status</td>
<td>- Change Guardian Process Priority</td>
<td>- Check Guardian Process by PID</td>
</tr>
<tr>
<td>- Display CPU Metrics</td>
<td>- Run Guardian Process</td>
<td>- Check Guardian Process by Process Name</td>
</tr>
<tr>
<td>- Display CPU Utilization</td>
<td>- Run OSS Process</td>
<td>- Check Guardian Process Pair by Process Name</td>
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<tr>
<td>- Display Disk Volume Metrics</td>
<td>- Run OSS Process with Changed Default Priority</td>
<td>- Check OSS Process by File Name</td>
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<td>- Display Disk Volume Usage</td>
<td>- Start Guardian Persistent Process</td>
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</tr>
<tr>
<td>- Display Disk Volumes and How Full</td>
<td>- Stop Guardian Process</td>
<td>- Check Time Duration</td>
</tr>
<tr>
<td>- Display Free Memory</td>
<td>- Stop OSS Process</td>
<td>- Display Current Time</td>
</tr>
<tr>
<td>- Display Last Boot Time</td>
<td></td>
<td>- Get Guardian Process List</td>
</tr>
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<td>- Display Looping Guardian Processes</td>
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HP Storage Essentials

Comprehensive storage resource management and storage automation for physical and virtual infrastructures

- Main console for open, heterogeneous SAN (Storage Area Network) management
- Automated discovery, visibility, and control of physical and virtual storage
- One tool to manage provisioning, capacity, performance, chargeback and reports
- Out-of-box integration with other HP software to optimize your data center

NonStop support available now for CLIM-attached, IOAM-attached and VIO-attached storage

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Optimize NonStop business technology using HP BTO portfolio
## HP BTO software support of NonStop

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CALL TO ACTION

Learn more about HP BTO at
https://h10078.www1.hp.com/cda/hpms/display/main/hpms_home.jsp?zn=bto&cp=1_4011_100__&jumpid=reg_R1002_USEN

Read datasheets and other reference material on NonStop manageability at
http://www.hp.com/go/nonstop/operationsmanagement

Check out articles on HP BTO support of NonStop in the Connection magazine

Contact NonStop Manageability Product Manager and Architect at
geroge.haskell@hp.com and vinay.gupta@hp.com
THANK YOU
THE INSTANT-ON ENTERPRISE IS HERE.