

Keynote Unifies Performance Management Across Mobile and Web Environments

Abstract

Recently, Keynote Systems introduced some significant advances to its core Keynote Internet Testing Environment (KITE) with KITE 4.0, as well as a parallel set of enhancements in its capabilities for testing and monitoring capabilities for mobile users in its Mobile Internet Testing Environment (MITE) 2.0 and Mobile Web Perspective (MWP) 5.0. Keynote is well established as an industry leader in Web monitoring, testing and performance diagnostics, including in-depth user experience management capabilities. It also has a strong global presence and complements many platform and other monitoring solutions through its focus on management outside the firewall. This ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) impact assessment looks at Keynote's announcement in customer and industry context.

Event

Keynote Systems recently introduced KITE 4.0 with expanded and fully integrated capabilities to support Mozilla Firefox in conjunction with Internet Explorer so that companies can ensure a more balanced performance for key applications across the two browsers. Since many Web and Web 2.0 applications depend on browsers for a considerable amount of localized processing, the differences can be significant. In addition, KITE 4.0 provides significantly enhanced capabilities for visualization, reporting and analysis.

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In the area of mobility, Keynote enhanced its capabilities with Mobile Web Perspective (MWP) 5.0 and Mobile Internet Testing Environment (MITE) 2.0 and MITE Pro to aggressively support QA validation and pre-deployment engineering and test.

This series of announcements reflect Keynote's commitment to bring parity to its service performance management capabilities for both mobile and non-mobile environments, as well as expand the range of browser and other technical requirements covered in direct support of a wide array of both business and technical users.

Keynote's offerings are all provided directly as Software-as-a-Service capabilities that provide immediate value and largely complement pre-existing monitoring solutions in most environments.

Market Context

It has become a cliché to highlight the growing requirements for IT-to-business alignment in an era when new businesses across all verticals are often created, at least in part, through innovations in IT services, which are enabling not only new levels of efficiency, but more and more often, entirely new business models. One healthcare organization bluntly stated that to talk of IT-to-business alignment makes no more sense than to talk about sales-to-business alignment, since "IT and the business are no longer in any way separate."

However, many challenges still remain, largely because of cultural, process-related and political or organizational conditions that tend to present a serious drag on IT-to-business dialogs, not the least of which is the difficulty communicating complex technical interdependencies to a wide range of IT and business skill sets. This challenge is only magnified when a business application depends on collaboration across an entire ecosystem of partners, suppliers and service providers of various types, some of whom may well be competitors. The eclectic and dynamic nature of Cloud computing is only accelerating this “ecosystem” trend.

EMA has long observed that poor communication, along with ill-defined processes and weak executive support, is a top reason why critical service management and delivery initiatives fail.

Therefore, finding an efficient way to package and present relevant data sets to a wide range of constituencies in support of effective communication and dialog is key. EMA has long observed that poor communication, along with ill-defined processes and weak executive support, is a top reason why critical service management and delivery initiatives fail.

Keynote's Advances

Few companies are as well equipped to address these accelerating requirements for business-to-IT collaboration across businesses, organizations, and even entire ecosystems as Keynote. There are a number of reasons for this, but most prominently they include:

- Keynote's strengths not only in User Experience Management, but also in tests for business competitiveness.
- Keynote's global reach to assess geographical performance “outside the firewall” and how it impacts a critical business application system. Keynote has more than 3,000 measurement computers and mobile devices in more than 240 locations worldwide with especially strong points of presence in San Francisco (Sprint), New York (AT&T), London (PSI), Frankfurt (Verizon), and Hong Kong (HKT).
- Keynote's strong support for mobile as well as non-mobile users.
- Keynote's ability to monitor different organizations and businesses in an ecosystem as a continuum with consistent data sets, reports and visualization.
- Keynote's attention to business as well as technical roles in how it presents information
- Keynote's versatile deployability as a SaaS solution.

KITE 4.0

The Keynote Internet Testing Environment 4.0 is optimized for a variety of technical users seeking flexibility, speed *and* granularity in how tests for user experience, diagnostics and monitoring are created and done. KITE's services include advanced scripting, detailed network performance monitoring, DOM or Web Document and Text Extraction analysis, and other tests optimized to support complex Web and Web 2.0 transactions across real-world environments. Scripts can be run in burst-mode, and configured to run on a scheduled basis for baselining. The new announcement makes the transition from browsing, to script creation, to script validation, to script reuse exceedingly easy for both standard and more customized environments.

KITE 4.0 supports a wide range of Internet technologies including HTML, CSS, HTTP, JavaScript, Servlets, AJAX, SOA, XML, Flash, and video, among others. Kite's focus is on Web 2.0 applications – where the browser can become an active player in orchestrating mash-ups and getting information through one or multiple servers. This places a tremendous burden on “front end” performance, which is where Keynote estimates that 80%-90% of the transaction time is lost.

This makes support for Firefox especially relevant. Keynote monitoring has exposed significant differences in Firefox and Internet Explorer performance in different environments, so assuming that both are the same, or that one is consistently faster than the other, is guaranteed to lead to errors. Moreover, the days when IE is so universally dominant that all other browsers are distant seconds is long gone. Firefox, for instance, is the lead browser choice in Germany today.

Keynote has made it surprisingly seamless to monitor both IE and Firefox in concert, without having to create new scripts or tests, and with effective graphics and visualization for assessing both browser environments together.

Some of the other capabilities introduced in KITE 4.0 are

- 100% of the Web page is tested, even when, as in many newspaper and magazine spreads, for instance, 50% of the Web page may not be immediately visible, or “below the fold.” This enables more effective diagnostics and scripting and greater overall testing accuracy and completeness.
- Improvements in graphical performance summaries, including waterfall charts and facile side by side comparisons based on targeted variables.
- Enhanced capabilities to search for content or performance issues in context.
- A Multiple Item Clipboard for easily prioritizing areas or applications of interest.
- The ability to retain existing browsing panes while exploring more detailed scripts or test results.

Mobile Web Perspective 5.0 and MITE 2.0

While often either overlooked or underserved by many management and monitoring solutions, mobile devices such as smartphones and tablets are already a prevalent and soon-to-be-dominant (within two years) part of the device landscape. So Keynote’s commitment here makes absolute sense.

In contrast to more competitive non-mobile environments, WebKit holds an overwhelming share in browser adoption and Keynote fully supports WebKit. But there are other unique obstacles to the mobile environment, including the many devices and models, slow transmission speeds, and unreliable or inconsistent networks.

With Mobile Web Perspective® (MWP) 5.0, Keynote has substantially improved the completeness of their solution for delivering broad, comprehensive Web monitoring for mobile devices. With over 11,000 device profiles across 1,800 devices, operators will find their needs well met. MWP 5.0 can be used to monitor content either directly through the Internet or through the many air interface testing options available in 15 global markets and spanning all Tier 1 mobile operators. The air interface tests most closely resemble real user experiences, but the Internet-based tests are sufficient for more basic content and format availability and responsiveness tests without being subject to any particular mobile operator’s state of performance. The information gathered through MWP can also be promoted up to the MyKeynote central console for side-by-side comparison with other non-mobile performance and availability monitoring results.

Closely associated with MWP is Keynote’s Mobile Internet Testing Environment (MITE) 2.0. While MITE 2.0 leverages exactly the same device emulation database as MWP 5.0, it is specifically meant for off-line, preproduction testing of browsers and content, so that potential issues can be found and corrected before content goes live. New in this release is an overall performance rating score for each device/profile, which combines multiple measures and metrics to help operators recognize which combinations work well and which need the most attention. Finally, Keynote has added a visually powerful waterfall diagram which can show load time and success achieved with each content element within composite Web pages for rapid recognition of problems and the details needed to proceed with corrective actions.

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EMA Perspective

Together, these updates significantly advance the reach and scope of KITE, while also bringing Keynote's mobile performance testing and monitoring capabilities up to par with the longer-lived fixed system solutions upon which Keynote has built its reputation. The need to support a wider variety of browsers with superior visualization and analysis is increasingly critical for mainstream or traditional end-device support. While there is an increasingly critical need for understanding and characterizing mobile experience, content owners and Web operators can now be in a much better position to assure high quality services with these improved solutions. Moreover, Keynote has diversified with a series of astute partners and integrations with vendors such as dynaTrace, Extrahop, OPNET and OpTier for true end-to-end Web monitoring inclusive of on-premise solutions targeted at transactions, applications and cross-infrastructure interdependencies.

Keynote can rightfully claim best-in-class status for comprehensive, multi-platform performance monitoring that unites both mobile and Web environments with balanced attention and focus.

EMA expects the competitive pressures for other vendors to respond to Keynote's advances will only increase as Cloud computing, ecosystem requirements for effectively communicating shared information, and the critical need for monitoring complex application ecosystems will only grow in the near and foreseeable future. But for now, Keynote can rightfully claim best-in-class status for comprehensive, multi-platform performance monitoring that unites both mobile and Web environments with balanced attention and focus.

About EMA

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise IT professionals, lines of business users, and IT vendors at www.enterprisemanagement.com or follow EMA on Twitter (http://twitter.com/ema_research).

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