

# Wily SOA Manager

## Abstract

On March 19, 2007, the Wily division of CA announced the release of a new product, Wily SOA Manager, specifically designed to monitor and manage Web Services-based Service Oriented Architecture (SOA) services. The new product extends the power of Wily's Introscope® and Customer Experience Manager™ (CEM) solutions by adding capabilities to autodiscover Web Services, track transactions and message exchanges, and report on elements embedded in message content. In conjunction with the Wily Introscope platform, Wily SOA Manager provides a single, correlated view of each Web Services transaction from multiple perspectives—from the infrastructure through the transaction (Introscope) and from the edge of the transaction back through the transaction details (SOA Manager). The combination of the two results in a distinctive solution set with few competitors in the industry.

## The News

On March 19, 2007, CA's Wily division announced the release of a new product, Wily SOA Manager, specifically designed to monitor and manage standards-based SOA transactions. Building on existing Wily solutions, Introscope and CEM, that provide infrastructure and Web transaction monitoring and management capabilities, Wily SOA Manager is a natural extension that adds visibility, autodiscovery, and transaction intelligence-gathering. This announcement broadens Wily's "sweet spot" by extending the company's already robust transaction analysis capabilities to Web Services as well.

EMA believes that Service Oriented Architecture (SOA) will crest early mainstream during 2007 with over 70% of enterprises indicating that they are at some stage of SOA adoption. Managing the loosely-coupled and message-intensive transactions foundational to SOA requires specific technology that is lacking in many competing management solution sets. Wily's focus on the transaction, along with the depth and breadth of visibility provided by the Introscope, Customer Experience Manager, and SOA Manager combination, effectively positions them for extension into this new market. While many competing vendors are still struggling to adapt point products to manage SOA, Wily has effectively positioned as one of the leaders in this space.

CA, founded in 1976, acquired Wily Technology in January of 2006. Since that time, the Wily division has remained virtually

intact in terms of staff and leadership, and appears to have thrived. Since its acquisition, Wily headcount has almost doubled, and year over year revenue growth was between 60% and 70%.

## Background and Product Information

Most Wily products rely on either the Customer Experience Manager or Introscope as foundational technology. Wily SOA Manager, for example, runs over Introscope.

CEM provides deep visibility to the online customer experience and is specifically designed to track transactional details necessary to manage and optimize the online experience. Introscope is a monitoring and management product designed to detect Web application problems. It also simplifies and streamlines the root cause analysis activity by building "expert knowledge" on Web applications over the technology layer. CEM and Introscope are tightly integrated, and Wily SOA Manager extends this integration to standards-based SOA.

Wily has a reputation as a forward-thinking vendor with highly regarded products. This new solution is one indication that Wily is continuing to pursue its innovative direction while still integrating with the CA line where it makes sense to do so.

Designed specifically for Web Services and standards-based SOA, SOA Manager tracks transaction performance with deep insight into performance issues. The complementary viewpoints of Introscope and SOA Manager yield multi-dimensional visibility into transactions, into the underlying technology, and into the interactions between the two.

## Why This Announcement is Important

Estimates are that SOA spending worldwide on technology and services will be between \$15 and \$40 billion dollars, depending on who is estimating, during the next five years. In addition, between 30% and 70% of organizations, again depending on who is doing the counting, indicate that they plan to roll out SOA initiatives during 2007.

However, SOA brings with it specific management challenges. SOA services are made up of distributed, heterogeneous software components that communicate with one another via messaging. Web Services-based SOA deployments rely heavily on standards-based protocols such as Extensible Markup Language (XML), Simple Object Access Protocol (SOAP), and Web Services Description Language (WSDL), which

many traditional solutions do not address. They also have difficulty managing loose coupling and machine-to-machine transactions. Without products designed to detect the fact that a transaction hasn't successfully completed, a company might never know that customers can't buy stocks through their Web portal.

Wily SOA Manager effectively addresses these challenges with multiple features specifically requested by Wily's customers. A partial list includes automated discovery of services, automatic service groupings, automatic Service Catalog generation, audit capabilities, and the ability to extract, store and report business information, such as dollar amounts and number of transactions, from executing SOA services.

## Product Features

- *Automatic discovery of Web Services and dependencies:* The Wily SOA Manager specifically addresses SOA-enabled J2EE and .NET environments. When the product sees a new Web service "go live," sending and receiving messages, it pulls in Universal Description, Discovery, and Integration (UDDI) information, if it exists in Web Services Description Language (WSDL) format. It also adds the entry into a proprietary store, then attempts to create a Service Group. Service Groups provide the basis for applying monitoring policies to multiple services owned by a business entity rather than to business services individually.
- *Service Groups and Catalogs:* Grouping transactions into Service Groups enables error detection and impact analysis of cross-machine, heterogeneous transactions and multi-step business processes. It also facilitates setting business entity-level policies as explained above.
- *Transaction Tracing:* Once services and service dependencies are discovered, transaction tracing provides a visual picture of the transaction's call stack. This is a graphic view of transactions and the integrations, or transitions, between them. This combined view translates to business processes and establishes a basis for defining baselines and thresholds. Once transactions and dependencies are discovered, SOA Manager can recognize, alert on and run reports on incomplete transactions.
- *Provides a "true view" of services, their relationships, and transaction paths:* In most organizations, Web Services and their interactions are designed and documented by application architects prior to deployment. However, in the real world, actual implementation is often quite different from the intended design. This means that knowledge of Web Services and their dependencies is often based on tribal knowledge that is basically

unknown to anybody outside the support group. Wily SOA Manager solves this problem by providing a view into actual Web Services traffic that can then be reconciled with designs and documentation.

- *On/off auditing:* Audit trails are increasingly relevant to troubleshooting, problem determination, and to SOA governance. Wily SOA Manager provides on/off switching for the auditing process, so that it can be used when needed but turned off when not. This provides a powerful troubleshooting tool with minimal day-to-day performance impact.
- *Standards-based, multi-vendor focus:* Supported platforms including Apache Axis, BEA WebLogic and Aqualogic, IBM WebSphere Application Server, and SAP NetWeaver. Introscope supports J2EE and .NET.
- *Content-based reporting:* Wily SOA Manager's visibility into the content of Web Services messages provides a basis for content-based reporting. For example, sales managers can receive a report on the number of orders received through the online sales system or their total dollar amount.
- *Automatic Baselines:* Wily SOA Manager provides two types of baselining. First, baselines can be done by Introscope, which calculates the normal system "behavior" within multiple time-based metrics. Baselines can also be scheduled by time period or by a specified number of transactions. This minimizes overhead while still providing baselines for capacity planning, trending, reporting or threshold-setting.
- *Integrated solutions monitor both machine-to-machine and human-to-machine Web Services interactions:* The focus of CEM is to monitor and measure machine-to-machine and human-to-machine browser-based transactions. SOA Manager extends the same service level and performance monitoring capabilities to Web Services as well.

## EMA's Perspective

EMA did extensive research into SOA products throughout 2006. While it seemed that many focused on development and runtime, few were positioned specifically to manage SOA. We theorized that one reason for this was that SOA and Web Services are "a different animal" from traditional Web transactions. While SOA and Web Services are "loosely coupled" to the underlying infrastructure, standard Web transactions typically map very rigorously to underlying infrastructure and these mappings are comparatively static.

Because of this fundamental difference, traditional application management solutions, many of which have evolved from the "point solutions" of the past, have had difficulty making

the transition from tightly-bound to loosely-coupled services. The majority of the products that have made this transition rely heavily on manual modeling to associate underlying technology to running services. However, because of SOA's inherent flexibility and fluidity, this manual modeling process can become so cumbersome that the products, in the end, yield little real value.

The few products that have successfully bridged this gap have done so using various flavors of discovery technologies. By watching transaction payloads, SOAP traffic, running services or by multiple other methods, these products rely on a tremendous amount of built-in "expert intelligence" to gain perspective to transactions and the underlying infrastructure that supports them. This is the course that Wily followed with SOA Manager, and the results are impressive.

Because of Wily's already deep focus on both infrastructure and Web transactions, SOA Manager is a natural "next step" in the product line's evolution, and one that positions Wily with few real competitors. IBM Tivoli Composite Application Manager (ITCAM) comes to mind as does AmberPoint. However, all three products have strengths and weaknesses, and multiple areas of overlap and divergence.

A word of caution is that the current product was designed to address standards-based SOA, not the proprietary protocols characteristic of some of the ESB-like solutions that evolved from early Enterprise Application Integration (EAI) platforms. It is likely that management for these solutions will be in the form of separate modules in future product releases. However, for standards-based platforms and services, this is certainly a bright spot in the SOA management market.

This is a well-thought out product release and one that draws Wily's line in the sand regarding SOA management. Purpose-built for SOA, the solution is built over an Introscope foundation, which means its basis is market-hardened and rock solid. With minimal competition, this product will likely be embraced by Wily's current customers. However, as companies struggle to manage Web Services rollouts throughout 2007, it will also likely drive business from new prospects as well.



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