# Evolven Introduces SaaS Capability for Industry's Most Adaptive Change Management Analytics

## **Abstract**

Very little has meant more to IT organizations and service providers than coping effectively with the impacts of change and configuration issues—especially in recent years. Even before the advent of cloud computing, the frequency with which configuration updates were made across complex, interconnected infrastructures was increasing by orders of magnitude compared to more sedate rhythms from the 1990s, which were in turn strongly accelerated over pre-client/server days. But today, with the advent of cloud and virtualization, managing changing infrastructures in support of critical applications has demanded

huge advances in real-time currency, more flexible approaches to change management control, surging dependencies on automation, and above all a cross-domain versus siloed mindset that is still challenging to many IT organizations for cultural as much as technological reasons.

And while many vendors are creatively addressing the implications of this need for real-time currency and cross-domain insights, none appear to have delivered as distinctive and adaptive a footprint in this arena as Evolven. This ENTERPRISE MANAGEMENT ASSOCIATES® (EMATM) impact brief addresses Evolven's new SaaS offering for advanced change management analytics in terms of function, design, customer benefit and industry impact.

while many vendors are creatively addressing the implications of this need for real-time currency and cross-domain insights, none appear to have delivered as distinctive and adaptive a footprint in this arena as Evolven.

### **Event**

On October 27, 2011, Evolven announced the availability of its new Software-as-a-Service (SaaS) Change Monitoring service. The new service is centered on an analytical approach to monitoring the impacts of change from a cross-domain perspective with robust options for drill-down, and perhaps even more meaningfully, advanced capabilities for assessing relevance of configuration-related data and change-related patterns.

The solution is unique in its clean focus on change management analytics, making it complementary to performance management solutions, CMDBs and CMS capabilities, application dependency mapping and the growing number of capacity planning and optimization capabilities on the market today. It is focused on reducing the risk of change across cloud, virtualized and physical environments, and so helps to ensure improved infrastructure resiliency in support of IT application and other services.

The new SaaS solution will help to extend Evolven's core change management solution down market, while improving on an already powerful time-to-value proposition, which according to Evolven is typically a matter of just a few days. The SaaS solution is priced simply at \$30 per month per OS instance (physical or virtual) and has all the same capabilities as its on-premise solution, so customers can easily migrate between the two as priorities, skills and in-house resources may change over time.

#### Context

EMA has years of extensive research assessing the impacts of change and configuration issues on IT, from a variety of perspectives such as service performance, capacity planning, asset management and asset planning, and strategic initiatives such as data center transformation. EMA experience has shown



that one of the first issues in understanding configuration management is that it has an "enterprise" aspect (represented by the well-known concept of the CMDB or CMS), and a lower-level "element" or resource aspect. Enterprise, or service-centic configuration management, focuses on overall inventories of IT resources and their dependencies, such as what applications are running on what servers. Element configuration management concerns itself with the internal state of the managed resource; for example, whether a Web server is configured to use the correct port, or an operating system parameter is set in such a way as to cause security risk.

Both enterprise and element configuration management are hard problems. And these two aspects of configuration management are frequently confused, leading to (for example) risk managers asking IT service management teams to solve problems such as managing approved server configurations or monitoring production systems for "drift" from their baselines. These types of problems that are typically too low-level for most IT service management suites, and in general out of the expertise of process-oriented ITSM teams; they need to be handled by the right stakeholders with tools and techniques specific to the platform being managed.

These challenges are only aggravated by the advent of cloud computing and associated virtualization technologies on change and configuration management. For instance, in the January 2010 EMA report, Operationalizing Cloud, configuration-related capabilities were rated "very important" or "important" across domains. Advanced analytics showed, if anything, even more dramatic results in cross analysis regarding how potential cloud computing benefits were actually realized. Those IT organizations with advanced service management-related analytics were 1.8 times more likely to reduce management complexity via cloud, 1.9 more likely to improve service resilience via cloud, and twice as likely to deliver business model enhancements via cloud, just to cite a few examples.

#### A Closer Look at the Evolven Solution

Evolven combines a well-focused breadth of insight with granular detail required by appropriate stakeholders to take actionable information in managing configuration changes more effectively. This is especially important in cloud and virtualized environments which are by nature cross-domain, and where VM sprawl and other transient events can potentially lead to catastrophic impacts that most solutions leave invisible and almost poorly or not-at-all analyzed.

Evolven looks at the software infrastructure stack from application to front-end services, middleware, databases, OS and virtualization layers and HW interdependencies.

Evolven looks at the software infrastructure stack from application to front-end services, middleware, databases, OS and virtualization layers and HW interdependencies. However, it is also granular in focus—targeting Windows, Linux and Unix systems versus mid-range systems, mainframes, or other infrastructure components such as network and storage. Critical subject-matter-relevant information such as application architecture, configuration files, and database schema are also available, as is clear contrasts with time and change-related criteria such as "Version" and "Last Modified." While Evolven allows for manual application dependency map creation, it is primarily complementary to CMDB/CMS deployments and can utilize CMS-related data when/if desired.

Evolven classifies change impact based on core criteria such as *functionality, security, performance,* and *stability.* And since Evolven's approach is to gather and analyze data holistically, it is dependent on its analytics to "cut through the noise" to highlight information of relevance. For instance, one of the most challenging aspects of a general case drift management solution lies in defining "what do I care about?" Computing infrastructure is complex; enterprise middleware platforms may have thousands or even tens of thousands of parameters, any one of which might be of concern. As a result, automating drift management becomes very labor intensive to set up, requiring deep analysis of the parameters of concern. Evolven's approach to solving this problem by centralizing data across multiple customers and using analytics to help guide users on "what matters" is truly innovative.



Evolven's logical architecture might best be understood in terms of three core components:

- Crawling Evolven's solution for gathering information can be either agent-based for SaaS customers with security requirements that preclude data collection outside the firewall, or agentless, which can be done by a proxy collector and sent back via an HTTPS connection for other SaaS customers. Both options also apply to on-premise data collection.
- *Knowledgebase* Evolven maintains a community knowledgebase that supports a broad array of insights on change-related behaviors via its own internal organization and more than 150 customer experts, with a capability for data-mining queries at the back end. This allows Evolven customers to look for patterns that are consistently normal or abnormal not only across their own environment, but across a wide range of broader deployments as well. For instance the parameters for a change connection time-out for a certain server type in an IaaS environment housing Exchange might be significantly out of range for one IT environment versus similar deployments. This can then become a departure point for further analysis to see why and assess impact.
- Comparison Engine This is an algorithm designed to capture patterns of change both in time and in infrastructure or environmental context to assess what changes are consistent with expectations (planned changes), which are different from prior instantiations, and where the application impacts are clustered. For instance one analysis, the Consistency Check, can break out patterns of inconsistency from a time, server type, or other context and then support further drill down.

# **EMA Perspective**

While it is popular to view virtualization and cloud computing as a "revolution" with tradition-bound ways of working sinking into oblivion, the truth is the present time is witnessing much more of an *evolution*—albeit one going through a lot of adolescent, hormonal changes with associated levels of confusion as the hype and reality of new technologies get sorted out. This complexity and confusion only gets magnified by dramatic shifts in global economic forces and the ever increasing relevance of IT services to business competitiveness and business-model transformation.

The good news is that a number of vendors, large and small, are actively seeking to address the requirements of this "Brave New World" with more dynamic, adaptive, and contextually relevant solutions. Within this larger mosaic, Evolven brings a unique and much needed offering optimized to complement other advances in discovery, dependency mapping, performance management and capacity management. Evolven's change management analytics sit squarely in the middle of all these advancing trends and can provide strong synergies across them, while also bringing pragmatic and direct value in and of themselves. Moreover, Evolven's solution, while addressing the requirements of "cloud," isn't lost in the clouds like so many other new technology entrants where functional advances are tarnished by huge administrative overhead and improbable deployments. EMA believes that Evolven's solution in both SaaS and on-premise deployments should have a positive catalytic effect on both IT approaches to managing change, and the other vendor solutions where Evolven's analytics can accelerate time to value, as well as depth and breadth of coverage.

EMA believes that Evolven's solution in both SaaS and on-premise deployments should have a positive catalytic effect on both IT approaches to managing change, and the other vendor solutions where Evolven's analytics can accelerate time to value, as well as depth and breadth of coverage.

#### 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 line of business users, IT professionals and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on Twitter or Facebook.

2363.110911

