Automic Continuous Delivery for Siebel™

Pain Relief for Siebel Agility Headaches

An ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) White Paper
Prepared for Automic

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EMA™ IT & DATA MANAGEMENT RESEARCH, INDUSTRY ANALYSIS & CONSULTING

Automic Continuous Delivery for Siebel™: Pain Relief for Siebel Agility Headaches

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Introduction

Today, business agility is heavily dependent on a company's agility in developing and delivering software. Innovative software products are driving digital transformation initiatives focused on enhancing customer engagement, operational excellence, and employee productivity. In many companies, new "products" cannot be delivered without software to support them. In others, modifications to existing applications are enablers supporting business adaptation to a rapidly changing customer base, to industry pressures, or to dynamic regulatory environments.

Enterprise Management Associates (EMA) research has found a strong correlation between agility in delivering software code—Continuous Delivery—and revenue growth.[1] In fact, companies that increased the frequency of code delivery by 10% or more in a given year were 2 ½ times more likely than their less agile competitors to have double-digit revenue growth for that year.

At the same time, accelerating software delivery of today's complex applications is no easy task. Often, software packages and versions span multiple platforms, requiring diverse development teams to work in parallel in multiple development environments. The problem is compounded when platform architectures supporting distributed application components are completely different as well. Many companies, for example, are integrating back-end systems of record with front-end systems of engagement and are challenged by the complexities of developing both sides of the application in parallel.

Recently, Automic has augmented its flagship **Automic™ Release Automation product (ARA)** with a new set of capabilities and templates supporting the unique architectural, operational, and administrative aspects of Oracle's Siebel Customer Relationship Management (CRM) solution. **Automic Continuous Delivery for Siebel™** enables development teams to deliver Siebel-specific upgrades and modifications at a level of agility commensurate with that of the web applications and mobile apps that interoperate with Siebel code and data.

This ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) white paper details the capabilities of this new solution and its value proposition for companies seeking to accelerate Continuous Delivery in Siebel environments.

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Packaged Enterprise Application Software Environments

These days, most companies of medium size or larger are running packaged enterprise applications such as CRM or Enterprise Resource Planning (ERP) systems. Such applications are often heavily modified and typically have two distinct use cases. In one, employees access the enterprise software directly as part of their day-to-day work. In the other, the packaged application acts as a back-end data and/or processing platform accessed by front-end applications supporting mobile, web, wireless, and similar user-facing access methodologies.

[1] Detailed in the following report: EMA, "DevOps and Continuous Delivery: Ten Factors Shaping the Future of Application Delivery," June 2014. Available at http://bit.ly/1Kp6L8E.

EMA research has found that these types of integrations are commonplace and their numbers are growing. As Figure 1 shows, almost one-quarter of companies report that 75% or more of their enterprise applications integrate with other databases or applications, and another one-quarter indicate that between 50 and 75% of their applications do so. In other words, the use of enterprise applications as back-end systems supporting other applications is commonplace, and this is particularly true of CRM applications such as Siebel.

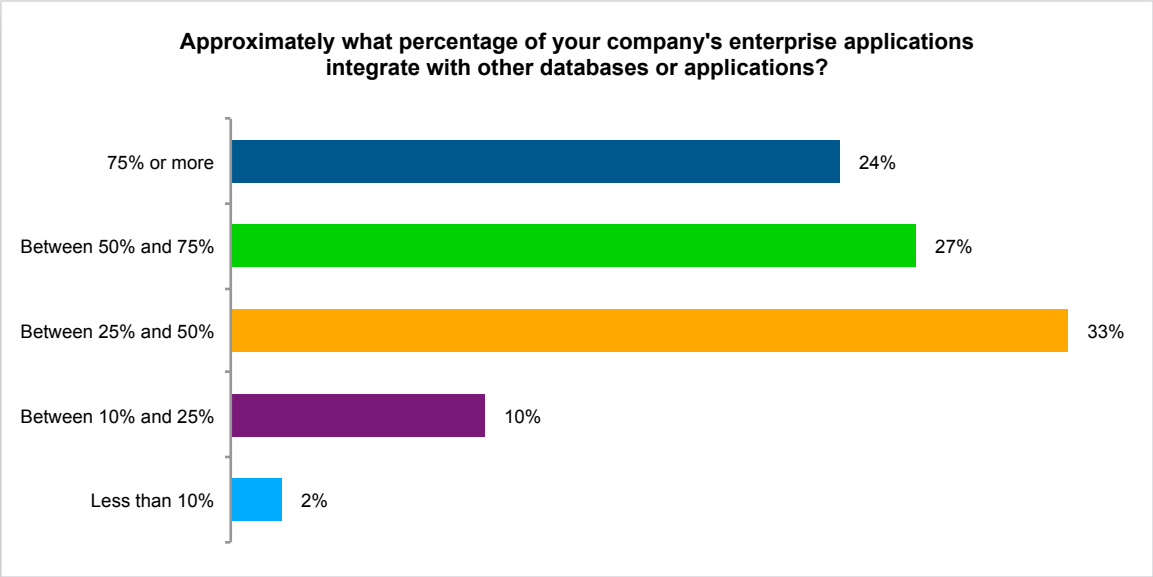

Figure 1. Widespread integration between enterprise applications and other systems

When CRM or ERP packages are used both as stand-alone systems *and* as systems of record interacting with front-end systems of engagement, the development process is complicated by the fact that code modifications on both sides must remain in sync throughout the lifecycle. At the same time, front-end code and back-end code are typically delivered by different development teams. And since software for both platforms is often developed as part of a single version or release, development teams work in parallel on multiple platforms. These differences can make it difficult to develop and deliver software to all platforms simultaneously in a Continuous Delivery model.

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Siebel in an Agile World

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Today, more than 80% of companies are using Agile development techniques to deliver at least some of their software development projects. Since the output of Agile development consists of multiple small code packages delivered on a more or less ongoing basis, many companies using Agile practices have also adopted Continuous Delivery as a way to accelerate the delivery of smaller code packages into production. In this scenario, companies deploy new code to production as often as multiple times daily. While not all deploy that frequently, almost all companies using Continuous Delivery will deliver new code at least multiple times per month (see Figure 2).

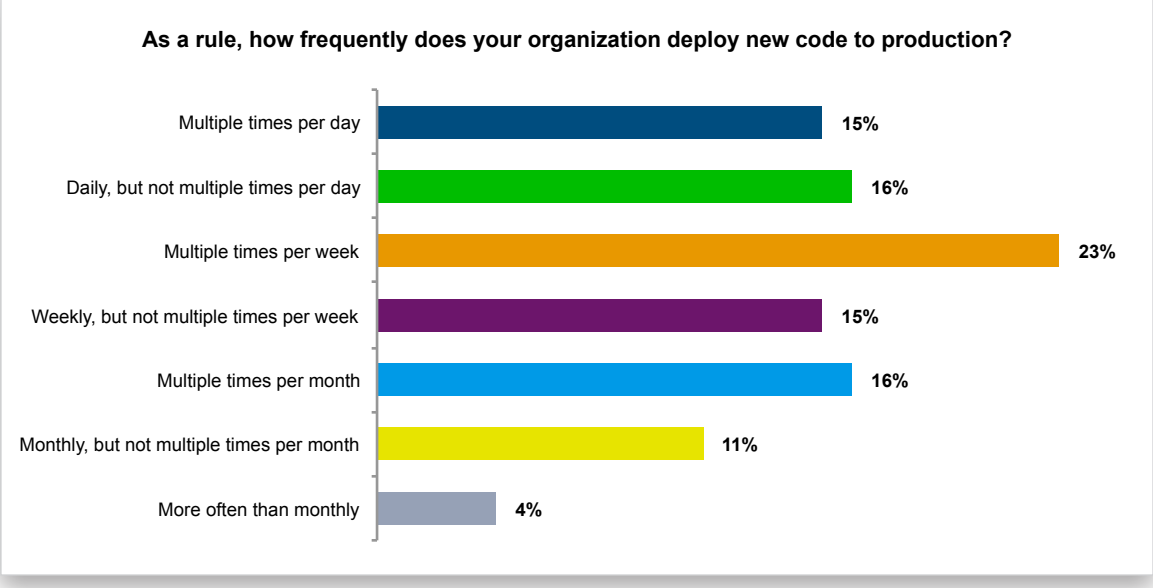

Figure 2. Continuous Delivery frequencies

While the development world continues to move toward Agile practices, Siebel software continues to provide a dynamic core and structure that serve as a foundation for the entire customer engagement lifecycle and for transactional and analytical functions supporting virtually every customer-facing operation. Customer and prospect data is centrally stored and accessed via an integrated set of software services supporting account management, sales activities, and customer contacts, among many other functions.

Siebel and Continuous Delivery

There are a variety of benefits to extending the value proposition of Siebel CRM to multiple use cases. Data is stored centrally and, in many cases, processed centrally as well. New customer-facing applications can leverage existing data from a trusted source for modernized applications which are more appealing and more accessible to customers and employees. Stable, proven code can be repurposed, while still ensuring that "apps" and web application access do not disrupt normal operation of the CRM platform itself.

At the same time, as Siebel customers adopt Agile development practices for front-end systems of engagement, they often encounter development, deployment, and release bottlenecks based on the fact that development of the new code is also tied to Siebel modifications. Due to the solution's architecture, breadth, and unique operational characteristics, such modifications require a high level of Siebel-specific expertise. This is particularly true since, as with other large-scale applications, a change to one piece of code can have a ripple effect, impacting downstream applications and dependencies as well.

It is also the case that, while front-end systems written in modern languages have modular structures that can be modified and redeployed in minutes, Siebel code is monolithic, developed in an era when code was delivered in large "chunks" at 12-to-18 month intervals, versus weekly or daily. Because of its monolithic architecture, even small modifications can require the entire system to be rebuilt and redeployed. This process can require a full workday or more, making it time-prohibitive to deliver modifications daily or even weekly. "Maintenance windows" are simply too infrequent, and too short, to support Siebel modifications in a Continuous Delivery model.

However, since all code in a given package—both front-end and back-end code—must be completed before the software goes into production, development teams may find themselves unable to deliver new applications at the pace demanded by the business.

In these environments, modifications to systems of engagement and systems of record are almost always out of sync. However, while the two architectures are like the proverbial oil and water, the business expects the same levels of agility and flexibility in Siebel modifications as they see with web applications. They also expect Siebel modifications to be made quickly enough to accommodate Continuous Delivery timelines.

These are the challenges that Automic addresses with the Automic Continuous Delivery for Siebel™ solution.

Automic Release Automation (ARA)

> ***"[Automation] software has the ability to create stable environments and stable code lines. [The] human elements in deployment lead to issues, and getting a grip on the stability of your environment is only possible with automation[.] With the human-error factor, your environments are never stable and will fail —for us [Automic automation] was essential [to overcoming this challenge]."***
>
> ***– Big Four consulting asset working with Automic at Siebel customer site***

ARA is built on and leverages many components of Automic's ONE Automation platform. Its capabilities encompass a wide variety of essential functions supporting service orchestration, workload automation and application delivery throughout the lifecycle. Billed as "Model-Driven Automation", the core of Automic Release Automation consists of a dynamic properties system for configurations, environments, and application modeling. It also includes a built-in library of actions and audit trails and a metadata repository describing the past, present, and future characteristics of an organization's deployment pipeline and application ecosystem (see Figure 3).

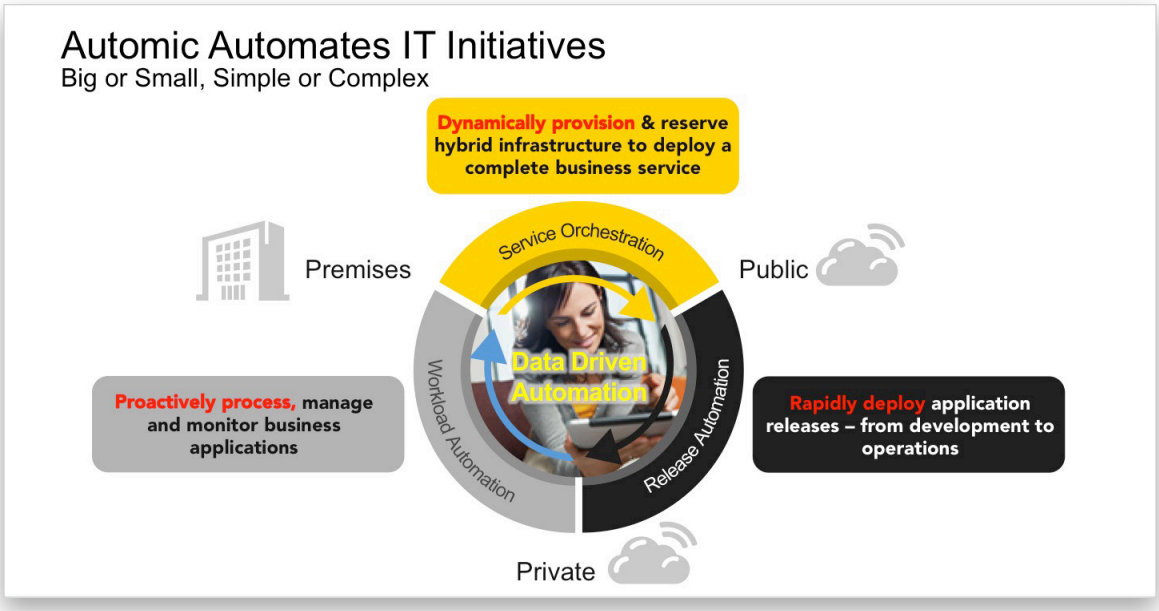

Figure 3. Automic ONE Automation Platform

Automic's Workload Automation, Release Automation, and Service Orchestration functions all leverage these core platform capabilities to dynamically access and maintain consistent states, approved configurations, and application promotion paths. The common core also supports analysis of cross-application interdependencies, updates to histories based on completed actions, and notifications to IT specialists of the success or failure of automated actions.

By completely automating the deployment pipeline and the provisioning of application-ready infrastructures from a single platform, Automic Release Automation builds and maintains a living model of the application ecosystem. This model provides the visibility that infrastructure, application support, and DevOps teams need to manage IT environments based on certainty versus guesswork.

These functions are extended by out-of-the box integrations with third-party solutions supporting diverse tasks across the application lifecycle. Since both Agile development and Continuous Delivery rely on an automated, efficient application lifecycle, plugins spanning heterogeneous products across each supporting stage of the lifecycle are essential elements supporting a seamless end-to-end deployment workstream.

In addition to the third-party plugins delivered out of the box, Automic recently announced the Automic Marketplace (more details at https://marketplace.automic.com/). This further extends the platform with templates and solutions for automating an ever-growing list of enterprise automation functions such as DevOps, Big Data operations, and service orchestration.

Automic Continuous Delivery for Siebel™

Automic's new Continuous Delivery for Siebel builds on this integrated, dynamic core with a set of capabilities that extend Automic Release Automation to Siebel-specific development and deployment challenges (see Figure 4). This enables customers to become more agile in modifying and deploying Siebel-related code.

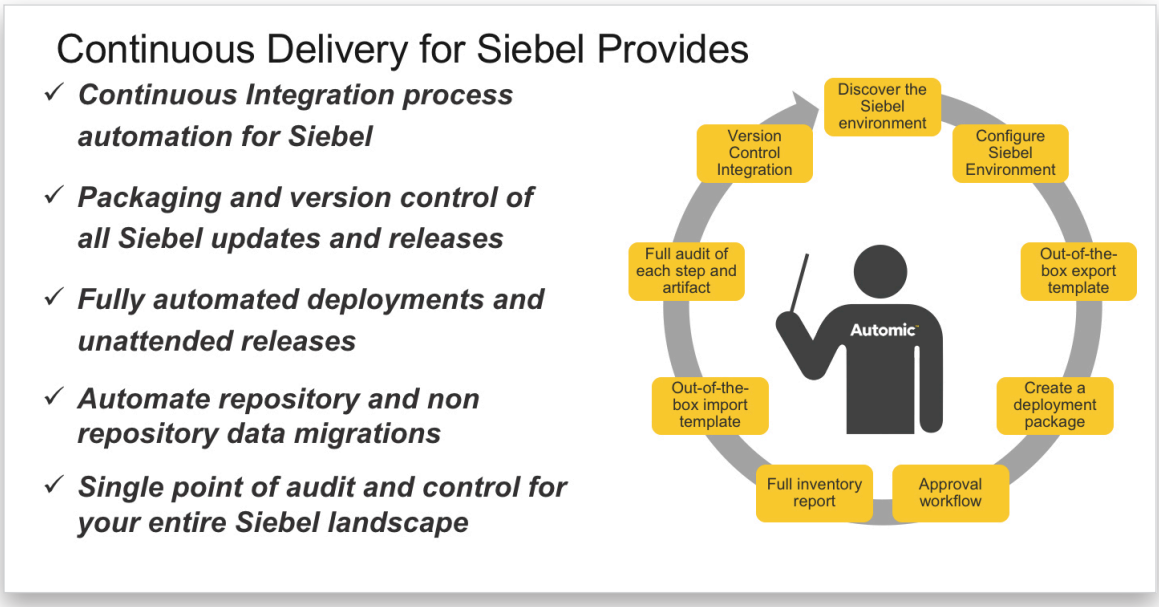

Figure 4. Automic Continuous Delivery for Siebel functions

Developed in response to customer requests, this new product has deep integration with the Siebel platform. It virtually "componentizes" Siebel code, temporarily decoupling specific portions of the code from the monolithic code body. This enables Automic customers to modify, build, and deploy Siebel code changes as a series of small components rather than as a single monolithic platform.

These new features overcome the version control limitations of the Siebel structure which typically allow large code files but not smaller objects to be versioned. Via new technology that essentially mimics the process used to incrementally develop modern apps and graphical interfaces, Siebel code can be updated and deployed in a "one-to-many" fashion to all modules of the code base requiring the update. All dependent components are updated at the touch of a button.

By abstracting smaller segments of Siebel code for development purposes, the solution enables Continuous Delivery of releases spanning both modified Siebel code and code intended for deployment to front-end systems. As a result, system-of-record and system-of-engagement modifications can be synchronized, developed, and delivered, in tandem, as smaller, more frequent increments.

Differentiators and Value Proposition

- Deep Siebel integration modularizes monolithic code, allowing it to be modified and released in smaller increments.
  - Integration via Siebel-specific APIs
  - Full support for all repository and non-repository object types
- Entire Siebel deployment process is centrally automated and managed.
  - Single point of control and interaction for all Siebel environments
  - Packaging of Siebel exports enabling integrated version control
  - Consistency across Prod, Dev, and QA environments
- Pre-configured templates for Siebel Export and Import
  - Orchestrate and automate manual tasks by developers, DBAs and System Administrators
  - Build and package Siebel Repository Files (SRFs), browser scripts, schemas, and any other required object types into a single package that can be imported to another Siebel enterprise instance
  - Siebel Import Templates replace manual actions with parameter-driven workflows that coordinate activities such as server shutdowns and parallel imports of SRF files, etc.
- Heterogeneous support for a wide variety of third-party solutions via plugins creates tight integration with application lifecycle tools.
- Access to production environments is audited, and each step of the deployment process is tracked.
  - Audit trail shows "what changed" at each step of the deployment
  - 'Snapshot' capability allows users to compare configurations and file contents between packaged items and existing files
- Rollback functions ensure fast recovery when upgrades fail.
  - Redeployment from last known good state to automatically override the changes causing the errors

EMA Perspective

As Siebel customers adopt Agile practices for development of front-end systems of engagement, they often encounter bottlenecks based on the fact that development of the new code is also tied to Siebel modifications on the back end. They often report feeling "locked in" by the systems and software running at the heart of the business and "locked out" of the Agile development practices that can be so beneficial to business agility.

Automic Continuous Delivery for Siebel mimics the component-based structure of front-end systems and enables systems of engagement and systems of record to be functionally linked for development, packaging, and deployment. This is a significant achievement on the part of Automic and a major differentiator for Siebel customers who may be considering the purchase of a Release Automation solution.

Development of these new capabilities required detailed knowledge of the Siebel platform, its components, and its architecture. Automic's investments are the customer's gain, since Automic Continuous Delivery for Siebel ships with a level of built-in expertise that most companies don't have in house. With this new product, IT practitioners are now able to put new software features into the hands of their users more quickly, even when feature changes require modifications to the Siebel software. Automic indicates that support for additional packaged applications will be developed over time.

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Automic's new Continuous Delivery for Siebel significantly extends the the value proposition of customers' Automic investments, and will likely be particularly compelling for Siebel customers seeking a better way to fully utilize their Siebel investments as well.

About Enterprise Management Associates, Inc.

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 EMA's 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, Facebook or LinkedIn.

Corporate Headquarters:
1995 North 57th Court, Suite 120
Boulder, CO 80301
Phone: +1 303.543.9500
Fax: +1 303.543.7687
www.enterprisemanagement.com

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