

Software Deployment Trends: Evaluating the SaaS Option for ePayments Testing Solutions

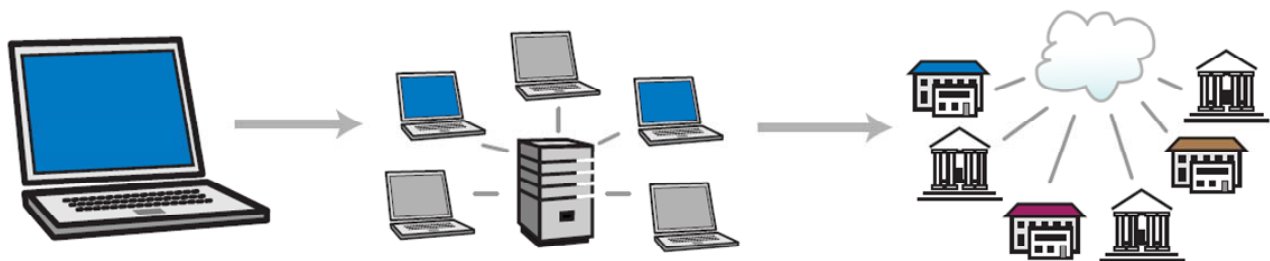
As organizations look for ways to increase efficiency and lower costs, many are reconsidering their software deployment options and choosing Software as a Service (SaaS). Particularly for organizations with a global presence, SaaS promises to reduce the time and effort spent maintaining multiple copies of desktop software and the systems that support them. But is SaaS a workable solution for ePayments testing? This article investigates how payments system testing via a SaaS offering could save some organizations time, frustration—and money.

Tough economy demands efficiency

As financial organizations weather a tough global economy, they increasingly focus on controlling costs and improving overall efficiency. Financial organizations must also react to a steady demand for frequent testing in response to changing regulations, frequent network mandates, maintenance of existing financial transaction processing systems, the addition of new products, and more. With fewer resources spending less time on testing, how can organizations ensure that their testing is precise, and that their results are valid? Successfully conducting rigorous QA, regression, and certification testing is exponentially more difficult when organizations are faced with logistical issues such as multiple time zones, a shortage of network certification personnel, or limited access to a local test lab. Organizations unable to meet the demand for testing can fail to reach their business objectives.

The software deployment evolution: desktop, server-based, SaaS

Advances in technology coupled with a growing number of global corporations have led to an evolution in the methods used to deploy software. Initially, software installed on PCs freed testers from the confines of a lab and the limitations of the number of physical test terminals and cards available. More recently, the server-based software model was adopted by many institutions, taking advantage of the increased simplicity of installing and maintaining ePayment testing software on a single server accessed by a number of testers.



Why Choose Software as a Service?

If an inhouse software deployment option does not meet your needs, SaaS can offer the following benefits.

- Lower total cost of ownership
- Predictable pricing model
- Centralized software control and administration
- Increased opportunity for collaboration with others using the SaaS offering
- Access to SaaS provider's industry expertise
- Agile application framework

Yet even server-based or enterprise-based software models had their shortcomings; chief among them the cost of software setup and maintenance, and the inability to collaborate with others outside the organization.

Many organizations have invested in *Software as a Service* (SaaS) as a method of controlling the cost of software and reducing server expenses. SaaS is a model of software deployment in which an application is hosted by a service provider and accessed as a service by users through the Internet. Because users do not need to install or run the application on their computer, SaaS reduces the tasks and expense associated with software maintenance, ongoing operation, and support. The SaaS model allows organizations to choose from a variety of services that are provided in an automated, secure, continuously available environment—providing on-demand, anytime, anywhere testing products and services.

The cost of software deployment

According to software industry research, the costs associated with software installation, management, and maintenance are significant. Software projects often exceed their expected costs, take considerably longer to complete than anticipated, and sometimes fail completely.

For payment networks, card associations, merchant acquirers, and major financial institutions, the complexities of globalization magnify these costs. These complexities multiply as network participants are added, other financial institutions are acquired, product and service offerings are expanded, and systems are upgraded. Time that should be spent *testing* is instead spent maintaining the infrastructure required for testing.

These costs mean organizations are reluctant to switch to another product, even when the currently installed software fails miserably to meet expectations—because “we’ve got so much invested in it already.” But what if the entry cost prevents an organization from making a software decision? There is also a “cost” realized when a solution is *not* purchased. When an organization has a need for ePayments testing, but the difficulty of implementing a solution prevents the organization from taking action, the organization loses business opportunities.

Conversely, SaaS typically has a lower entry cost and requires a minimal investment of time and resources—with reduced requirements for software administrators or internal “go to” personnel. SaaS is also “ready when you are”; that is, SaaS is installed and waiting for an organization to access it—with much less planning and integration.

Collaboration: a 21st Century approach to corporate communication

Another shortcoming of the inhouse server-based or enterprise-based software models is that there is no easy way to collaborate. Each organization (and, at times, each workgroup *within* an organization) is contained in its own content silo, struggling independently to answer questions or resolve issues that are common to them all.

Collaboration via the Internet is a fairly recent phenomenon, but one that has rapidly taken hold—from initial efforts via USENET news groups, to topic-based email groups on Google or Yahoo!, to the phenomenal growth of publically shared and maintained sites like Wikipedia. SaaS offers forums, chats, and more through which the SaaS provider and users can share information about tools and topics of interest. In a sense, all SaaS users are automatically members of an exclusive network that offers information of specific interest to them. For example, SaaS users of testing tools might have access to test plans and scripts; details on network mandates, file structures and layouts; or other valuable resources. Easy access to centrally stored information is far more efficient than each organization calling or emailing card associations and networks, then trying to disseminate that information among their workgroups.

Evaluating SaaS deployment for ePayment testing

How do you determine if a SaaS ePayment testing solution makes sense for your organization? The ideal testing solution results in more reliable payment systems, improved agility when responding to mandates, and faster time to market. The right choice of deployment makes this testing solution available to all your testers all the time, regardless of their physical location, time zone, or access to lab equipment.

Do you frequently encounter one or more of the following issues?

- Problems originating from testers in different physical locations
- Excessive time and expense associated with licensing and installing testing software on multiple PCs
- Difficulties cost-effectively procuring hardware and data center space for an ePayment testing solution
- Problems keeping testing software updated with software patches or with test scenarios for network mandates or regulations
- Unexpected PC crashes that result in the loss of valuable test data

- Inability to meet the needs of many testers simultaneously (limited equipment or test time “slots”)
- Difficulty communicating test results among team members, to other departments, or to management; for example, being unable to compile test results from multiple testers, or to provide reports that show the progress of the various testers in a group
- Inability to effectively collaborate, with no clear path for timely discovery and research

Can you save time and money using SaaS rather than more traditional deployment methods for your ePayment testing solution? For many organizations, the answer is yes.

Need more information?

If you are interested in more information about SaaS deployment of your ePayment testing software, contact sales@paragonedge.com.

About Paragon Application Systems

Paragon Application Systems is a leading global provider of ePayment simulation, configuration and testing software tools to the financial industry. More than 450 financial institutions in over 80 countries use Paragon tools to improve quality and reduce time-to-market. Paragon’s broad customer base includes major interchanges, processors, leading software providers, banks and credit unions. Visit Paragon Application Systems at www.paragonedge.com.

About the Author

Mark Simerly, Paragon’s Director of Managed Services, is responsible for defining and managing Paragon’s new Software as a Service (SaaS) offering for ePayments Testing Solutions. He has over 20 years experience in the financial services software industry, including specialized experience defining and building SaaS offerings in the electronic payments arena. Mark also has hands-on experience in the design, development, support, and testing of BASE24. Mark earned a Bachelor of Science in Computer Science from the University of Kansas and a Master of Science in Computer Science from the University of Nebraska at Omaha.

The Potential of SaaS for ePayments Testing

SaaS eliminates much of the software and system maintenance tasks and expense, and offers easier (often instant) accessibility to up-to-date testing software, test data, and test results.

In SaaS deployment, the ePayment testing software is accessed via the Web. The service provider maintains the ePayments testing software, the test data, and (depending on the service agreement) perhaps even supplies test scripts.

When all testers are using the same up-to-date ePayment testing software and testing with the same up-to-date test data, organizations can experience increased reliability in testing and increased confidence in the validity of test results.

In addition, testing efficiency may be increased by escaping from the information silo of a single organization and reaping the benefit of a collaborative working environment maintained by the SaaS service provider.

Test results from all testers can be compiled and reported in a variety of ways, from high-level compiled “progress reports” that illustrate the number of tests successfully completed by each tester in a group, to detailed test documentation required for compliance with the Sarbanes-Oxley Act.