



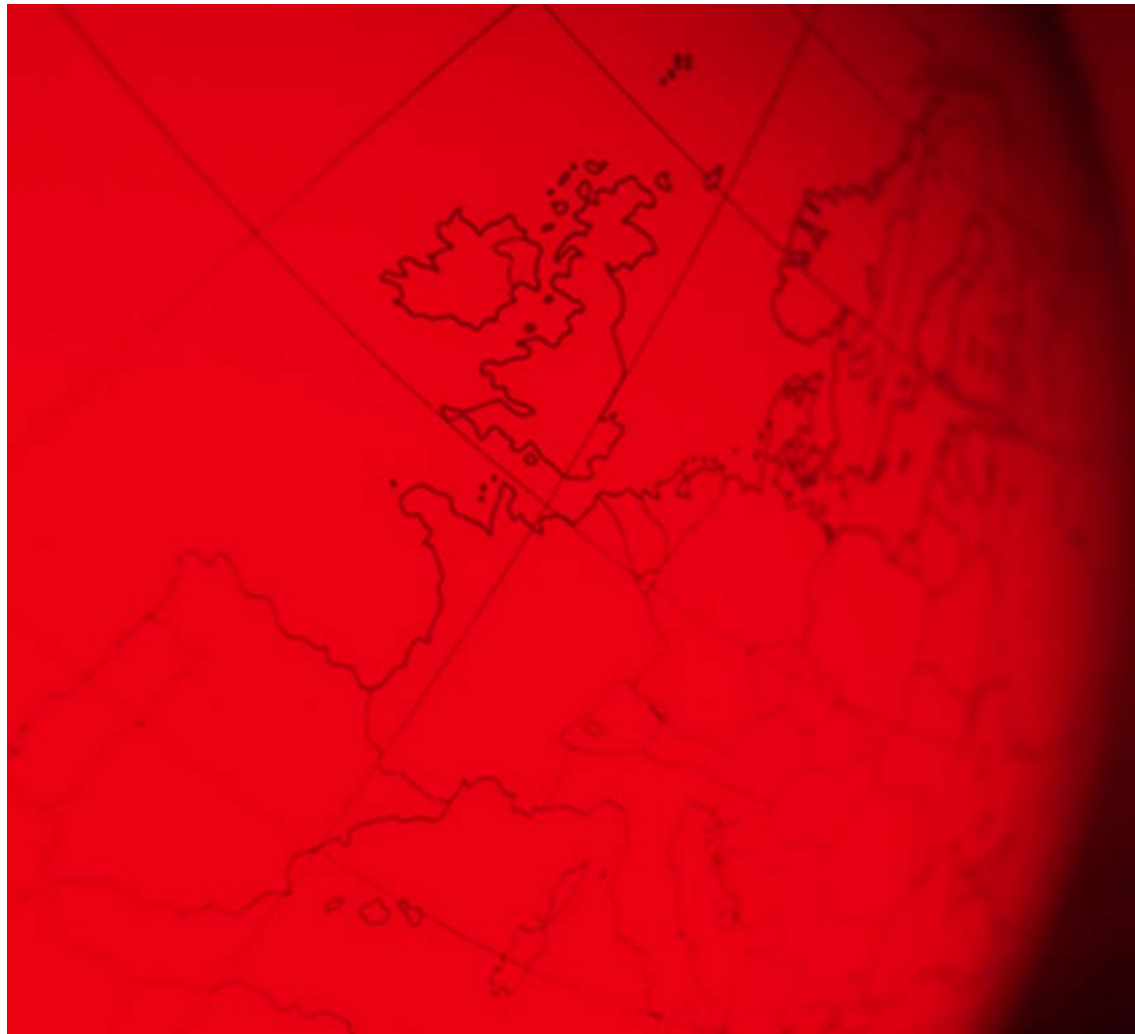
**NUCLEUS  
RESEARCH**

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## **ROI EVALUATION REPORT REPLIWEB DEPLOYMENT**



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**TOPICS**

IT / Infrastructure  
 Operations  
 Application Development & Integration  
 Content Management and Collaboration  
 E-Commerce  
 IT Management & Operations  
 Software as a Service

**THE BOTTOM LINE**

**Companies use RepliWeb Deployment to cost effectively distribute large, dynamic, and complex volumes of content or code across their enterprises, increase productivity and improve the uptime of Web sites and operating environments. Companies can use RepliWeb to not only increase the responsiveness of their IT staff, but also enable the line of business to more rapidly and iteratively fine tune their Web sites in response to changes in their operating and competitive environments.**

**SITUATION**

As large companies look to leverage the scale of their geographically distributed Web presences, development environments, and intranets, much depends on their ability to distribute Web content, Web applications, and software. However, companies typically find it difficult to do this in ways that are cost effective, consistent, and unlikely to disrupt operating environments. Some of the challenges include:

- Labor-intensive workflows. Companies typically rely on error-prone, labor-intensive, and repetitive tasks such as scripting command lines or dragging, dropping, and copying code or content from their source folders to their many destination folders.
- Process control. Maximizing the revenue generating capacity of a Web presence requires a company to manage a difficult trade off between effectively governing its publication process and enabling the line of business to more continuously fine tune their Web presences as operating and competitive conditions require.
- Dynamic conditions. The business units within large enterprises are continuously responding to changes in their operating, competitive, and regulatory environments, requiring frequent deployments and changes to content and code. This becomes more complex the more geographically dispersed a company is.
- Hosting complexity. Large enterprises typically host many separate Web sites on one Web server, resulting in operational risk, because deployment of disruptive code or content to one site can disrupt the performance of others.

Although RepliWeb is focused on distributing Web content to Web servers, RepliWeb Deployment has features and distribution capabilities that enable streamlined and role-based distribution of other types of content such as software and video. These features also ensure that the distribution of such content — regardless of data type or volume — does not interfere with network performance.

Without automation, organizations typically incur significant costs to distribute data, including lost productivity of IT staff, network disruption, and troubleshooting to correct distribution errors.

Companies currently rely on a combination of homegrown solutions, protocols, and applications that make varying degrees of automation available for the publication of content and code. However, many of these applications require labor-intensive tasks such as script writing and customization. Additionally, their error-prone work flows can result in disruptive and costly system outages. Other applications either

do not scale well or are tightly coupled with content management product suites that have functionality specifically designed for content rather than code.

### **RepliWeb**

RepliWeb Deployment, sometimes referred to as R1, automates the distribution of large amounts of Web content, Web applications or software. Key features and functionality include:

- **Publication.** RepliWeb Deployment is used to automate the delivery of a variety of content and code types, and is compatible with .NET, COM+, IIS, Unix, Java and composite applications.
- **Synchronization.** RepliWeb Deployment can be used to continuously synchronize and update all of the applications in a production environment. In the event that a distribution of content or code disrupts a company's operating environment or Web presence, a rollback feature can be used to rapidly reverse the publication and restore availability.
- **Governance.** Administrators from either a company's IT department or line of business can define — with a high degree of specificity — when, where, and how content is moved or copied. IT can also enable the line of business to perform these tasks under IT's terms. Audit trails and reporting enable documentation and ready analysis for trouble shooting.

Use cases for RepliWeb Deployment include publication of the following types of content:

- **Web content.** People in lines of business with Web presences can use RepliWeb Deployment to publish or modify content on their Web sites.
- **Web applications.** Web-based tools that enable customer interaction — such as credit applications, mortgage calculators, product searches, or purchases — can be deployed or modified using RepliWeb Deployment.
- **Software.** Development teams within software companies — and IT departments supporting any other type of company — can use RepliWeb Deployment to distribute to sales, operational, support staff, or other employees the newest versions of patches, software, and upgrades. RepliWeb Deployment can also be used to move large volumes of software between development, test, and operating environments.

This report analyzes the key benefits RepliWeb customers achieved and is based on Nucleus's in-depth analysis of a number of customers, including Countrywide Financial, SAS, AmeriCredit Corp., and Carlson Companies.

### **REPLIWEB BENEFITS**

Nucleus found that by using RepliWeb to support business-critical workflows, Web-based presences, and applications, large enterprises whose operational success relies on creating and publishing Web content or software were able to achieve improvements in a number of areas, including:

- Productivity
- Consistency
- Collaboration
- Business agility
- Uptime

- Scalability
- Trouble shooting
- Security

### **Improved productivity**

In the absence of an automated tool such as RepliWeb Deployment, the workflows that IT departments complete in order to publish Web content, software, or Web-based applications are surprisingly rudimentary. Typically, publication requests are entered into an IT-based ticketing system through non-standardized written e-mails or face-to-face meetings. IT administrators then fulfill these requests by using home-grown code or dragging and dropping files from production or test servers to a destination medium, such as the intranet, Internet, servers, or CDs. In the case of a large enterprise that uses shared hosting or has distributed development environments and Web infrastructures, these workflows are typically highly repetitive, since the same publication tasks are repeated for each node of presence on the Internet. RepliWeb users readily identified the benefits of automating these workflows:

- *"RepliWeb saves me about four hours a day. Without it, I'd be moving files across networks manually, by dragging and dropping files repeatedly. This wouldn't work because I have 40 Web content contributors, 12 of whom are active once a week."*
- *"We do about five complex or large pushes per month. It used to take four to five hours to do it manually. Now we do them with a single command line in RepliWeb in about ten minutes."*
- *"In RepliWeb, you automate deployments in containers. You can deploy a container with a number of jobs, or you can schedule each job in its own container. So there's lots of flexibility in how you automate."*
- *"RepliWeb is the most efficient tool for this. If we deployed all this content and code manually, we'd need three more people."*

At a cost of only \$2,000 per server per year plus maintenance, three IT administrators using RepliWeb on five servers only need to save 2.5 hours per week to get a payback on RepliWeb

### **Improved collaboration**

Using RepliWeb Deployment to automate low-value publication tasks means there is more time for IT to help the business improve the nature and usability of the content and code they create. Most of the companies Nucleus spoke to said that productivity improvements enabled IT to become a more value-added partner to creators of content and applications by providing advice rather than acting as a gatekeeper:

- *"I now spend more time on design and on complex trouble shooting or providing one-on-one support for content publishers. And when they send me content, I can spend time finding the best way to put it on the Web, maybe by changing the page, doing a better online form, or better document management."*

*"With RepliWeb, I'm less of a gatekeeper for the people who create Web content."*

- *"Since the people who deal with prospects and customers always have the most recent versions of our software, production is more tightly integrated with sales. For example, research and development hears about how new versions are performing and how prospects are reacting to them. So we refine things faster and more often."*

Because companies need to publish and modify Web content and software in response to changes in the competitive environment, automating these workflows can reduce the demands placed by business on IT. One company said, *"The content flow is very inconsistent, so RepliWeb takes an extremely spiky workflow out of my day."*

### **Improved business flexibility**

Companies got the most benefit from RepliWeb Deployment when they used it to continuously fine tune their Web presence, software, or Web-based applications on a more frequent and iterative basis in response to opportunities and changes in their competitive environments. Companies readily identified the benefits of streamlining the publication process:

- *"Our salespeople in the field always want the latest and greatest version of our software – things like patches and pre-release versions. With RepliWeb they always have that, and can do better presales work."*
- *"We're using RepliWeb for critical things that get updated fairly frequently. Things like how people apply for credit, and other things that change based on market conditions."*
- *"The businesses I support now publish more content and update it more frequently. So their sites are more responsive to changes in the business environment."*

Because of the functionality of RepliWeb Deployment and its ability to distribute large volumes of data without disrupting network performance, RepliWeb enables companies to distribute any kind of data effectively. One European retailer uses the application to distribute video content to hundreds of kiosks located in its stores. A large financial institution uses it to ensure that financial statements become available at exactly the same time globally.

### **Improved consistency**

Because RepliWeb Deployment can simultaneously touch so many servers in a company's operating environment and Web presence, it improves consistency. Large enterprises typically have large and geographically-distributed Web infrastructures, and intranets, across which it is difficult to publish identical versions of content and applications. Companies continually strive to improve this consistency, because it enables uniformity of messaging, ensures delivery of identical services and Web interactions — regardless of location — and reduces application rework and trouble shooting. Although IT departments are responsible for improving this consistently, they seldom have the tools to achieve this difficult task.

RepliWeb enables the distribution of identical content and applications to any number of servers, development environments, and Web points. Nucleus finds that

companies typically use this capability to substantially increase the consistency of these distributions:

- *"From servers in Minneapolis, we replicate content and applications to Canada, the United Kingdom, and Australia. So a new application will get built with consistency across all the locations."*
- *"With RepliWeb, we can easily set up new applications and product updates, and have them identical in all locations, 25 regional offices in the United States."*

Many companies that don't have a tool such as RepliWeb achieve consistency — or something approaching it — across their distributed environments as the result of workflows and processes that are more complex and costly than is understood:

- *"We are constantly updating our software for all our different locations. Before we started with RepliWeb, we had people sitting around, burning software onto CDs and shipping them."*
- *"The only other way to achieve real consistency is to do things like ship machines back and forth from the location so that we can rebuild them according to standards."*

### **Uptime**

By automating publication workflows that are not only labor-intensive but also error-prone, RepliWeb Deployment enables IT departments to publish large volumes of complex content or software with minimal risk to the operating environment. Since companies need their Web presence to have near-perfect uptime, companies readily identified the benefits of RepliWeb as a risk reducer:

- *"You can set up a roll back in RepliWeb. This enables you to rapidly undo something if it interferes with your operating environment, intranet, or Web presence."*
- *"RepliWeb helps isolate the production environment from the Intranet, so that a production problem can't disrupt the Web. It's a great gate-keeping tool."*
- *"If we know one of our content or code pushes will be huge, we can schedule it for midnight, so it can't disrupt our intranet or the end-user Web experience."*

### **Scalability**

All of the companies Nucleus spoke to used RepliWeb Deployment to move or publish large volumes of software or content. They also indicated that the performance and usability of RepliWeb did not change with the volume of content or code being deployed. Whether companies were deploying Web content or applications, users uniformly identified the benefits of managing large amounts of content with RepliWeb:

- *"RepliWeb is extremely fast. We use it to move gigabytes of data to the Web every day – with no user interaction."*
- *"We looked at other applications, but they don't scale as well as RepliWeb."*
- *"We used to move data using scheduled batch jobs. We outgrew that quickly and now we do it with RepliWeb."*
- *"Our entire product suite, with all components, is almost 20 gigabytes. We can pipe this out easily only with RepliWeb."*

Because RepliWeb transfers content and code so rapidly, it can overcome problems caused by slow network links — making it easier to achieve geographic scale. One company said, *"We do lots of development in Australia. Before when we transferred code using .FTP, it kept timing out because the transfer was taking too long. But I know that using RepliWeb with WAN transfer mode, we're able to reduce the transmission time from 45 minutes to 15 minutes. So it gets there in one piece — and faster."*

### **Troubleshooting**

In addition to automating the publication of content and code, RepliWeb Deployment creates extensive and user-friendly reports about publication or changes to content. This means that IT administrators don't have to create extensive Excel spreadsheets documenting the workflows they used to publish content or software. More importantly, it means that when the publishers of content have a question or problem, it's easy to figure out what was actually done — and correct any problems:

- *"RepliWeb has reporting that details what files went out and how. So we can respond to inquiries and problems a lot faster, without sifting through logs."*
- *"We get at least two to three inquiries a week from content publishers. With the reporting, it takes almost no time to respond to them."*
- *"If our customer loyalty team wants to know what files we moved for a particular customer, we just view that list in RepliWeb, without running a 'diff' command."*
- *"Because we aren't manually finding out what files moved, we're saving approximately a quarter of a full-time equivalent."*
- *"Our average ticket takes one hour instead of two to three. This is because all of the time is spent on resolution, and no time is required for data gathering."*

### **CONCLUSION**

At most companies, the task of consistently deploying Web content, code, and Web applications across their enterprises is poorly supported. Typically these tasks are completed with a variety of labor-intensive and error-prone workflows that expose Web servers, Web sites, and operating environments to the risk of disruption. Additionally, because most large enterprises typically need to publish large volumes of content and code on a frequent basis, IT departments are becoming distracted by these low-value, tactical tasks.

Large enterprises and other companies that publish large volumes of complex code or Web content should turn to RepliWeb Deployment to improve the responsiveness of their Web sites, the productivity of their IT departments, and the degree of collaboration between IT and its business counterparts. When companies are not distracted by the tactical tasks of publication, they become more responsive, agile, and have more valued IT departments.

*Nucleus Research is a global provider of investigative technology research and advisory services. Building on its unique ROI case study approach, for nearly a decade Nucleus Research has delivered insight and analysis on the true value of technology and strategies for maximizing current investments and exploiting new technology opportunities. For more information or a list of services, visit [NucleusResearch.com](http://NucleusResearch.com), call +1-781-416-2900, or e-mail [info@NucleusResearch.com](mailto:info@NucleusResearch.com).*