

## Introduction

World Wide Web Technology is now the leading platform for deploying corporate information systems. Industry analysts have predicted an explosion in the growth of e-commerce and services on the Net along with reduced costs in the terms of software deployment through standard browser access.

The Internet has given users a new way of using computers and has proved that sometimes it is the simplest ideas that work the best. Millions upon millions of users have accepted the Internet as a way of accessing information.

As the Internet and corporate intranets extend their reach, many companies are searching for a way to integrate a wealth of mission critical information, residing on legacy systems out into the World Wide Web.

The chances are that, as an existing mainframe user, you have over the years invested heavily in the development, deployment and maintenance of your corporate data and benefited from the security and stability of the mainframe platform. However in the fast moving world of graphical users interfaces and PC/Web technologies, your end users/customers are demanding more.

### **Net.Visual™ Protecting the Past:**

Net.Visual™ is an Internet/Intranet technology that bridges the gap between traditional systems and end users' desktops. Unlike traditional emulation products, Net.Visual™ does not restrict you to just providing emulation or enhanced emulation through a browser. Net.Visual™ allows you to create stunning and dynamic Web based applications without compromising the security or integrity of your existing systems.

***"The Net.Visual solution brings our agency exactly what we need to service our communities. Overall we're very happy with it. Working with twincentric and its partners has shown us that our investment in our legacy systems can evolve in a fast, yet cost-efficient way."***

Mike Evans, Chief Information Officer, Oklahoma Employment Security Commission

Based on open systems and object-orientated technologies, Net.Visual™ is an ideal way to integrate existing legacy "Green Screen" applications with new front end applications and information contained in other systems.

Legacy data residing on hosts can be made available through existing or new transactions and can be made available in a carefully controlled manner to users of Web browsers, servers and Windows PC applications.

### **No Changes to Mainframe Code:**

Net.Visual™ uses the least intrusive, most effective approach to gain access to legacy data. It uses data streams, fed from the host to existing screens and applications. Unlike access via a messaging API or direct database access with Net.Visual™, there are not new host applications to write or mainframe software to install.

This approach both lowers risk and saves greatly on development time. It is also an absolute requirement if you are unable to change the host system, for instance if the source code to the application is unavailable or if the application is a service provided from a third party.

You can create a new business logic without the need to even touch your existing applications. The resulting new application maintains the investment in the

existing business logic and maintains the legacy application in the current form.

### **Protecting Your Investment:**

Net.Visual™ allows you to reuse the business logic already developed for the original legacy

application. The data presented on "Green Screens" may be presented in an old fashioned manner but it has usually been pre-organised on how the end user needs to transact business.

With Net.Visual™ you can leverage this business logic and use it in your new Web application without having to re-write it.

In contrast, the API route requires detailed knowledge of data structures and locations in order to navigate to the data and then detailed application knowledge in order to apply the appropriate logic.

Net.Visual™ comprises of two basic components, the first is a client object similar in concept to existing screen scraping with an emulator. Net.Visual™ is a fully programmable object that includes its own fully featured emulation engine. Net.Visual™ goes beyond traditional screen scraping by introducing a second server object; this allows scalability and the opportunity to make use of Web technologies such as Microsoft ASP or other technologies that support the COM object standard.

In addition, information from many legacy applications can be accessed concurrently, allowing for information to be scraped and integrated into a single HTML form, eliminating much of the interaction between the application and the application user. Since the application is now running on the server, it can be shared amongst many users.

## Secure:

The lack of security on the Internet means that access to sensitive host information should be given only to Intranet users. Fortunately, there are several ways to encrypt information and authenticate the identity of users and systems on an Intranet. The choice of authentication and encryption protocols is largely dependent upon the type of communication involved.

In addition to traditional screen scraping, applications can be extended through the use of new technologies. For example, you may wish to authenticate your end users against relational database before allowing any data to be accessed. Secondly, should your legacy screen change you can quickly apply changes without rewriting in minutes instead of days or weeks.

## Reducing Costs:

In practical terms, the biggest benefit of Web technology for many IT Managers is the opportunity to significantly reduce the costs associated with some existing enterprise applications. In particular, IT Managers are eager to replace existing remote computing applications that use terminal emulation or client/service technology to connect customers and business partners to their enterprise applications. Many of these applications work as expected and provide all the benefits for which they were designed.



Replacing those remote computing applications with well-designed Web integration applications can reduce IT related costs in several ways:

- 1.** Web applications are much easier to learn and require significantly less end-user training.
- 2.** Because they are easier to learn and use, end-users have fewer problems, requiring fewer IT support calls.
- 3.** Web applications use standard TCP/IP connectivity. If an end-user already has Internet access, no additional connectivity is required. Since Web connectivity is typically obtained from an Internet Service Provider (ISP), end-user look to the ISP to provide assistance with installation and connection problems rather than calling the IT support desk.
- 4.** Web integration applications are server-based so any changes are instantly available the next time an end-user connects to the server. There is no client software (other than the browser) so there are no diskettes to be copied and shipped and nothing that end-users must install to use the new version.
- 5.** Server-based deployment allows fixes, upgrades and enhancements to be implemented on a much shorter cycle, which means problems and the related support calls are virtually eliminated.

#### **No Limit:**

You can have it all with Net.Visual™. You can protect your existing investment and fully leverage the information captured using relatively low cost web technology.

For companies that want open data rich corporate systems to a broader user base while maintaining centralised control, security and lowering ownership costs.

With Net.Visual™ you can set up your data free from the confines of your legacy application.

#### **About Twincentric:**

Twincentric Integration is a multi-talented UK based Software and Services company specialising in the relative use of Internet/Intranet technologies. From our offices based on the outskirts of the beautiful and historic city of Oxford we develop, market and support a number of innovative software packages that allow existing mainframe users to exploit their data through the use of thin client technologies. We also create and deploy Web based solutions worldwide for a number of leading customers.

We offer our customers a single source for all aspects of connectivity from browser based emulations, firewalls and server access through to the design and implementation of full Web based applications.

Our detailed knowledge of past and current technologies enables us to assist in the transitions faced by mainframe users and allows our customers to gain business advantage through solutions that maximise the full potential of their existing systems.

For more information visit our website at [www.twincentric.com](http://www.twincentric.com) or contact us on the following:

Tel: +44 (0) 1993 700610

Fax: +44 (0) 1993 700630

Email: [info@twincentric.com](mailto:info@twincentric.com)

