Delivering Legacy Applications to the Web - Fast! Speaker Notes

E-business - Delivering Legacy Applications to the Web - Fast!

- Personal introduction of the speaker
- Thank the audience for attending
- Will cover with you today IBM Connected e-business which includes our Host Integration Solution and integration with WebSphere Transcoding Publisher
- While the prospect of becoming an e-business may seem overwhelming, what I'll share with you today is how our Host Integration product portfolio offers you the quickest, most cost-effective, flexible and secure way to turn your business into an e-business. And, with WebSphere Transcoding Publisher, convert and reformat your existing host data for access by any device, anytime, anywhere.

Challenges ... in the e-business world

- Let's start with a discussion about the environment ... the business environment, that is
- e-business is not really about technology, it's about business. Technology is just a means to an end
- what e-business really represents is a fundamental change in the way in which business is conducted ... with customers, business partners and employees
- What Line-of-Business managers want to be able to do, for example, is ...
  - Improve customer service by letting customers get information via a Web site instead of making a phone call
  - Reduce operations cost for the supply chain by allowing partners to access inventory systems
  - Reach new customers by offering the ability to purchase goods and services electronically over the Internet
  - Make employees more productive by allowing access to any information they need from anywhere, such as human resources data
- These business needs elevate the role and expenses of the IT organization within the company

IT Concerns ... in the e-business world

- If you're like any other IT organization, you're caught in the middle. The CEO and LOB managers want to take advantage of the business opportunity the Internet presents, and they want it yesterday. The CFO, on the other hand, wants you to reduce expenses.
- So, the challenge is, how do you maintain / improve the IT service you're providing today while helping move your company forward in the new business world.
- IBM can address all of your IT issues as we help you in your move to e-business

e-business .... = Web + IT

- e-business is where Web & Internet technologies intersect with traditional IT systems to transform key business processes.
- it's not about "out with the old and in with the new"
- now, when you consider deploying an e-business solution, I would propose to you that there's some very important criteria you should consider when evaluating technology solutions:

  - quick to deploy, easy to use: accelerates the positive impact to the business
  - leverage host applications: applications you've had in production for years
  - standards-based: makes it easier to deal with all the things you can't control
  - scaleable: difficult to predict loads for these new classes of users, need to be able to adapt
  - manageable: ensures system continuity and availability
  - Extendible: reach users you have never been able to reach before!

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e-business ... making it work

- In working with CIOs and business leaders over the last three years, we've observed a cycle that companies typically go through to transform their businesses into e-businesses
- In reality, this is an iterative cycle, a process of continuous improvement that companies go through over and over.
- There's no hierarchy to the cycle, you can start at any stage at any time.
- Each stage adds incremental value to your business, whether your needs are to build, run, manage, or a combination of the three.
- To free you from trying to control all the variables in the networked world, we're working with the industry to drive an open, multi-platform, multi-vendor approach.
- The e-business application model allows any client to access services anywhere in the network, from a desktop, from a mid-tier server, from a large enterprise server.
- This model simplifies life from the client perspective, and even more importantly, it maximizes your deployment freedom, enabling you to write applications on one platform and deploy them on another without completely rewriting them. When you need to move your application to another platform, you simply recompile it for that system. You never have to change the source code itself.

Host Integration... The Fastest Path to e-Business

- When building an e-business, IBM has developed the fastest, most cost effective way to extend your existing applications, the applications you have been using to run your business for years.
- The Host Integration solution extends your reach to new users without requiring any changes to existing applications!
- You can simply Web enable your applications so people can view information online with a browser (e.g. employee benefits).
- Or, you can also take several existing applications and integrate them so they work together. Customers can order online, update their billing information, check the status of inventory, basically perform all the functions associated with completing a transaction, even if the applications live in different systems and on different platforms.
- The Host Integration's extensible infrastructure enables you to connect to many back end data sources and support multiple delivery options to meet the needs of users on any platform in any network environment.
- The Host Integration solution provides a powerful cross platform application development environment that enables you to rapidly create new e-business applications for new functions and users.
- The Host Integration solution offers several features, including SSL encryption and a Firewall, to ensure your e- business environment is secure.

Host Integration ... connects

- The Host Integration quite simply, connects
    - Any user on any system ... TO ... any information, application or data source ... ACROSS ... any network
- There really is no such thing as homogeneity, especially when you're talking about customers and business partners, let alone your employees.

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- Host Integration is not a one-size-fits-all solution, rather it's an integrated set of products designed to meet a variety of very unique requirements for each individual end-user based on their business needs.
- Let me show you ....

Professional Emulation

- It starts with the infamous "green screen" - connecting users to mission-critical legacy applications that have been running our businesses for years...
- IBM offers Personal Communications, the leading terminal emulator on the market, to meet this need.
  - For many of your users, this still represents the most productive way to access 3270, 5250 or VT applications.
- So, professional emulation still delivers tremendous value to your business:
  - Market leading terminal emulator: the most widely used, full-function emulator
  - Improves user productivity: Unlike the many freeware products available, PCOMM offers an extensive set of productivity features (macros, hot spots, lots of other things that improve the usability of traditional 3270/5250/VT applications.
  - Protects investment: allows continued usage of host based applications.

IPPA Reference

Company Profile
- Banking, located in Antwerp Belgium

Challenge
- Because IPPA bank and its insurance partner each had separate backbones and networks, their agents who handled both banking and insurance had to use two different PCs to connect to each network and do their jobs. IPPA's SNA backbone required them to spend heavily on leased lines.

Solution
- Migrated to an ISDN IP network, integrated with their insurance partner, with PCOMM providing the 3270 emulation for agents.
- CS/NT provides the gateway

Business Value
- Increased agent satisfaction because of faster response times and the ability to use one PC to do both banking and insurance work.
- Continued ability to use their APPC applications over an ISDN IP network protected their investments
- Significant costs savings achieved by eliminating leased lines

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Java Emulation

- But what about mobile employees and business partners? How do you give them access? Clearly, it's difficult to gain access to their systems so you can install software. And, can you count on their system having the right operating system level?
- This is where "Professional Emulation - On Demand" comes into play.
- Our solution is Host On-Demand, a Java-based 3270/5250/VT emulator. Being Java-based means you install it on a web server and it's downloaded "on-demand" as users need it. It also allows for caching so it really only needs to be downloaded the very first time!
- The business value is tremendous:
    - Extend application reach: More easily reach a new class of users that previously would have been very difficult to serve.
    - Provide fastest access to applications: Provides a direct 3270/5250/VT pipe to critical applications with the quickest response time. Users are not willing to accept "web response times" for critical business applications.
    - Reduce IT expense: Say good-bye to the costly and time consuming software rollouts. Simply install on a server and users can point-and-click!

Volkswagen Brazil

Company Profile

- Automobile manufacturer

Challenge

- Volkswagen wanted to give its dealers access to S/390 applications over a TCP/IP network. It needed a solution that would work with different platforms and accommodate new applications that access the host system via TN3270E protocol.

Solution

- Installed Communications Server for AIX , eNetwork Dispatcher and Host On-Demand. Host On-Demand provides its dealers access to S/390 applications and data using a Java web browser. eNetwork Dispatcher is used to load balance requests from approximately 4,000 users (Volkswagen will eventually have 10,000 users).

Business Value

- IBM's solution gave Volkswagen the ability to transform its business process quickly so that it could gain a competitive advantage through improved technology.
- By improving communications with its dealers, Volkswagen is more efficient in responding to their needs.

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Application Rejuvenation

- One of the things we've found out is that the "green screen" just isn't for everybody.
- Take a business partner, for example. While you may have an inventory application that you'd like them to use, what's the chances that they can successfully navigate it with little or no help?
- The same can be said of new employees. If you have positions in your company that experience a lot of employee turnover, you're probably either spending a lot of time & money on training or there's a long period of time when these new employees are not as productive as they could be. Our experience working with companies shows that longterm employees may also prefer a GUI over the green screen interface and can increase both their productivity and satisfaction.
- The bottom line: many traditional host applications are difficult to use. How do we overcome this?
- IBM's answer is the new IBM Ibm Screen Customizer which can be used in conjunction with **BOTH** Host On-Demand and Personal Communications (SNA and TCP/IP), depending on your users needs.
  Screen Customizer provides the capability to completely rejuvenate the way a host application looks, without having to change the application itself! The customized screens can be shared across by both Host On-Demand and PCOMM clients.
- With Screen Customizer, you can suppress information, add buttons that will automatically execute tasks you define (e.g., enter "123" in a given field and hit the enter key), create pull-downs and radio buttons, and more. It will change the user interface of a host application into a PC type graphical user interface, something that most people are comfortable using. You can also combine screens from multiple hosts into a single GUI.
- The payback is outstanding:
  - Simplify application use: All users take advantage of an easier way to use applications. They'll be more productive than an experienced "green screener" using the same application. Also allows different departments to create their own interface for a given application, again because the application itself remains unchanged.
  - Extend application life: Makes legacy applications look 21st century. How risky is it to modify the application itself??
  - Reduce training expense: Easier to use application means less time is required to get new users productive.
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Bank of America Reference

Company Profile

- One of the largest banks in United States with 5,000 banking offices and 14,000 banking ATM's, and one customer in every three U.S. households

Host On-Demand has facilitated a "virtually paperless" procurement process which integrates two legacy applications

Greatly simplifies the process of ordering supplies and IT assets

Web-based; access to the application is in the hands of decision-makers rather than Procurement staff

Challenge

- Provide procurement employees Web-based access to a single, scaleable application with a modern, easy-to-use interface without rewriting existing applications

Solution

- Intranet solution using Host On-Demand with Screen Customizer
- The application provides consolidated screens for procurement personnel and a new set of users, business consultants

Business Value

- Increases productivity of procurement personnel and business consultants, providing a virtually paperless process
- Reduced workflow cost by an estimated $500,000 per year
- Enhanced speed to market because the solution required no changes to existing applications
- Easy to implement application
- Reduced training cost because application was self-explanatory to the average Web user

Application Integration

- While you might use Host On-Demand and Screen Customizer for a finite audience who would regularly access your applications, downloading a Java applet, even once, may not be acceptable for a user who only accesses your application once or very infrequently.
- Also, what if there's more than one application involved? Is there any way to have two or more independent applications work together?
- The answer is Host Publisher! Host Publisher allows you to integrate and correlate multiple sources of information into a single new application with a browser interface. For example, you could query a 3270 application, use the results to query a JDBC database and publish the integrated results to a browser using HTML. In effect, you've created a brand new application, what we call a "composite application", without any modifications to the original information sources themselves. In addition to 3270, 5250, and VT, additional information sources supported by Host Publisher are Java applications and JDBC databases.
- Host Publisher significantly extends the value of the Host Integration solution:
  - Leverages existing assets: Allows you to utilize the value of the applications and data in which you have already invested.
  - Reduces application development expense: Host Publisher utilizes a visual development environment so construction of these composite applications are done via drag-and-drop. In addition, the composite applications, also called Host Integration objects, are reusable. They can be used to generate custom web pages or they can be used 'as-is' with any IDE (VisualAge for Java e.g.) to create Java applications.

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- Integrates and leverages the Websphere strategy: Host Publisher integrates the Websphere Standard Edition as part of its runtime server, which means that installations can integrate the Java servlets created with Websphere directly into their Host Publisher HTML web pages. It also means that Host Integration Objects created with Host Publisher can be integrated with other IBM connectors to create powerful new e-business applications
- Minimizes deployment time: It's server based, which means users have immediate access to the application without time consuming and costly software installations.

North Carolina Office of State Treasurer Reference

Company Profile
- State Government Agency

Challenge
- Needed to give State government employees faster, easier access to their 401(k) information. When state government employees in North Carolina need information about their 401(k) retirement accounts, they used to have to call the Office of the State Treasurer.

Solution
- Implemented an Internet host publishing solution using CS/NT and Host Publisher to make the 401(K) information available to employees using their browser.

Business Value
- Increased employee satisfaction
- Reduced costs by giving employees direct access versus having to call for information
- Enabled business to transform and enhance key business process, while protecting existing applications.

Customized Applications

- The missing piece of the puzzle so far is, what do you do when you need to add business logic to your existing applications, again without changing the applications themselves?
- For example, suppose you wanted to extract information from a host-based catalog application, merge it with information from an inventory database and create a local PC-resident data store for a sales rep to access while on the road?
- IBM offers a powerful set of application development tools and reusable components to give you the flexibility you need to develop your e-business applications. Depending on your needs, you may use one or more of the following: IBM's Host Access Beans for Java, Host Access ActiveX controls, Host Integration Objects, or Host Access Class Libraries. The Host Access Beans for Java, ActiveX controls, and Host Integration Objects provide a mechanism for easily integrating IBM Host Integration technology into new or existing e-business applications using Java or Windows based programming. With the Integration Objects and Host Access Beans for Java, you can use any standard Java visual development environment, like IBM's Visual Age for Java. You simply wire and go. Host Access Class Libraries provide an API for programmatic access to 3270 and 5250 data streams.
- The Host Access Beans for Java, Host Access ActiveX controls, Host Integration Objects, and Host Access Class Libraries ...
    - Leverage existing assets: Again, no need to get rid of your current sources of information, mine those assets.
    - Offer the greatest flexibility: Consider these as your programmable pipeline to host information. Access the information and do absolutely anything you want with it.

- Improve user productivity: Don't change the application(s), create a brand new user interface in exactly the form you require.

Renaissance Cruises Reference

Company Profile

- Serves the entertainment/travel industry

Challenge

- Improve current AS/400 reservations system to allow agents to handle calls in a more natural manner, and make navigation easier, eliminating the requirement for callers to provide information in a certain sequence.

Solution

- Using the Host On-Demand IBM Host Access Class Library, developed new e-business reservations applications that accessed multiple back end 5250 data sources and offered agents additional flexibility and ease of use.

Business Value

- Improved customer relationship management because the agents are more efficient. They can concentrate on creating the right vacation for the user, versus figuring out how to navigate the screens.
- Reduced costs
- Enabled business to transform and enhance key business process, while protecting existing applications.

Pervasive Device Support

- With IBM Transcoding Publisher, you can reach beyond the PC and the browser and reach a new set of devices. Transcoding Publisher converts and reformats existing data and applications so they can be accessed by devices such as Palm Pilots and Smartphones. By coupling Transcoding Publisher with Host Publisher, users can access host applications from anywhere on any device without requiring the source code to be rewritten. The data is reformatted for the device's capabilities, so you are able to see the same application from a device like the Palm Pilot without having to reauthor the source content.

How Secure is HI?

- You absolutely cannot discuss e-business without talking about security.
- The Host Integration Solution has been designed to include the security capabilities you need to deploy your e-business solutions with confidence.
  - Authentication: HOD can authenticate the server via use of X509 certificates. HOD can authenticate itself via SSL client authentication (coupled value with Vault Registry!).
  - Access Control: PCOMM and HOD currently use host access control methods (e.g., RACF), CS/NT and CS/AIX support Vault Registry
  - Data Privacy: TN clients to TN servers via SSL encryption, Win32 remote API clients via RC4 stream-level encryption, SNA session level encryption using IBM Ibm Cryptographic 4758 Adapter and software

- . ## Solution Offering
- All of the components of the Host Integration Solution that I've reviewed with you today can be purchased ala carte. So, if you just want Communications Server, you can purchase that by itself. Likewise for Host On-Demand, Personal Communications, etc.

- But, if you value a relationship with a single vendor that can provide you a single e-business connectivity infrastructure that will allow you the flexibility to meet the needs of many different types of users accessing many different types of information sources across different types of networks, then IBM has something to offer you that nobody else can ...
- ... The Host Integration Solution Offering: for one single price per user, you get all the key components plus services to get you up and running quickly. And, you get no-charge migrations between the components. Want to deploy Communications Server on several platforms right now and then consolidate to a single platform in 9 months? No additional charge. Not quite ready for web-to-host within the Intranet now? Then utilize the market leading Personal Communications today and move to Host On-Demand when you're ready. Again, at no additional charge.
- And you can implement this solution with confidence. All the components of the solution have been designed, developed and tested to work together ... this means lower risk to you. And when you do need assistance, there's only one vendor to turn to ... IBM.
- Note to Speaker: Screen Customizer is not included in the single price offering, but is offered as a complementary product.
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Host Integration...Freedom of Choice

- As we discussed earlier, there is no such thing as homogeneity and one-size-fits-all just doesn't fit.
- That's why the Host Integration Solution has been designed with a tremendous amount of flexibility to offer you the best solution for a variety of different environments.
- That flexibility or freedom comes in several different forms:
    - Application and data sources: We're offer more than just 3270. The Host Integration Solution supports 3270, 5250, VT, JDBC-compliant databases, and Java.
    - Client and server platforms: Consistent with the objective of the application framework for e-business, we support key operating systems for both the client and server. And with Java, of course, that's extended to any operating system with a JVM.
    - Network environments: Whether your users are internal or external and on an SNA or IP network, the Host Integration solution can make the connection.
    - Technology / user interfaces: The Host Integration Solutions supports not only standard green screens, but also Java-based emulation, HTML and any interface you desire using our programming interfaces.
- This flexibility is not only valuable now, but positions you to adapt as your business needs change!

The Analysts' View

By both the press and analysts, the IBM Host Integration Solution is viewed as the most flexible and comprehensive Web-to-host offering on the market. To cite a few recent articles, InfoWorld named Host On-Demand the "hot pick" in a hands-on comparative review against Attachmate's eVantage Host Access Server, WRQ's Reflection for the Web, and NetManage's Rhumba. Zona, IDC and Gartner all have the IBM Host Integration Solution as a strong leader in the Web-to-host marketplace.

Host Integration...Leveraging Your Investment

- E-business is an evolutionary process.
- You need to be able to extend your e-business investments to support new requirements.
- I've discussed several different delivery options that the Host Integration solution supports. The Host Integration solution provides both the flexibility and the application development infrastructure to

support the e-business evolution. We can quickly get you started on e-business, and then enable you to exploit more advanced technologies to realize even greater returns on your application investments.

- You may be thinking that you don't need all the delivery options available, for example, you may be planning to put your corporate information on an internal web site for employees only. But down the road, it may make sense to give your business partners and suppliers access to corporate data, for example, to allow them to check inventories.
- The point is, with the Host Integration solution, you will have the software and tools you need to quickly respond to new requirements.

Host Integration...Your Path to e-business

Remember, the IBM Host Integration Solution is the fastest path to e-business...

- Quick to deploy, easy to use
- Leverage host applications
- Standards - based
- Scalable
- Manageable
- Extendible

Next Steps - For More Information

- Talk to your IBM sales representative or Business Partner
- Inquire about the Host Integration Proof-of-Concept program
- http://www.ibm.com/software/network/hostintegration (Host Integration information)
- http://www.ibm.com/software/secureway/transcoder (Transcoding Publisher information)
- http://swaydemo.dfw.ibm.com (Host Integration demo)