

Letters from the Trenches



Insurance and CICS Integration: Moving from Batch to Real-Time

From the HostBridge Archive

After decades of investment in technology, the insurance industry relies heavily on IBM mainframes to process business information. According to Gartner, at least 80% of insurers continue to use such systems for their policy processing. Most policy processing runs in batches where information is gathered during the day and processed overnight.

Unfortunately, even nightly batch processing means companies are making decisions based on yesterday's data. Moreover, because customers expect real-time access to information, they are exposing the weaknesses of batch processing.

Real-time access to data allows you to replace batch processing and finally getting rid of the large data dumps from one application to another. Business benefits of real-time access include improved efficiency in business processes and the ability to respond to evolving customer service needs. However, the widespread use of legacy applications that do not support data integration presents serious problems for companies engaged in real-time initiatives.

Internet technologies are driving the transition from batch to real-time. For example, application servers and integration adapters, such as HostBridge, use standards-based XML, and HTTP to communicate. This allows enterprise applications to share data across different devices, operating systems, and locations. The emergence of SOAP and web services presents another integration option based on XML and HTTP.

HostBridge for IVANS

HostBridge Technology and IVANS, Inc., a provider of networking and e-commerce services for insurance, financial security and healthcare customers, have entered into a strategic relationship to deliver an end-to-end "straight-through processing" (STP) solution for insurance carriers using IBM mainframe and CICS-based insurance processing systems.

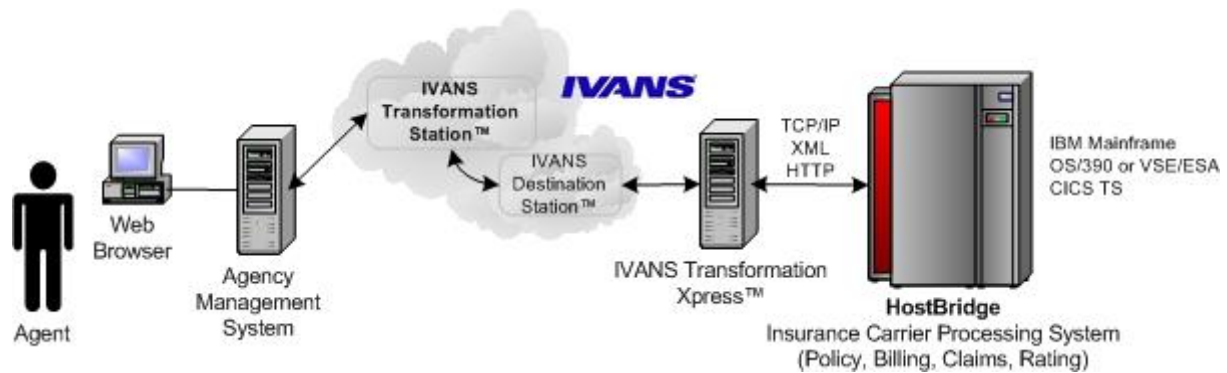


Figure 1. IVANS architecture overview

The diagram above illustrates how companies can use HostBridge to get real-time access to CICS data using IVANS' support for AC ORD XML. IVANS Transformation Station is an Internet data exchange using Web services and ACORD XML for real-time transactions between agency and carrier systems. IVANS Transformation Xpress provides translation to and from a variety of ACORD and X12 Standards and proprietary system formats. IVANS handles the transfer of data between an Agency Management System and HostBridge. HostBridge, running on the mainframe, handles all the interactions with the existing CICS applications. A key feature of this solution is that the existing CICS applications do not have to "speak" (or know anything about) the ACORD XML document formats.

This same model can be used with other commercial integration tools or in-house development projects. Because HostBridge includes native SOAP support, applications can also invoke HostBridge directly as a web service. Whether your goals are for straight-through processing for specific transactions or developing a real-time enterprise (RTE), HostBridge allows you real-time access to your legacy CICS applications.

Tech Notes

This section answers common technical questions.

Q. Is it possible to initiate HostBridge interactions with middle tier applications from CICS on the mainframe?

A. Yes.

HostBridge Technology is making available a collection of sample programs that have been developed to make it easy for a CICS program to send an outbound TCP/IP request (and optionally wait a response). These programs can be used without HostBridge. For example, these programs will allow a CICS program to invoke a Java Server Page (JSP), Active Server Page (ASP), or other CGI program via an HTTP GET request. Whatever the JSP/ASP/program returns in response to the GET request will be returned to the CICS program.

Finally, these programs can serve as sample code to those interested in adding support for CICS socket I/O to their own programs. By the way, one hidden gem in this collection is a program called HBRTCPM; it returns the error description associated with a CICS TCP/IP function name and error number. VERY

handy! We originally developed these programs for a customer who wanted to invoke (from within a CICS application) a distributed application running outside of CICS on a Windows server. Once invoked, the distributed program would take two actions: (1) respond to the request with an acknowledgement message, and (2) determine if there was any work that needed to be presented to CICS for processing (essentially, the request sent by the CICS program was a "poll" to the server). If there was work to be done, the distributed application would send one or more HTTP GET requests to HostBridge in order to invoke the required CICS transaction. HostBridge would return the output from the transaction as an XML document.

There are two known issues.

1. Socket program has not been tested in a VSE environment. This is being done now by a HB biz partner, and VSE downloaders will be notified of the outcome.

2. For CICS TS 2.2 users, this error has been documented: "All HBRTCPx programs successfully compile, except HBRTCPM program." Some users report getting a RC=08 in the ASM step. The program author has determined that the TS 2.2 CICS translator did not pick up the NOEPILOG and NOPROLOG parameters. He is investigating and will provide an update in the near future.