

Letters from the Trenches



Integrating CICS into Business Process Management Suites

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The major BPM players of today were SOAP/Web services managers yesterday. Many companies took their SOAP management tools and re-purposed them for BPM; which is why companies such as webMethods are among the the early leaders. Other companies are buying their way into the market: IBM (through the pending acquisition of Bowstreet), TIBCO (through their acquisition of Staffware), and BEA (through their acquisition of Fuego). There is a lot of pressure on these major players to provide comprehensive suites or run the risk of having to compete against best-of-breed solutions for each component of a BPM solution. For the purposes of this newsletter, we will look at the process management and business activity monitoring (BAM) facets of BPM.

Process Management

Today, BPM is mostly about managing web services because the tooling supports it and businesses understand it. Architecturally, this means HostBridge is immediately compatible with the BPM software through our ability to respond to SOAP messages, inbound XML documents, or even text-based query strings. Therefore, the web services you make available using HostBridge can be immediately managed using your BPM software. The question then becomes: How granular should you make the CICS web services?

BPM software is designed to handle the “big picture” of business processes: `getCustomerInfo`, `submitOnlineOrder`, and `checkLoanStatus` might be typical business processes in many companies. These processes could interact with multiple databases and applications before concatenating the data and returning the results. Sifting through a multitude of web services is what BPM suites are designed to do. Where BPM software can get bogged down is at the integration layer handling “micro flows” such as navigating through dozens or hundreds of CICS transaction screens to collect or submit data.

By using HostBridge to automate the direct interactions with CICS, you can create a single service (something like `getCicsData`) that manages all the screen navigation and application data and returns only the required information to the BPM software. This protects the business analyst from having to understand the use of the legacy systems and simplifies the creation of the larger business process.

Business Activity Monitoring (BAM)

Business Activity Monitoring tools check the health of business processes. They can detect peak usages for capacity planning or alert you to bottlenecks and outages for managing SLAs. BAM software operates at the level of the web services, but they can penetrate to the deeper systems or application level if

there is some kind of resident monitor. Without those monitors, BAM tools can still track the performance and availability of web services, but when problems occur the ability to drill down for root cause analysis is lost.

HostBridge allows you take the web services you write for your BPM software and reuse them with your BAM software. Most BAM tools have interfaces to receive events and collect performance data. For each CICS transaction, HostBridge collects and returns abend codes, CICS response codes, and error messages. This data can be returned in any format required by the BAM tools. By calling the same web services, the BAM tools monitor the processes from the same perspective as the business processes and the status messages returned by HostBridge ensure that the CICS subsystem is operating as it should.

Because HostBridge adopted the use of industry standards such as HTTP, XML, SOAP, and JavaScript it is well-positioned to play well in the BPM market space.

Tech Notes

This section answers common technical questions.

Q. Is there any way to troubleshoot communications problems between the client and CICS if we don't have the ability to put a sniffer on the wire or on the client PC?

A. Yes. You can run an MVS TCP/IP trace to help diagnose your communications problems. Read our instructions on how to run an MVS TCP/IP trace.