



## Case Study

# Check 21 Application Links OnDemand Content Management System with ASP.NET using JNBridgePro

### Customer Profile

A large U.S. retail bank with hundreds of branches and internet services to all 50 states.

### Business Situation

The bank needed to extract check image and loan statement data from an IBM OnDemand mainframe system and deliver it in richer on-line banking applications. Major project considerations included time-to-deployment and overall cost.

### Solution

Use JNBridgePro to bridge between ASP.NET and OnDemand's Java API.

### Benefits

- Fast development cycle
- Avoided a 6-month delay for training in Java that a Web services solution would have required
- Saved over \$200,000 in software licensing costs

### Situation

The Check Clearing for the 21st Century Act (Check 21) allows banks to dispense with original paper checks, and instead transmit electronic images of the checks throughout the clearing process. A large U.S. retail bank stores the check images on a mainframe using IBM's Content Manager OnDemand for z/OS. As the bank re-engineered their processing to take full advantage of Check 21, the Electronic Information Systems Integration team needed to extract both check images and loan statements from the OnDemand database for display in various systems throughout the bank, including a new teller application.

The OnDemand Web Enablement Kit (ODWEK) that is used to access the data stored in an OnDemand system includes a Java API. The integration team didn't have any Java resources available, so the team would have been faced with about six months of training time before they could start creating a Web service in Java. As the team began exploring other architectural alternatives, they gravitated towards using ASP.NET to display the images in the user's browser. This architectural choice demanded another solution: a way to bridge between ASP.NET and the OnDemand system.

### Solution

The team designed a solution that uses a .NET Web service between the client and the IBM mainframe. (See Figure 1). Using SOAP, a client makes a call to the CheckImage Web Service, which resides on a ASP.NET server. The Web Service instantiates the JNBridgePro-created DLL, which controls communications with the OnDemand Java API. Residing on the mainframe, the Java API runs within WebSphere. The system searches for the check and returns the image to the Web Service as a TIFF image. Loan statements are extracted as text and applied to a PDF template. The TIFF or PDF is then serialized and returned to the client in a SOAP response. This way the entire organization can retrieve OnDemand artifacts by only knowing SOAP security.

### Benefits

From start to finish, the integration team was able to completely design, build and test the solution within 4 months. The other configuration options the team explored would have required substantial retraining in Java, plus a \$200,000 outlay in IBM software licensing costs. Since going online, the system has had a spectacular record of performance and stability. "We couldn't have gotten this accomplished without JNBridgePro. All other solutions degraded performance so much that the results would not have been usable," said Senior Programmer/Analyst David S.

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**David S.  
Senior Programmer/Analyst**



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JNBridge provides Java and .NET interoperability tools that simplify joining any type of program element together across the platform boundary. Unlike the single narrow view that Web services provide, JNBridgePro allows developers to access the entire object-oriented API from the other side, providing a high degree of performance, reliability, and programmatic control. JNBridge’s customers include 5 of the top 10 U.S. financial services firms and over 30% of the top 25 global financial services firms.

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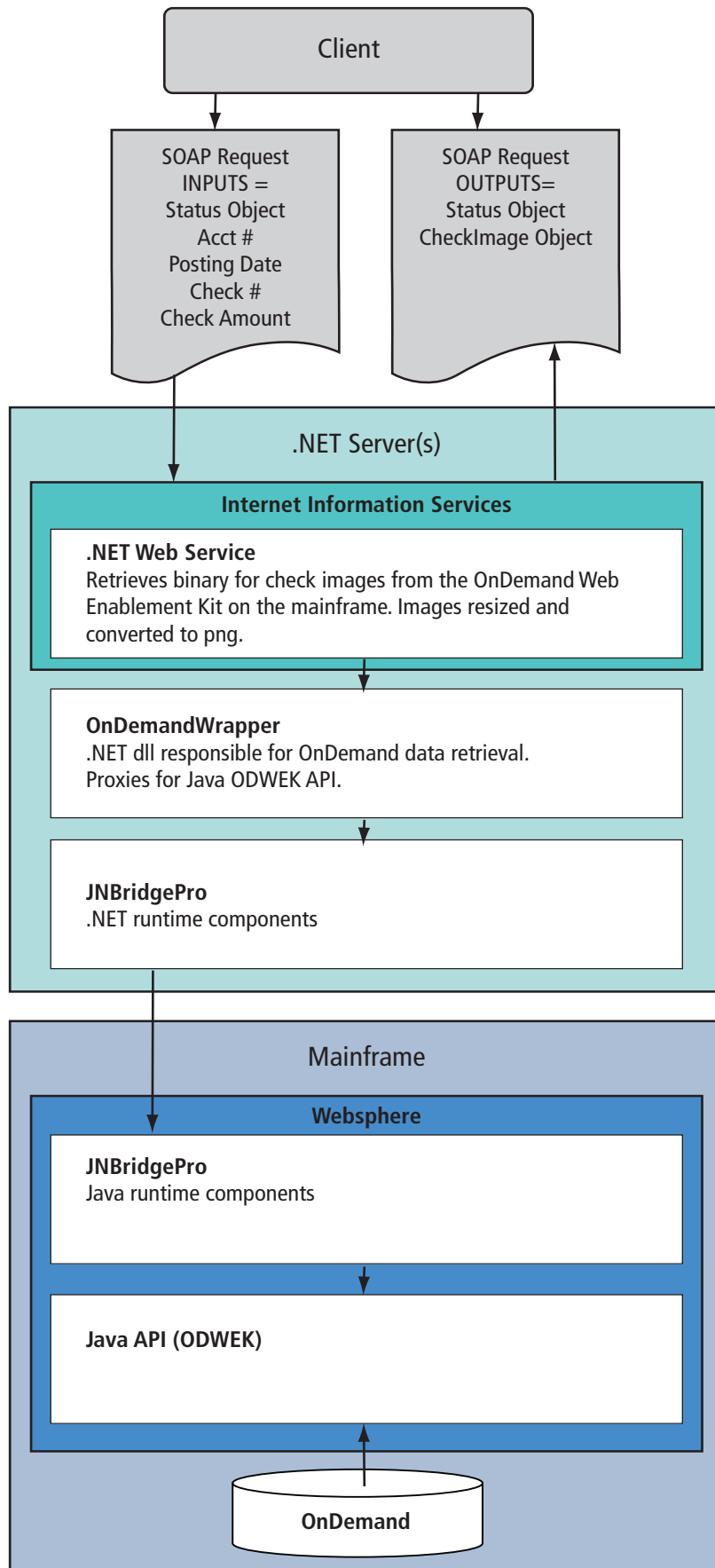


Figure 1: Solution Architecture