

# U.S. Bank entrusts streamlined global wire-transfer system to HP NonStop Payments solution

Combines reliability, performance, and agility



"This is a frenetic business. Half the load for the day comes in the last two hours, and half of that comes in the last 30 minutes. Our payments system needs to be able to scale quickly, and the HP solution does that."

– Steven M. Soroka, Executive Vice President, U.S. Bank

HP customer case study: HP NonStop™ Payments wire-transfer system

Industry: Banking and Payments

## Objective:

Increase the operational efficiency of the wire-transfer process by making it faster and more efficient, and enhance international wire-transfer capabilities.

## Approach:

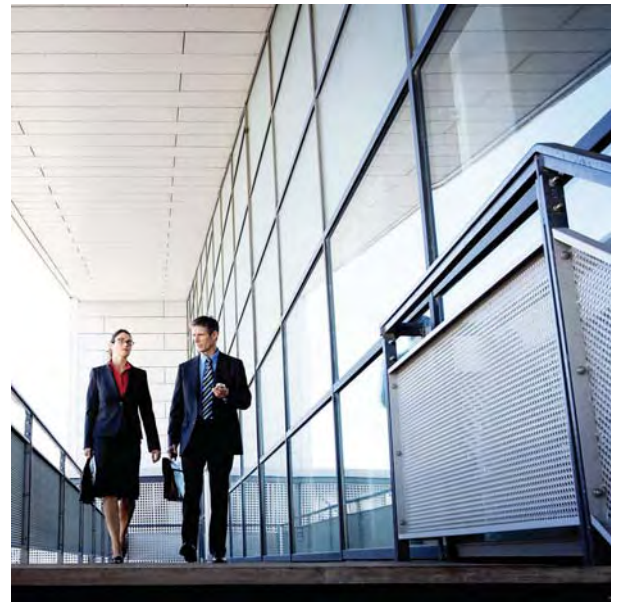
HP Services implemented and supports an HP NonStop Payments solution based on HP NonStop Servers and incorporating payment processing software from Software Integrators and online wire-transfer initiation software from Lighthouse Systems.

## IT improvements:

- Streamlined, high-speed processing environment for customer's domestic and international wires
- Improved transaction turnaround and quality
- Better payment routing and system security
- Faster end-of-day processing, with potential for 24x7 availability
- Met or exceeded all service-level agreements for availability, performance, and stability

## Business benefits:

- Allowed bank to handle growth of average daily volume to over 30,000 high-value payments, with peak volume of over 75,000 payments in one day



- Improved straight-through processing (STP) rate – inbound STP rates went from 84% to 93%, and outbound rates increased from 71% to 82%.
- Responds faster to changing regulations and customer needs
- Saves corporate customers' time and costs by initiating international wire transfers in a batch process
- Provides the high levels of reliability and system availability required for the payments system

### **U.S. Bank invests in HP and its software providers for new payments system**

U.S. Bank, a major U.S. financial holding company, sends and receives more than 1 trillion dollars in wire transfers per month. Reliability is critical, because wire transfer is the largest live-payment system in the bank and requires the most robust platform available. When the bank's IT vendor announced it planned to end support for the bank's existing MoneyNet wire-transfer system, U.S. Bank began evaluating new systems.

"The major drivers for our selection of the HP NonStop Payments solution were the reliability of the HP NonStop platform, price, and HP's commitment to support the solution," says Steven Soroka U.S. Bank Executive Vice President. "The MoneyNet system ran on NonStop hardware since 1984 absolutely reliably. That was the single biggest factor on which we made our decision, along with HP's long-standing and continuing commitment to providing technical and business solutions for worldwide payments processing."

U.S. Bank required a payments solution that provided the highest levels of business continuity and availability. "HP NonStop servers come with the reliability we need built in," says Soroka. "Moreover, the applications that comprise the HP NonStop Payments solution take full advantage of the high-availability capabilities of the NonStop hardware. Consequently, there are no single points of failure. You can lose a CPU, or any other piece, and the system just keeps running."

### **New system yields improved efficiency, productivity, agility**

U.S. Bank worked with HP and HP software providers to develop new business services for the system, resulting in enhanced international wire capabilities, improved operational efficiency, increased productivity – and the ability to adapt quickly, easily, and economically to changing business needs.

"U.S. Bank now offers customers improved functionalities that were not possible with our old system," says Caroline Fortmeyer, Senior Vice president, Corporate Services, U.S. Bank. "Working with HP, the transition was smooth – and we have a newly streamlined, high-speed processing environment for our customers' domestic and international wires."



### **Why HP? HP Services delivers a complete NonStop solution**

As the prime contractor for the project, HP Services managed the entire implementation, including the work of Lighthouse Systems, Inc. and Software Integrators. HP Services consultants helped U.S. Bank determine the infrastructure needed to meet current and future system demand, as well as high-availability and disaster-recovery requirements. HP Services installed the hardware and created the ongoing support structure, for both hardware and software, under a five-year support contract. Lighthouse Systems provided the new software interface for about 1,500 corporate customers, and Software Integrators provided the payments processing system.

The payments system runs on an HP NonStop S Series server with six S76000 and two S78000 processors and internal disks mirrored for fault tolerance. A second NonStop server located in a different city has the same configuration, and HP NonStop Remote Database Facility replicates all transactions between the two servers. The bank worked with HP Services to define a future upgrade path from S-series to Integrity NonStop servers.

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### **Banking on the solution that MUST work**

U.S. Bank's new wire-transfer system enables high-value transfers between bank customers and bank-to-bank. It also manages funds transfers within the Federal Reserve Bank system over FedWire and internationally over the Swift wire-transfer network. The wire system is central to the bank's operations, making connections throughout the bank structure, tying into risk management, clearing, settlement, and security systems, and extending outside the bank, allowing customers to enter and track the progress of payments.

"Through the payment system, the bank will send and receive payments of over \$80 billion every day, \$1.8 trillion each month," says Soroka. "Therefore, it must work. Daily performance is monitored closely by executive management. We are also part of the global payments network, and if one bank stumbles, it can disrupt the whole world banking system."

### **Solution pays measurable dividends**

The bank measures service levels on a daily basis for stability, performance, and system availability. "We look at the time frame for response to the customer, how fast we answer the phone, everything," says Soroka. "HP administrates the application, provides the hardware, and is responsible for system maintenance and service level requirements. Since we installed the HP solution, we haven't missed a service-level agreement. They have met them absolutely."

The new system also improved the bank's straight through processing (STP) rate – the percentage of transactions that go straight through the system, from initiation to settlement, without human intervention. "Every time someone has to touch a transaction, it is an opportunity for a mistake," says Soroka, "so the higher the STP percentage, the higher the accuracy of

the transactions. Our STP levels were high before, but they got even higher with the HP solution." With the new system, inbound STP rates went from 84% to 93%, and outbound rates increased from 71% to 82%.

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*"The reliability of the HP system and the application have met or exceeded all of our expectations. For timeliness of wire-transfer transactions, online interface and applications availability, all measures are 99.97% or greater."*

– Steven M. Soroka, Executive Vice President,  
U.S. Bank

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At the end of each business day, the payments system runs an end-of-cycle process to settle all transactions to the bank's general ledger and posting accounts, clean up loose ends, and get ready for the next business day. The HP solution shortened the end-of-day activities by five hours, increasing system availability and giving the bank the option of starting its business day earlier.

### **Flexibility and scalability are bottom-line benefits**

The architecture of the payments application allows changes to the system to be parameter-driven, rather than code-driven. This lets the bank respond to changes in regulatory requirements and customer needs without writing or changing code. "Risk comes from the fact that every time you go in and change code, you create an opportunity to generate a problem," says Soroka. "Parameter-driven change decreases risk – and reduces time and cost to make changes."

Previously, it took months to introduce to market new payments products or features. "When you have to change code," explains Soroka, "you need to do

## Customer solution at a glance

A new, global wire-transfer system for domestic and international banking

### Primary applications

- Make payments with other banks worldwide
- Move funds within the Federal Reserve System
- Move funds internally

### Primary hardware

- 2 HP S-series NonStop servers, each with 6 S76000 and 2 S78000 processors and mirrored disk for fault tolerance

### Primary software

- HP NonStop operating system
- HP NonStop Fundamentals development environment
- HP NonStop Payments solution

- HP NonStop Remote Database Facility
- HP NonStop Transaction Monitoring Facility
- Software Integrators payment-processing application
- Lighthouse Systems security and customer and branch online wire-transfer initiation systems

### HP Services

- Program management
- Application integration
- System installation
- Infrastructure consulting
- System administration and support
- Five-year service contract

extensive testing before you can roll it out. Now, we can just make parameter changes and set up a new workflow. It is much faster to handle customer needs and regulatory changes. That's what the bank likes."

Improved scalability means being able to react to long-term growth as well as hour-by-hour changes. "This is a frenetic business," says Soroka. "Half the load for the day comes in the last two hours, and half of that comes in the last 30 minutes. Our payments system needs to be able to scale quickly, and the HP solution does that." The scalability of the new system has also allowed the bank to handle the growth of its wire-transfer volume to over 30,000 transactions a day, with peak volume of over 75,000 transactions in one day. "That peak load would have overwhelmed the previous payments system," says Soroka, "but the HP system took it in stride."

### Smooth change-over means business as usual for customers – now and in the future

One of the missions of the conversion was to have as little impact as possible and to affect as few customers as possible. For nine out of 10 customers there was no change at all, and only about 10% of customers had to handle wire transfers differently. "The switch went off without a hitch," says Soroka. "All wires were sent and received on day one without interruption."

Continues Soroka, "A wire-transfer system conversion is something one wants to do only once in one's career. The wire-transfer system interfaces with 50 other systems inside and outside the bank. It is the most sensitive system in the bank. Any trouble with wire transfers damages the credibility of the bank. Starting on day one, you cannot afford any problems. Thanks to the reliability of the HP NonStop hardware, and the integration done by HP Services, Software Integrators, and Lighthouse Systems, the conversion was nearly flawless."

The bank plans soon to pilot branch wire-transfer functionality, which will allow internal customers to initiate wire transfers from a PC within the bank. "When we implement that service we will be able to reduce by 50% the telephone traffic we see now," says Soroka.

### About U.S. Bancorp

Minneapolis-based U.S. Bancorp ([www.usbank.com](http://www.usbank.com)), with \$219 billion in assets, is the sixth largest financial holding company in the United States. The company operates 2,472 banking offices and 4,841 ATMs, and provides a comprehensive line of banking, brokerage, insurance, investment, mortgage, trust, and payment services products to consumers, businesses, and institutions. U.S. Bancorp is the parent company of U.S. Bank.

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