



Cisco Systems and CentrePath Help Fifth Third Bank Support Its Growing Business with a High-Speed, Highly Available Optical Network

Executive Summary

Customer Name

Fifth Third Bank

Industry

Financial Services

Business Challenge

- Reduce return-to-operations time by enabling real-time data replication across sites for disaster recovery system
- Increase operational efficiency and flexibility by building a high-speed link that allows two local data centers to function as a single location
- Provide a flexible networking foundation to support the company's rapid growth

Network Solution

- High-speed, highly available Cisco optical network, designed and deployed by CentrePath

Business Value

- Supports enhanced disaster recovery system to make business more resilient
- Provides flexibility to easily expand the data center into temporary and permanent new sites to meet operational requirements
- Supports flexible, easy-to-provision, high-bandwidth optical connectivity to keep pace with changing business needs

A high-speed, highly available Cisco® metro optical network designed and deployed by CentrePath connects geographically dispersed data centers to support state-of-the-art disaster recovery systems and increase operational efficiency.

Business Challenge

Fifth Third Bancorp is a leading financial services company based in Cincinnati, Ohio. The company has more than US\$102.7 billion in assets, and includes 17 affiliates, more than 1000 full-service banking centers, and nearly 2000 ATMs in nine states.

Like other leading financial services firms, Fifth Third Bank clearly saw and understood the need for resilient, geographically dispersed data operations to assure business continuance in the event of a disaster. The company had always been a leader in disaster recovery, but the executive team wanted to enhance business continuity by reducing recovery times from hours and days to minutes or less. Fifth Third Bank had previously relied on a system of file transfers and physical backup tapes for disaster recovery, which were transported by truck to a site in Grand Rapids, Michigan. By 2004, the organization was ready to take the next step in its business continuity strategy.

“We’ve always felt comfortable that we could recover quickly from a disaster,” says James Lancaster, Vice President, Fifth Third Bank. “But we wanted to get into a mode where disaster recovery would be instant. In the event of a disaster, we wanted to be able to be back running at full capacity within seconds.”

The company intended to build a local backup site in Greater Cincinnati and deploy a real-time data replication system to back up all customer and transaction data. But to make real-time data replication possible, Fifth Third Bank needed a huge amount of highly reliable bandwidth between the two sites.

While a new permanent backup center was in the works, Fifth Third Bank also needed a new temporary data center right away. The company was growing rapidly, and preparing to roll out several new business applications and an update of its Website, <http://www.53.com/>. But the Cincinnati data center was running out of space.

“We’re a growth company, and we’re always growing our consumer and merchant business,” says Lancaster. “To keep up with that growth, we’re constantly upgrading our infrastructure, adding WAN connections, deploying new headend routers, etc. All those things take up space in our data center. Growth is a great thing, but sometimes, staying ahead of it can be challenging.”

“This industry moves so fast that it’s not always possible to know what the future will bring. But with this installation, we’ve positioned ourselves to be able to react much more quickly.”

– James Lancaster, Vice President, Fifth Third Bank

To accommodate the immediate needs, the company planned to lease additional data center space in an office several blocks away. But instead of dividing services between the two locations, Lancaster wanted to deploy a high-speed connection between the sites, and allow them to function as a single data center. Most importantly, Lancaster wanted to bring up the temporary site quickly, to make sure the new applications were up and running before the busy holiday season, just a few months away.

“We needed to put the new servers in at the secondary site right away, but it had to seem like just an extension of our main data center,” says Lancaster. “We had to have the space, but we needed the same flexibility we had when everything was just 10 feet away.”

Network Solution

Lancaster and the Fifth Third Bank IT team wanted a single solution that would allow them to build the necessary high-bandwidth connectivity between the main data center and the temporary site, as well as support the roll-out of the enhanced disaster recovery system. The answer: a high-speed metro optical ring over dark fiber, owned and provisioned entirely by the bank.

“We knew an optical network could provide the bandwidth, but we needed to be able to channel it and break it off into logical connections for data replication and other services,” says Lancaster. “We decided that deploying a metro dense wavelength-division multiplexing (DWDM) network was the best solution.”

After considering several options, Lancaster chose to deploy the metro optical solution using Cisco ONS optical platforms, with integration assistance from CentrePath and local service provider Cincinnati Bell.

Fifth Third Bank had worked extensively with Cisco Systems® in the past, and relied on Cisco network routers and switches to support its regional branch office networks. The company’s positive relationship with Cisco and Cisco engineers made the choice easy.

“Cisco has always been a good partner for us, and we always work well with them,” says Lancaster. “It’s the support, the analysts’ opinions, the long-term stability of the company, and on and on.”

Moving into a new technology such as optical, Lancaster also felt more comfortable working with an established global leader in business networking.

“We had a lot of confidence in Cisco as a company and in its ability to deliver,” says Lancaster. “There was never a debate about whether a Cisco engineer would still be around to help us if we had issues six months down the road. We had those questions with other vendors.”

Lancaster also believed that expert assistance, both with deploying the DWDM solution and training Fifth Third Bank employees on optical provisioning, would help ensure a smooth transition. So the bank contracted with CentrePath to validate and deploy the high-bandwidth, flexible, multiple-site Cisco optical network to support the business continuity initiative.

“We partnered with CentrePath because they could guide us through the process of implementing this new technology,” says Lancaster. “We didn’t have much experience with several aspects of this project, and having a partner that had dealt with this before was a real benefit. The knowledge exchange between CentrePath and Fifth Third Bank was crucial to our success.”

“Ensuring that financial institutions can continue operations in the event of physical or other type of outage is critical,” adds Jim Sullivan, chief executive officer of CentrePath. “In order to dramatically improve recovery point objectives (RPOs) and recovery time objectives (RTOs), more organizations like Fifth Third Bank are realizing the benefits of owning and controlling their business continuance/disaster recovery environment, including an optical network.”

CentrePath – Global Leader in Data Center Networking Solutions

CentrePath, an advanced technologies solutions provider for Cisco optical equipment, focuses on helping clients in the finance, healthcare, government, and education markets create and manage private data center networks. Founded in 2000, CentrePath is recognized as one of the pioneers in data center networking solutions.

CentrePath focuses on helping customers assess, design, test, implement, and manage private data center networks powered by Cisco optical solutions. With more than five years experience and hundreds of satisfied customers, CentrePath is the clear choice to mitigate risk and accelerate adoption of a private data center network.

In addition to offering design and implementation services, CentrePath has developed industry-leading technology to manage Cisco optical networks remotely. The technology, developed to support mission-critical business continuity applications, can find and isolate a fault within 60 seconds, greatly speeding the recovery process. CentrePath provides this service from its fully redundant Network Control Center (NCC), located in Waltham, Massachusetts, and a geographically dispersed backup facility.

backup in Grand Rapids will remain just a few seconds behind. The high-bandwidth Cincinnati link also provides an ideal solution for expanding the data center.

“The Cisco optical solution gave us the flexibility to band two separate locations into one logical data center,” says Lancaster. “We can deploy new servers for our Website and other applications at both locations, and treat the systems as if they were all in the same place.”

Building the Solution

Fifth Third Bank uses Cisco ONS 15540 ESP extended services platforms to provide 10-Gbps connectivity between the main data center and the secondary site. The Cisco ONS 15540 ESP provides protocol-independent DWDM technology that allows organizations to increase backbone bandwidth and support ESCON, 1-Gbps and 2-Gbps Fibre Channel, Gigabit Ethernet, and 10 Gigabit Ethernet for a variety of high-bandwidth applications. Cisco ONS 15530 DWDM multiservice aggregation platforms at each site aggregate Gigabit and Fibre Channel services between the data centers. The Cisco optical network provides the bandwidth capacity to link the two Cincinnati locations into a single logical LAN and allow the company to run its EMC data replication and disaster recovery solution between the two sites until the new permanent data center comes online.


To streamline data replication at the Grand Rapids site and reduce reliance on backup tapes, Fifth Third Bank also deployed Cisco ONS 15454 multiservice provisioning platforms (MSPPs) at both Cincinnati locations and the Grand Rapids facility. The platforms provide a highly available data link to the tertiary backup over SONET OC-12 links.

Although Fifth Third Bank had not previously used optical network solutions, the deployment went very smoothly. Just two months after making a decision to move forward, the optical network was deployed and the core connectivity and disaster recovery system between the two Cincinnati data centers was fully operational.

“The implementation was basically painless,” says Lancaster. “We’ve been running production now for seven months, and we really haven’t had any issues.”

Business Value

Fifth Third Bank is already benefiting from the new, high-speed optical link in Cincinnati, and is now preparing to deploy the real-time data replication system between the two local sites. When the solution is fully deployed, all customer and transaction data will be synchronized in real time, eliminating any single point of failure. And, in the event of a regional disaster impacting both locations, the tertiary



Using the streamlined DWDM provisioning tools of the Cisco ONS MSPP, Lancaster's team can also easily provision new circuits and add or subtract bandwidth as needed, allowing them to better support the company's dynamic business.

"With the Cisco DWDM equipment, we can segregate the networks, provision a Gigabit Ethernet connection, a 10-Mbps connection, a 100-Mbps connection, and break up the bandwidth however we need to," says Lancaster. "And using the optical network we already have in place costs much less than provisioning new circuits through a local provider."

Most importantly, the metro optical ring gives Fifth Third Bank the flexibility it needs to keep pace with a constantly changing business. When one line of business grows unexpectedly or a new opportunity emerges, Lancaster can easily turn up new services or bandwidth, instead of putting expansion plans on hold while waiting for a local service provider to provision new circuits.

"This industry moves so fast that it's not always possible to know what the future will bring," says Lancaster. "But with this installation, we've positioned ourselves to be able to react much more quickly. Whether we want to expand a certain line of business, or open a branch of the future, or install high-speed connections at our ATMs, we have the flexibility to do whatever we need to do."

Next Steps

In the coming months, Fifth Third Bank will open its new permanent backup data center 13 miles outside of Cincinnati, replacing the temporary site, and the company will use the same Cisco optical model to bring the new location online. Down the road, Lancaster can see the optical network expanding even further.

"Being a growth company, we're always looking at new opportunities," he says. "We have an operations center and some other locations in the region that aren't currently connected with dark fiber. But as we do more and more check imaging, as more of our transactions get digitized, and we need much more bandwidth between facilities, this solution will help us take that next step."

For More Information

Cisco Systems optical solutions have already helped businesses and service providers around the world reduce costs, streamline service provisioning, and support a wide range of new applications. To find out how Cisco can help your organization, contact your local account representative, or visit: <http://www.cisco.com/go/optical>.

This customer story is based on information provided by Fifth Third Bank and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

CISCO PROVIDES THIS PUBLICATION AS IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties, therefore this disclaimer may not apply to you.

**Corporate Headquarters**

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica
Croatia • Cyprus • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR
Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico
The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia
Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan
Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

All contents are Copyright © 1992–2005 Cisco Systems, Inc. All rights reserved. Cisco, Cisco Systems, and the Cisco Systems logo are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0502R)

Pa/LW8836 07/05

