



*“The MIMIX HA for i5/OS solution has definitely helped reduce downtime and has improved our response to branches and customers. MIMIX has helped us maximize customer satisfaction by ensuring the continuous availability of systems responsible for their transactions.”*

Destine Lim, Head of IT  
Bank Niaga

## Business Profile

Company name:  
Bank Niaga

Headquarters:  
Indonesia

Industry:  
Banking and financial services

Industry Rank:  
One of the top five banks in  
Indonesia

Business Environment:

- A top Indonesian financial institution with assets of over Pr 22 trillion (US\$ 3 billion)
- Listed on the Jakarta and Durabanya Stock Exchanges.
- Operates 160 branch offices and 234 ATMs in major Indonesian cities
- Bank Niaga’s ATM system is connected to national and global networks with thousands of electronic access points
- Maintains 1.4 million accounts that generate an average of 180.000 transactions a day worth roughly Pr 3.8 trillion (US\$ 450 million).
- 60% of its daily customer transactions take place through its electronic delivery channels.

Implementation Team:  
PT Multipolar Tbk

Vision Solutions Product:  
MIMIX® HA for i5/OS®

## Critical Issue

With over half of its business transacted electronically over a vast network banking systems, and 24/7 customer access, Bank Niaga grew concerned with the exposure that a single compute point represented. Recovery from a serious iSeries server malfunction would take 10 hours with its cold-site backup strategy.

“Our customers know that Bank Niaga provides the best service in the banking industry. In terms of reputation, in terms of business loss, downtime could have a huge impact,” says Andreas Tedja, Bank Niaga’s VP for IT Infrastructure Technology & Operational Group Head.

## Results

- Two systems in different locations are completely synchronized so either one can act as the production machine
- The primary and backup systems are regularly switched to ensure system integrity and make technicians familiar with the process
- The first Indonesian bank to run a Dual Data Center for its banking system
- Can recover primary electronic banking operations within 15 minutes and most others in 30 minutes
- Has placed in the top three for the Best Service Quality Bank in Indonesia, placing first four years in a row

## Technologies

- MIMIX® HA for i5/OS®
- Production Machine: IBM iSeries model 830
- Remote Backup Machine: IBM iSeries model 740
- A variety of core banking applications from Silverlake Solutions

## Business Challenge

For many years Bank Niaga had relied upon its “cold backup” disaster recovery plan. Based on new risk assessment and simulation studies, it found that recovering data to the cold backup side during a production data center failure would likely require a minimum of 10 hours downtime. In addition, such an outage would cause its primary customer access point, the electronic delivery channels, to go offline, which would further inconvenience the bank’s clients.

“The main problem with the Disaster Recovery Center plan was that we could not be sure that the staff would be ready to operate the backup site,” says Sigit Arnanto, Bank Niaga’s AVP – Technology Infrastructure Services. “In the heat of the moment, they could panic and not follow the correct procedures, causing even more delays in bringing the backup server online.”



## Solution

Bank Niaga implemented a Dual Data Center concept that called for one data center to handle live daily transactions while the other data center mirrored and synchronized the data. The advantage of this arrangement is that either data center would be ready to handle all of Bank Niaga's business on a moment's notice without any significant service or data loss. This solution was also beneficial because the second data center would always be up-to-date and Bank Niaga's operations could continue uninterrupted while daily data backup was performed at the other center.

Bank Niaga turned to Multipolar, an authorized Vision Solutions and IBM Business Partner, to implement this new high availability data center configuration. "High Availability is a vital factor for any company that wishes to maintain constant business operations," says Dicky S. Moechtar, Director of PT Multipolar Corporation Tbk. "As we know, Bank Niaga is in an industry that must provide services to their customers 24 hours a day, 7 days a week, so a High Availability solution is a critical aspect of their IT infrastructure."

To support Bank Niaga's Dual Data Center initiative, Multipolar implemented MIMIX HA for i5/OS. IBM iSeries servers were utilized for both data centers. In the Bintaro Data Center, the bank now uses an iSeries model 740 server, while the Cikarang site uses an iSeries model 830 server. MIMIX HA for i5/OS proves comprehensive real-time replication of DB2/400 data and objects, including application, system, configuration, document library and integrated file system objects.

MIMIX also provides a centralized framework for monitoring system events and conditions. Should an outage occur at the primary data center, MIMIX can automatically switch users to the server at the backup data center. In addition, MIMIX allows users to be switched to the backup server quickly and easily whenever the primary server must be taken off-line to perform system maintenance or application upgrades.

With Multipolar's assistance, the entire process, from initial planning through installation, system integration and switch testing (with multiple scenarios), was completed within only six months.

Multipolar provided end-to-end support for MIMIX, including training and technical maintenance once the system was online. Using MIMIX, Bank Niaga has been able to set a maximum standard of 30 minutes to complete the switch between data centers, with the first group of branches reconnected within the first 15 minutes. "The value of such a short switchover is tremendous," says Ayu Bisono, iSeries Country Manager of PT IBM Indonesia. "It's very impressive to see such an effective High Availability solution in action. Bank Niaga's MIMIX solution definitely allows it to give its customers the highest level of customer service and sets a new standard by which all banks in the region will be compared," she highlighted.

In addition, Bank Niaga's IT staff is now trained intensively to adopt a collaborative operation methodology in which operators at both sites support each other. With the help of remote terminals, and video conference facilities, they perform as one group, operating the two data centers simultaneously in concert.



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◆ High Availability ◆ Disaster Recovery ◆ Systems and Data Management ◆