



Business Resiliency: *Turn Downtime into Primetime*

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Principal Manager

Today's Agenda

- Trends and issues – Why so many expectations?
- How can you meet these expectations?
- Real-world examples of how to address these issues with different levels of Availability solutions





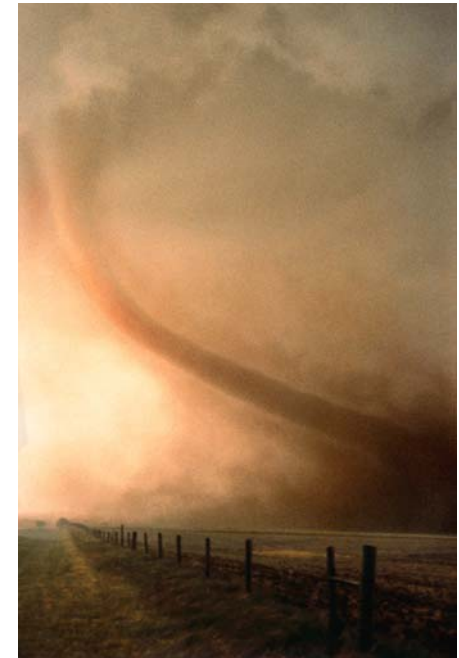
Trends and Issues to Address

- Globalization of markets, supply chains, distribution avenues
- 24/7 service demands from customers, partners, suppliers and employees
- Compliance to governmental and trade regulations
- Service level agreements
- Overburdened IT budgets and resources



Risks of IT Systems Downtime

- Lost revenue, wages and inventory
- Loss of customers, opportunities and business momentum
- Loss of business/brand reputation
- Legal fees and payouts due to civil litigation
- Government sanctions and penalties



Most IT Outages Caused by People/Processes

- Operator errors
- Undetected bugs in applications
- Software conflicts
- Unsuccessful upgrades or modifications to software
- Configuration errors
- Hardware problems
- Power interruption
- Virus, worms and hacker attacks





Availability Solutions Can Have Big Benefits

- Lower the risk of significant costs to business
- Protect business relationships with customers, partners, suppliers
- Meet service level agreements
- Ensure compliance with government and trade regulations



The Bottom Line

When the real world price of unplanned IT downtime is taken into account,

an information availability solution is an essential resource for preserving revenue...

...and is even more important in a world where “time is money.”

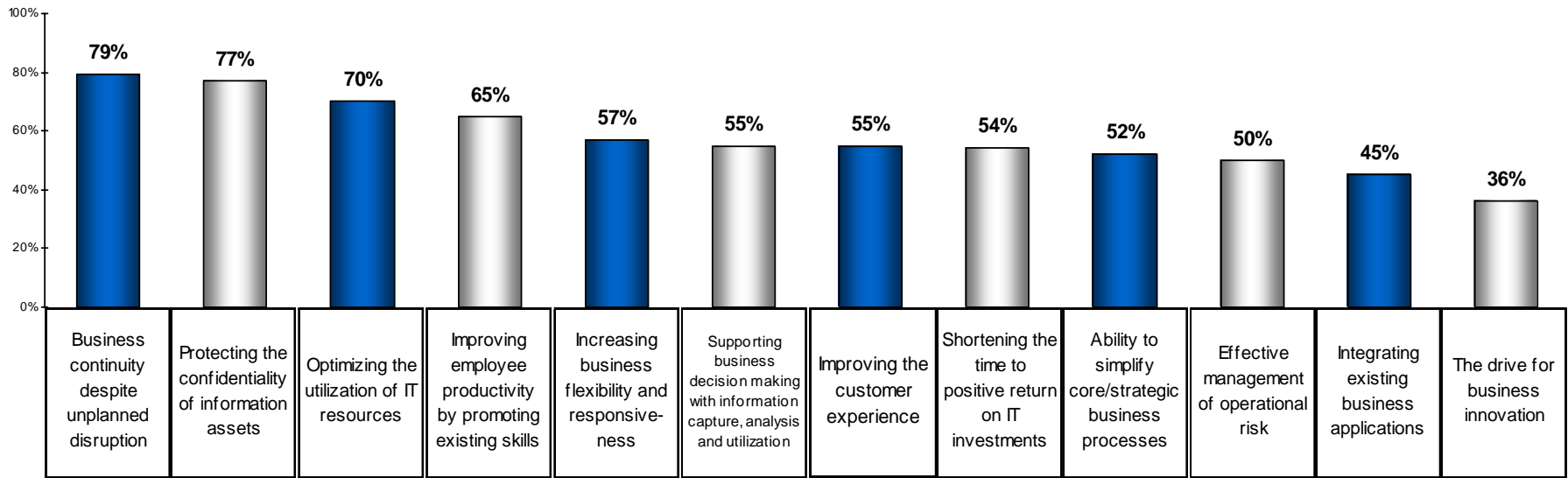




Business growth is dependent on IT uptime



Information Availability is a Top Corporate Priority



Source: IBM IT Trends



From the Experts

- *Studies show that 75 percent of U.S. businesses cannot function without computer support.*

- *Continuity Insights Magazine, May/June 2004*

CONTINUITY
insights

Strategies to Assure Integrity, Availability and Security

- *After 14 days without computer support, 43 percent of businesses will not reopen; 29 percent of those that do reopen will close for good within two years.*

- *U.S. Bureau of Labor*





IT Uptime is Essential to Support the Business

- Expanded internet dependence (email, ecommerce)
- Real-time enterprise strategy / business SLAs
- Global computing / mobile workforce
- Demand for flexibility, adaptability, scalability
- Business units in the driver's seat



The Business Wants More, Faster, Better Information Accessibility

- Accelerated decision-making, time-to-action models
- New corporate governance legislation or mandates for information accessibility, availability and resiliency

Gartner estimates that only 35% of SMBs have a comprehensive disaster recovery plan in place.

Gartner



**Calculate not just the
cost of downtime, but
the savings of uptime**

Opportunity

Tangible / Direct Costs – Potential Savings

- Lost transaction revenue
- Lost wages
- Lost inventory
- Remedial labor costs
- Marketing costs
- Bank fees
- Legal penalties



According to IDC, 40% of storage growth is driven by legal requirements for long-term data retention and compliance.

Intangible / Indirect Costs – Potential Savings

- Lost business opportunities
- Loss of employees and/or employee morale
- Decrease in stock value
- Loss of customer/partner goodwill
- Brand damage
- Driving business to competitor
- Bad publicity/press





Industry Average Downtime Costs Per Hour

“Any application that plays a role in developing, creating, manufacturing, supporting, or distributing a product or service to buyers will significantly impact the organization during an outage event.”

Gartner/Meta Group Inc.

- Brokerage Service \$6.48M
- Energy \$2.8M
- Telecom \$2M
- Manufacturing \$1.6M
- Retail \$1.1M
- Healthcare \$636,000
- Media \$90,000

Sources: Network Computing, the Meta Group, and Contingency Planning Research



Measuring the Impact to Your Business

- How many transactions can you afford to lose without significantly impacting your company?
- Do you depend upon one or more mission critical applications such as ERP or CRM software?
- How much revenue will you lose for every hour your critical applications are unavailable?
- What will the productivity costs be for the loss of available IT systems and applications?
- How will collaborative business processes with partners, suppliers and customers be affected by an unexpected IT outage?
- What is the total cost of lost productivity and lost revenue during unplanned downtime?



IT Can Save the Business Money

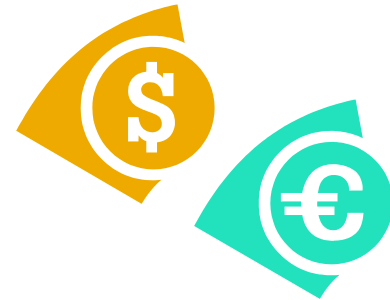


Source: Gartner Group, Inc.



Why Eliminate Planned Downtime?

- It's expensive
- It's unproductive
- It's mostly unnecessary



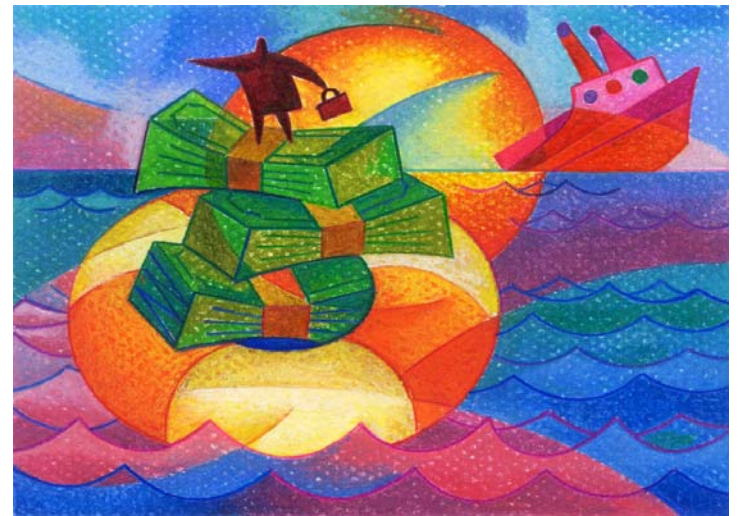
- *By eliminating downtime, you can improve profits, productivity and performance*

“No other department in the company has the leverage that IT has to help the company save money.” Techrepublic.com, 2004



Availability is More Than a Safety Net

- Get a higher return on investment from existing resources
- Get lower costs by reducing the management challenges in your IT environment
- Get higher productivity with more flexible infrastructure
- Get lower risks to the business



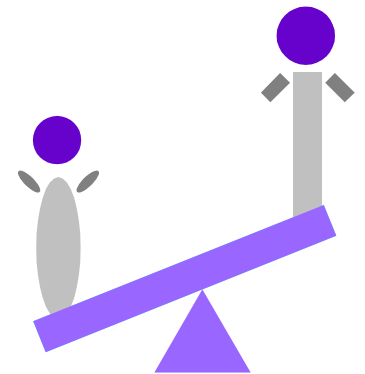


**Solve the “Time Is Money”
challenge by adding more
uptime to your business**



Availability Solutions to Choose from

- Data Protection and Recovery for information protection
- High Availability for continuous business operations
- Integrated availability to protect multiple platforms





Take the first step beyond tape backup and restore...





A Word About Lakeview and MIMIX

- Lakeview – the provider of choice
 - High availability, data protection and recovery, data management
 - Premier partners and customers - 3,000+ installations
 - Record revenue and new customer growth in 2005
 - Global service and support
- MIMIX – the technology of choice
 - 15+ years of innovation
 - Easy to use and manage
 - Affordable
 - i5/OS, Windows, Linux and UNIX
 - SMB to large enterprise scalability

The 1 to
count on.



What If You Could...

- Protect more data and application objects to satisfy data protection/retention corporate governance requirements?
- Give your executives the assurance they need that any unplanned event wouldn't leave large amounts of data unprotected?
- Speed up any recovery process so user productivity loss due to unplanned outage can be minimized?



Does Your Customer Need...

- Data protection commitments to recover in under 12 hours?
- Recovery point objectives that cannot be met with traditional tape backups alone?
- A no journaling, change-based persistent replication solution that is efficient and reduces the processing overhead on the primary server?



Look to MIMIX dr1

- Reduce recovery from days to just hours
- Identify more recovery opportunities during the day to ensure continuous recovery-ready data
- Free your production server from planned downtime due to backup operations



Facil Saves Time and Money

“Ford’s assembly lines mostly operate non-stop day and night, and it is obviously vital that the production line does not grind to a halt due to the late delivery of a certain component—and certainly not a small fastener.”

Raf Engelbos
Purchasing Manager
FACIL & Cie G.C.V.





Facil Saves Time and Money

- Met major Ford's data protection agreements without added complexity
- Eliminated weekly downtime entirely and achieved continuous access to critical supply chain systems
- MIMIX dr1's easy installation, setup and pricing didn't interrupt their business or their budget

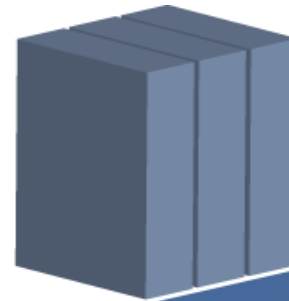


Reduced RPO of one week to less than a day!

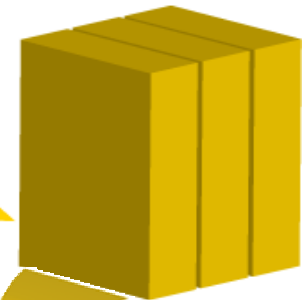
How Facil Saves Time and Money

- Total IT staff: 2 people; needed easy to use, low maintenance, low cost solution
- Use a Practical MIMIX Availability strategy to replicate their EDI application capturing recovery points every 30 minutes
- Eliminate nightly tape backup downtime by running tape backups off the backup machine

Production iSeries 810
EDI application
Daily Downtime: 0



Backup iSeries 820
EDI backup
RPO: 30 minutes



Tape Backup
Without Downtime

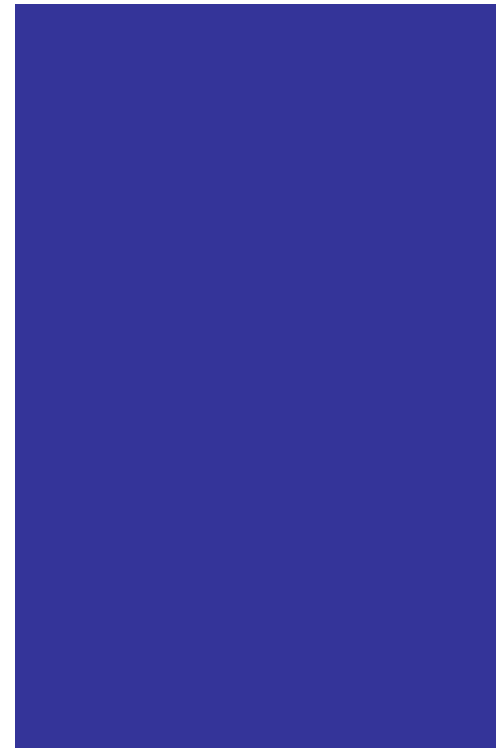




Practical Availability, Reliable Recovery

- No journaling, no complexity, no problems
- Set it and forget it
- Downloads and installs in minutes
- Protects everything you need and parks it in one place, for quick restore from disk
- Offers a smooth, risk-free upgrade path with other MIMIX products if your needs grow

MIMIX®
dr1™





Need more?

Try High Availability



Does Your Customer Need to...

- Support high productivity demands and continuous user access to information and applications so they can continue to work—no matter what happens?
- Transform both planned and unplanned downtime into productive uptime?
- Save money by consolidating distributed servers or workloads into fewer machines without bringing systems down during transition periods?
- Do it all with maximum automation, less admin and within your budget?



High Availability Fits If You Need to

- Deliver maximum uptime and zero data loss for the business
- Run analytics more frequently for decision makers on the always-current backup server—a timesaving productivity enhancer
- Switch systems on demand to completely eliminate planned downtime whenever application and server maintenance is required on production systems
- Provide real-time information for more responsive business decisions and keep tighter control on inventories, resource allocation and other business functions without impacting ongoing production
- Respond within minutes to unexpected system or server outages by one-step failover to the backup server—it's always an assured, completely functional, production-ready system with a known current dataset



Take the High Availability Approach

- Ensure uninterrupted access for your users and customers
- Provide the assurance that business can continue no matter what may happen
- Demonstrate a measurable value to your business by virtually eliminating downtime



Collectcorp's Key Business Drivers

“To increase our revenue generating opportunities, we needed to make our systems available to our collectors a greater percentage of the time.

We were subject to periodic downtime – both planned and unplanned – and we needed to minimize that. Our clients deal with us because we provide high quality service. We needed to impress upon them that we have resilient technology in place to meet their requirements.”

Steve Townend
Vice President
Collectcorp



Collectcorp Saves Time and Money

- Previously averaged about 300 hours of downtime every year (planned and unplanned)
- Reduced annual downtime by 87% to just 40 hours
- 87% less downtime means 260 more productive hours each year





Collectcorp Saves Time and Money

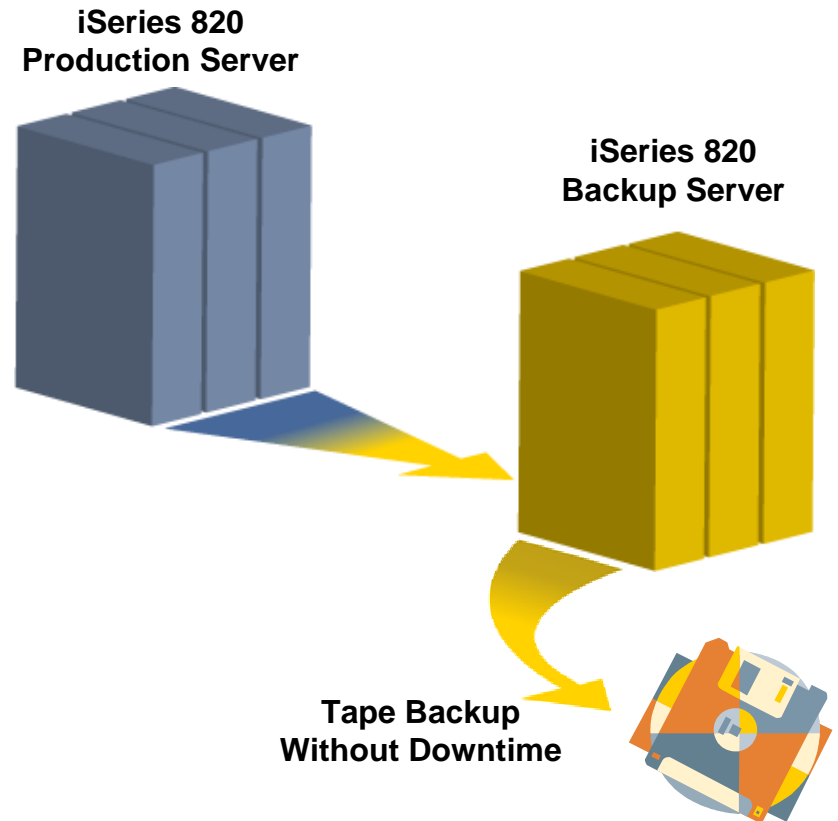
“At the end of the normal business day, we can immediately start overnight processing on the production machine while we do our backups on the secondary machine. That eliminates the backup process from the overnight timeslot and greatly increases system availability.”

Steve Townend
Vice President
Collectcorp



Collectcorp Saves Time and Money

- MIMIX High Availability fit Collectcorp's strategy
 - Ensures continuous uptime during planned maintenance
 - Added 260 more hours (= 6.5 work weeks) of annual productivity to the bottom line
- Added benefit of disaster recovery
 - Geographic distance between datacenters gives added protection for the unplanned





Quixtar Achieves Exceptional Resiliency

- Consolidated servers to two System i 570s located miles apart
- Achieved 24/7/365 continuous operations for 1,500 business people
- Eliminated planned and unplanned downtime
- Backup system used for testing, development and training



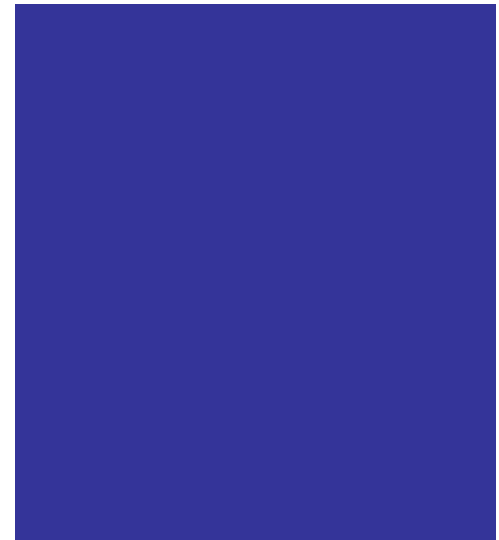


Take the High Availability Expressway

- Maximum uptime, zero data loss, and automatic switching
- Easy-on-the-resources, turbo-charged remote journaling option for high speed replication
- Low maintenance: 10 minutes a day
- Competitively priced for your budget

MIMIX[®]
ha1[™]

MIMIX[®]
ha Lite[™]





Customers looking for Availability with IBM System i and Windows?



Would It Help If You Could...

- Support high company productivity with continuous user access to Windows-based information and applications so they can continue to work—no matter what happens?
- Transform planned and unplanned downtime into productive uptime?
- Save money by consolidating highly distributed Windows server farms into fewer, more reliable servers without bringing systems down during transition periods?
- Do this with maximum automation, less admin and within budget?



Windows Availability Fits If You...

- Want zero planned and minimal unplanned downtime for Windows applications such as Exchange and SQL Server
- Have aggressive requirements for quick recovery times and minimal data loss — especially important since email and the web have become critical for business productivity
- Need rapid and complete disaster recovery
- Want high and fast ROI
- Want to get control of Windows server proliferation and minimize your admin work



Take the Windows Availability Express

- Benchmark-proven high availability solution
- Continuous uptime and protection for your critical Windows applications
- Consolidates Windows and i5/OS backups behind the scenes



PFG Business Drivers

- Keeps operations running by eliminating downtime
- Protects supply chain intelligence and email applications
- Integrates Windows Servers into their Series i servers maximizing IT resources
- Integrated switching for easy administration





PFG Saves Time and Money

“Nowadays we can’t afford downtime. It’s no longer acceptable for systems to be offline. Customers won’t tolerate it and our infrastructure can’t support it.”

Steve Neely
VP Information Systems

“MIMIX for Windows proved to be a simple process of installation and testing, Lakeview’s Services and Support team ensured that each step in the process was overseen with painstaking detail.”

Kelly Thompson
Network Administrator





PFG Saves Time and Money

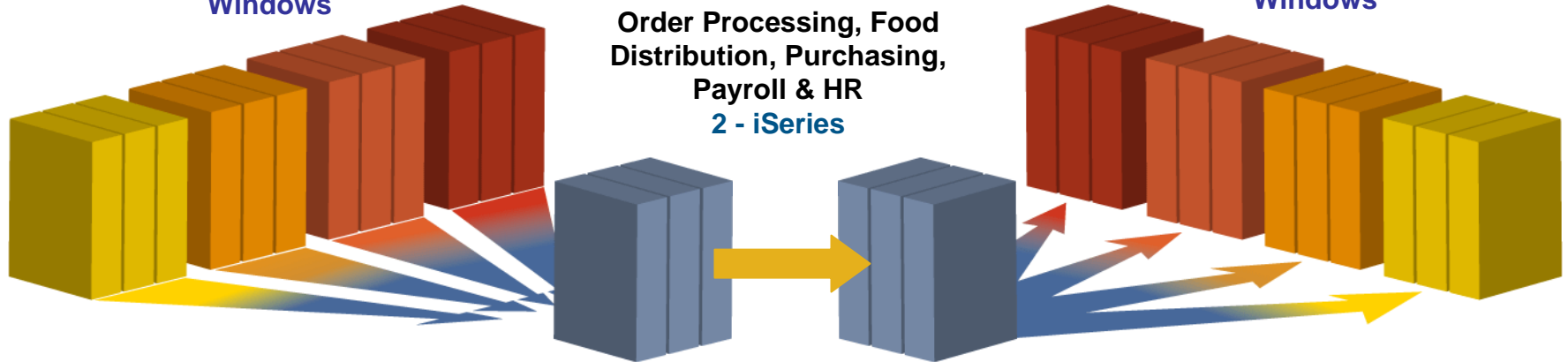


- Spend 10-15 minutes a day to maintain
- Needed easy to use, easy to maintain, low cost of ownership solution
- Integrated i5/OS and Windows Availability

Citrix Metaframe: Notes, MS Office, Truck Routing App, Supply Chain Intelligence, Windows

Order Processing, Food Distribution, Purchasing, Payroll & HR
2 - iSeries

Citrix Metaframe: Notes, MS Office, Truck Routing App, Supply Chain Intelligence, Windows

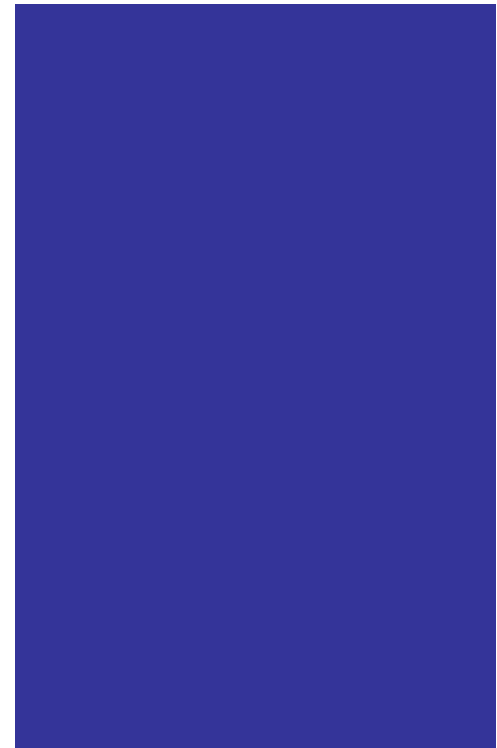




Windows Availability Meets MIMIX ha1

- Maximum uptime, zero data loss, and automatic switching for Windows applications
- Low maintenance: 10 minutes a day
- Competitively priced for your budget
- Provides cost efficiencies with using IBM's IXS and IXA technology

MIMIX[®]
ha1[™] *for Windows*[®]

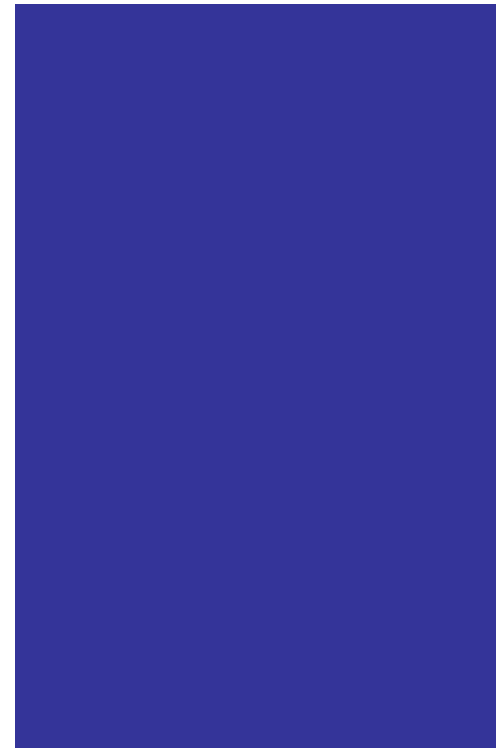




Take the Windows Availability Express

- Scalable benchmark-proven high availability solution
- Real-time recovery strategy for your critical Windows application data
- High speed consolidated backups for both Windows and OS/400 / i5/OS

MIMIX[®]
ha1[™] *for Windows*[®]





Business Resiliency: *Turn Downtime into Primetime*

Thank you!