

# High Availability Resilience

System availability is a requirement for most iSeries installations. Without access to your iSeries system, you will lose business, customers, and your reputation as a reliable supplier of services, information, or products. Sessions in this COS are centered around maximizing your solution availability in a B2B environment. Topics such as backup & recovery, unplanned outages, and clustering are included in this course of study.

## Introduction to F06 Miami Sessions: Thursday, 9/21/2006

21MA: Mon 8 - 9:15, B113, Miami Conv Ctr

**ID:**404029

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speakers:**  
Larry  
Youngren  
IBM Corporation  
Dave Owen  
IBM Corporation

Have you always wondered how journaling works and how best to employ this function? Would you like to hear where it's heading in the future? This session provides an introduction to iSeries journaling and its functions.

This provides a good introduction for those who want to attend more in-depth journal sessions later in the week which are part of the Focused Education Roadmap associated with journaling.


We'll introduce you to the objects, talk about Hot Site practices, show you how Journaling can affect your back-up strategy, show you how it can be a useful debugging aid, illustrate the role it plays as "better plumbing" in a High Availability scheme, introduce many of the commands, suggest some optimal hardware choices that tend to be journal-friendly, and finish off with some performance tuning suggestions.

In this session, learn:

1. When and where to use journal functions.
2. The benefits you can expect.
3. What's new.
4. Some of the major factors which affect performance.
5. How to make your applications more journal friendly.

## Case Study: Is Your H/A Truly High Availability?

21MG: Mon 8 - 9:15, B119, Miami Conv Ctr

 **ID:**450052

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speaker:**  
Richard  
Dolewski  
Midrange Computer  
Group

You have invested in a High Availability solution. Have you ever used your solution in a planned or unplanned outage. Is your target box ready to run your production applications? This session reviews the audit process and identifies common findings for failure. A gap analysis will provide a basis for discussion. Can you really run your business from that other box? Make your H/A ready for true Disaster Recovery.

By the end of this session, attendees will be able to:

1. Understand common failure in H/A.
2. Make your H/A system reliable.

## Better Plumbing for High Availability

23MA: Mon 11 - 12:15, B113, Miami Conv Ctr

 **ID:**404246

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speakers:**  
Larry  
Youngren  
IBM Corporation  
Dave Owen  
IBM Corporation

If you need a highly available 24x7 system, a remote data vault, or just better plumbing for your Data Warehouse approach you'll want to take a look at the Remote Journal support. If you've tired former 24x7 approaches but were frustrated over the fact that some recent transactions were missing when you switched to your back-up machine, you'll definitely want to check out the Remote Journal engine. This session will investigate what the Remote Journal support can offer your business.

In the session, learn:

1. How to gain high availability with the least performance overhead.
2. How to keep from losing any transactions during a disaster.
3. How to broadcast changes affecting your Database files in real time to remote machines.
4. How to successfully switch over to a backup machine.
5. How to best tune a Remote Journal environment so as to achieve optimal performance.

## F06 Miami Sessions: Thursday, 9/21/2006

### BRMS: Introduction/Overview

23MJ: Mon 11 - 12:15, A208, Miami Conv Ctr

ID:407051

**Level:**  
Beginner

**Course:**  
Focus: Disaster  
Recovery

**Speaker:**  
Kristi Harney  
IBM Corporation

iSeries systems management is critical to the smooth operation and success of your business. Backup and Recovery Media Services (BRMS) is IBM's strategic save/restore product. It helps track your media, implement your backup strategies, and automate your recoveries. BRMS also provides the TSM Client for iSeries and supports backing up spool files and is the product that delivers parallel save support. It is also the premiere HSM solution for the iSeries, allowing comprehensive migration of data to and from compressed DASD, and allowing data archive and dynamic retrieval to and from tape.

In this session, learn:

1. The functions of BRMS.
2. How to install the product.
3. How to set up simple BRMS operations that are included in the standard BRMS product.
4. How to review BRMS reports to ensure all saves ran successfully.

### What's New with Backup/Recovery in V5R4 - Including Virtual Tape Support

26ML: Mon 3:30 - 4:45, B211, Miami Conv Ctr

ID:440024

**Level:**  
All

**Course:**  
High Availability  
Resilience

**Speaker:**  
Debbie S.  
Saugen  
IBM Corporation

Find out what new things you need to know for the very latest V5R4 release to ensure you have a good backup strategy. Learn what changes need to be made to update your disaster recovery plans. New and exciting changes for Backup and Recovery in V5R4 are highlighted including Virtual Tape support and the latest and greatest for Backup Recovery and Media Services(BRMS).

### Increasing the ROI of an iSeries DB2 Disaster Recovery Project

31MF: Tue 8 - 9:15, B118, Miami Conv Ctr

ID:510080

**Level:**  
All

**Course:**  
High Availability  
Resilience

**Speaker:**  
Mike G.  
Warkentin  
DataMirror  
Corporation

Everyone understands the importance of being prepared for a system outage. If mission-critical production systems go down, business can grind to a halt. But often, cash-strapped IT departments still have a problem justifying the expense of a failover system to the business executives. Are there ways to show a greater return on investment for disaster recovery systems?

In this session learn how you can maximize the business benefit of your iSeries Disaster Recovery systems. This session will discuss how backup systems can be used for other business needs such as real-time reporting and analytics, offloading general query load from production systems, or as a development or test environment. Learn how companies like Tiffany's, Fisher & Paykel Appliances and Dean Foods have architected their iSeries DB2 High Availability systems to increase the overall ROI of the project without impacting the performance or reliability of production systems.

By the end of this session, attendees will be able to:

1. Increase the overall business value of a High Availability solution.
2. Leverage your investments in production systems to provide real-time insight into business performance.
3. Learn how other companies have used their High Availability solutions to provide increased access to operational data.
4. Discover how to architect a High availability solution that can allow business users real-time access to production data without impacting the performance of mission-critical systems.

## F06 Miami Sessions: Thursday, 9/21/2006

### Save While Active

32MF: Tue 9:30 - 10:45, B118, Miami Conv Ctr

ID:250387

**Level:**

All

**Course:**

High Availability  
Resilience

**Speaker:**

Al Barsa, Jr.  
Barsa Consulting  
Group, LLC

Does your backup window keep shrinking, while your users want a more available system? Save While Active is the most dramatic thing you can do to shrink your backup window. This session will set the record straight as to what SWA can and can't do, and what gets in its way. It will dispel many myths about SWA not working or being magic. SWA may or may not be right for you, so come and find out. SWA enhancements in recent releases will be covered.

### Backup and Recovery of Lotus Notes Data on i5/OS

32MQ: Tue 9:30 - 10:45, B216, Miami Conv Ctr

ID:440006

**Level:**

All

**Course:**

Workplace  
Collaboration/  
Lotus

**Speaker:**

Trevor  
Tallackson  
IBM Corporation

This session will go over all options customers have to backup Lotus Notes Data on iSeries systems! Will compare and contrast all options (including TSM - Tivoli Storage Manager) and go in details to set up, and execute instructions for save and restore of Lotus Notes data via Online Domino Backup Feature of BRMS/400! This presentation will explore full saves / incremental saves and which one to implement depending upon customer environment! Come to this session everything you need to know about Lotus Notes Backup/Restore on iSeries!

By the end of this session, attendees will be able to:

1. Understand Lotus Notes Backup/Restore strategies on iSeries.
2. Select their own Lotus Notes backup Strategy.
3. Set up Online Domino Backups.

### Honey, I Shrunk My Backup/Recovery Windows! You Can Too!

33MC: Tue 11 - 12:15, B115, Miami Conv Ctr

ID:470003

**Level:**

All

**Course:**

Managing  
System i  
Environment

**Speaker:**

Debbie S.  
Saugen  
IBM Corporation

New System i hardware and tape technology in combination with software enhancements in Backup, Recovery and Media Services (BRMS) using Concurrent and Parallel Saves, Save-while-active and Online Lotus Server Backups are resulting in huge reductions to backup/recovery windows. Learn how you too can dramatically reduce your backup and recovery windows!

### System i Cluster - So Many Technologies, So Little Time

33MA: Tue 11 - 12:15, B113, Miami Conv Ctr

ID:510031

**Level:**

Beginner

**Course:**

High Availability  
Resilience

**Speakers:**

Jenny Dervin  
IBM Corporation  
Curt  
Schemmel  
IBM Corporation

Business Continuity is an extremely broad topic. This session will focus on the technologies that provide improved data resilience for end users. Discussion will include:

1. Business continuity requirements: How to determine and prioritize your business requirements in the context of the specific problem sets.
2. Overview of technology categories related to business continuity.
3. How the technologies apply to the various business continuity requirements and how they compare with one another.

A detailed analysis is included to help you position the various technologies against your specific business requirements.

## F06 Miami Sessions: Thursday, 9/21/2006

### Backup/Recovery Strategies Update

36MH: Tue 3:30 - 4:45, B122, Miami Conv Ctr

ID:402342

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speaker:**  
Debbie S.  
Saugen  
IBM Corporation

A complete backup and recovery strategy is key to any business. Learn what you need to know to update your backup and recovery strategy for Logical Partition(LPAR) systems, Hardware Management Console(HMC), Lotus Notes and Windows Servers, Linux and AIX in a partition, and the use of Independent ASPs. New support for backing up spooled files and performing a backup of the system data in a non-restricted state will be covered. This session also takes you through example backup strategies and the steps needed to recover your system after a system failure or disaster.

### Disaster Strikes Your AS/400, Are You Ready?

43MD: Wed 11 - 12:15, B116, Miami Conv Ctr

ID:420019

**Level:**  
Advanced

**Course:**  
High Availability  
Resilience

**Speaker:**  
Richard  
Dolewski  
Midrange Computer  
Group

You have a disaster recovery plan but are you really prepared? Your plan references the AS/400 Backup & Recovery manual--all 600 pages of it. Where do you start? In this session, a complete step by step recovery of an AS/400 will be presented. Attendees will leave this session with a working technical recovery script (provided) for recovering their AS/400s back home. This session will also investigate numerous exposures in the disaster recovery planning model in today's IT shops. This is a technical interactive session.

### Disaster Recovery Solutions with IASPs and Clusters

42MD: Wed 9:30 - 10:45, B116, Miami Conv Ctr

ID:460035

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speaker:**  
Chuck Stupca  
IBM Corporation

i5/OS provides a functions that will support a variety of disaster recovery solutions using IASP and clusters. The solutions that will be discussed are:

Tower level mirroring with different power domains.

Geographic mirroring  
Total storage with FlashCopy  
Total storage with Metro Mirror  
Total storage with Global Mirror  
Load source in total storage

At the conclusion of this session the attendee should:

1. Understand the disaster recovery options available using i5/OS functions.
2. Know the IBM Total Storage Copy Services available.
3. Be able to evaluate the applicability of each of the solutions to their environment.

### System i Cluster - Switch Disk and XSM Technologies

43MK: Wed 11 - 12:15, B210, Miami Conv Ctr

ID:510033

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speaker:**  
Curt  
Schemmel  
IBM Corporation

IBM provides data resiliency technologies that protect the data while preserving single level store. This session will explain IASPs, how to build them and use them to keep the data highly available. The XSM technology will be explained within the context of the cluster and the end user's application. Finally, the administrative domain will be explained and how it can be used to keep the cluster environment consistent across the recovery domain.

## F06 Miami Sessions: Thursday, 9/21/2006

### Getting the Most Out of BRMS Recoveries!

44MD: Wed 12:30 - 1:45, B116, Miami Conv Ctr

ID:403136

**Level:**  
Intermediate

**Course:**  
Managing System i Environment

**Speaker:**  
Debbie S. Saugen  
IBM Corporation

Backup, Recovery and Media Services (BRMS) takes the guesswork out of System i complete system recoveries.

In this session, learn:

1. How to get the most out of BRMS recovery on any release of i5/OS or OS/400.
2. Valuable tips to make recovery easier.
3. Tips for recovering with Media Library Devices.

### Disaster Recovery - Be Prepared!

46MQ: Wed 3:30 - 4:45, B216, Miami Conv Ctr

ID:170062

**Level:**  
Beginner

**Course:**  
High Availability Resilience

**Speaker:**  
Debbie S. Saugen  
IBM Corporation

Performing a successful iSeries disaster recovery -- whether conducting a test or recovering from a real disaster -- is key to any company's business continuity. Learn the top 10 mistakes customers make when testing or performing a real disaster recovery. The recovery process will be discussed along with tips, techniques and best practices to ensure your recovery goes as well as possible.

Prerequisite: Basic understanding of Backup and Recovery.

### September 11, 2001: Tragedy and Disaster Recovery

45MA: Wed 2 - 3:15, B113, Miami Conv Ctr

 GOLD  
ID:410250

**Level:**  
Advanced

**Course:**  
High Availability Resilience

**Speaker:**  
Al Barsa, Jr.  
Barsa Consulting Group, LLC

This presentation contains material, including photography, that may be upsetting to certain individuals. It deals with a day of immense United States tragedy and patriotism; juxtaposes those events with pertinent humor, and then deals with appropriate iSeries technical issues. Besides the many personal tragedies that occurred were many business disasters that had to be recovered. Come hear Al Barsa describe how his company recovered one of the most significant systems for a large, complex New York customer. This is the last time this session will be given at COMMON.

### What's New for Journal and Commit

46MD: Wed 3:30 - 4:45, B116, Miami Conv Ctr

ID:500005

**Level:**  
Intermediate

**Course:**  
High Availability Resilience

**Speakers:**  
Larry Youngren  
IBM Corporation  
Dave Owen  
IBM Corporation

Come hear about the newest features recently introduced for High Availability, improved performance, and faster recovery using Journal and Commit.

- Topics include:
1. A more auditor friendly space minimization approach.
  2. A kinder, gentler commit for improved performance.
  3. How altered command defaults can make life easier for journal users.
  4. Capacity increases where, "The sky's the limit" for journal users.
  5. Coaxing objects into starting out life in a journaled state.
  6. Data Queues: second class objects no more.
  7. Taming the mysterious journal recovery ratio tiger.
  8. Tell your EVI's to "come on down" and join the SMAPP party.
  9. Making your database cross reference file more robust so that you can bid reclaim storage adieu.

## F06 Miami Sessions: Thursday, 9/21/2006

### Fault Tolerant Networking on i5/OS

**46MN: Wed 3:30 - 4:45, B213, Miami Conv Ctr**

**ID:500215**

**Level:**

All

**Course:**

High Availability  
Resilience

**Speaker:**

Chris Gloe  
IBM Corporation

In today's networking environments, there is a growing need for more robust and personalized networks. On-demand networks are intelligent networks which can automatically respond to changes in the environment. These networks possess the ability to reroute traffic in the event of a node or line failure. The System i5 has evolved one such service over the past several years to provide fault tolerant solutions to help meet our customer requirements for autonomous networking.

### System i Cluster - Conquering Your Disaster Fears - Managing the Cluster

**47MP: Wed 5 - 6:15, B215, Miami Conv Ctr**

**ID:510034**

**Level:**

Intermediate

**Course:**

High Availability  
Resilience

**Speaker:**

Jenny Dervin  
IBM Corporation

A Business Continuity than that covers everything from user error to regional natural disasters is a daunting task, all under the control of an operations staff that must respond to outages on a moment's notice. The goal is to handle all planned and unplanned outages from a simple, application level interface. This session will show how the various technologies work together. The cluster monitor technologies of cluster heartbeat and failure detection mechanisms of cluster resource services will be explained. Switchover and failover steps will be explained, providing the operations staff confidence that they can handle whatever may come their way.

### OPEN LAB: Try Out New Journal and Commit Goodies

**51LA: Thu 8 - 9:15, A205, Miami Conv Ctr**

**52LA: Thu 9:30 - 10:45, A205, Miami Conv Ctr**

**ID:500003**

**Level:**

Intermediate

**Course:**

High Availability  
Resilience

**Speakers:**

Larry  
Youngren  
IBM Corporation  
Dave Owen  
IBM Corporation

An opportunity for hands-on experience with newest Journal and commit goodies.

Including:

1. An auditor friendly journal minimization technique to make both your auditors and efficiency gurus grin from ear to ear.
2. A technique whereby you can assure each new object gets journaled from birth.
3. The new journal recovery wizard.
4. A softer, gentler commit for improved performance.
5. An opportunity to take an impressive performance boost (journal caching) for a spin by putting the pedal to the medal.
6. A chance to try your hand at enabling journal protection for objects other than Database.

### Effective Backup and Basic Availability Considerations

**54ME: Thu 12:30 - 1:45, B117, Miami Conv Ctr**

**ID:250116**

**Level:**

All

**Course:**

High Availability  
Resilience

**Speaker:**

Al Barsa, Jr.  
Barsa Consulting  
Group, LLC

This session will discuss AS/400 considerations for quick backup and availability. The covered topics will range from backup, to journaling, SMAPP, access path journaling, and commitment control. This session, or the equivalent knowledge, is a prerequisite for the following session, Recovery and High Availability Solutions.

## F06 Miami Sessions: Thursday, 9/21/2006

### System i Cluster - Don't Reinvent the Wheel - i5OS HA Best Practices

54MN: Thu 12:30 - 1:45, B213, Miami Conv Ctr

ID:510035

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speakers:**  
Curt  
Schemmel  
IBM Corporation  
Jenny Dervin  
IBM Corporation

Business Continuity is more than great technologies and interfaces. It also includes keeping focus on IT process management. It is no longer a single system world and systems management practices are the key to success. Obtaining and maintaining the optimal HA environment of interconnected systems is critical and will be discussed. The real key to fast switchover is confidence in the switch and that means practice, practice, and more practice. Finally, a discussion of mistakes made and what we can learn from them.

### Human Factors in Disaster Recovery Planning

55MG: Thu 2 - 3:15, B119, Miami Conv Ctr

ID:460009

**Level:**  
Beginner

**Course:**  
High Availability  
Resilience

**Speaker:**  
Richard  
Dolewski  
Midrange Computer  
Group

In Disaster Recovery, you rely on dedicated people to perform heroic technical acts. How do you select the right people? This session will identify methods for choosing the right members for your recovery teams. We will examine the management structure, the human elements, stress, dedication, testing and finally Best practices. Your recovery team is your most important asset in a Disaster Recovery Plan.

By the end of this session, attendees will understand:

1. The Human side.
2. Characteristics of a good team member.
3. How to choose a member.

### Creating Confidence in the High Availability Role Swap/Failover Processes

55MM: Thu 2 - 3:15, B212, Miami Conv Ctr

ID:490055

**Level:**  
All

**Course:**  
High Availability  
Resilience

**Speaker:**  
Rick Ayres  
iTera

The single largest benefit of HA is the ability to move users to a fully synchronized backup environment in the event of a system failure or disaster. However, there are extended benefits that can be realized when you have confidence in the role swap process. Reducing down time during planned maintenance events, nightly back ups and system migrations are just a few. If your company has made the investment in HA (or is thinking about doing so), it is absolutely critical that this process work smoothly. This session will examine in detail how the HA role swap and failover processes work and how to ensure that these processes consistently perform as expected delivering value to your company.

By the end of this session, attendees will be able to:

1. Know how the HA role swap and failover processes work.
2. Know how to ensure these processes consistently work as expected.
3. Understand the extended benefits of the role swap process.

### Conducting a Successful DR Test

56MK: Thu 3:30 - 4:45, B210, Miami Conv Ctr

 **GOLD**  
ID:430037

**Level:**  
Intermediate

**Course:**  
High Availability  
Resilience

**Speaker:**  
Richard  
Dolewski  
Midrange Computer  
Group

Disaster Recovery Planning is an integral part of any effective business strategy. Testing your plan is essential. Listen and learn from over 100 recovery tests and simulations performed to see how to do it right. Testing makes perfect.

By the end of this session, attendees will be able to:

1. Develop testing objectives.
2. Understand what makes a successful DR test.