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iSeries

Migration

Version 5 Release 2

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Contents

Migration

A data migration is the process of moving data from one iSeries^(TM) server that is running OS/400^(R) V4R5, V5R1, or V5R2 to another iSeries server running V5R2. This information does not describe how to migrate your data from an OS/400 release earlier than V4R5.

A License Addendum will be provided to allow the customer to install and use the copy of OS/400 (received with the newly ordered server) on their source server for up to 70 days. This Addendum authorizes the customers to use the new Version and Release on the source system for the sole purpose of migrating their data. The previous Version and Release must be reinstalled after the migration is completed. The V4R5 or V5R1 licenses of OS/400 and the LPs will only allow the products to be run on one system at a time. Feature Code #0205 provides for minimal pre loading of the new server, inclusion of a special License Addendum.

This information assumes that you are moving data from one server to another. If you are installing a new version of OS/400 on the same server, it is not necessary to perform an explicit data migration. You can use the Install the OS/400 release topic. If you are upgrading to a new iSeries server without changing the serial number, use the Upgrades topic. If you are migrating data from one iSeries server partition to another partition on the same server, follow the instructions in Chapter 4. ″Restoring a Logical Partition to

Another Logical Partition—Checklist 22″ of the Backup and Recovery Guide .

IBM^(R) offers a fee-based service for migrating your data. For more information, select **Migration** on the

Integrated Technology Services Web site.

For more information on migrating your data, select any of these topics:

"Migration concepts" on page 5
Review the migration process and learn the terminology that is used in this migration topic.

"Plan the migration" on page 5
Find out what you should do to minimize your down time and make your data migration as easy as possible.

"Perform the migration" on page 7
Find instructions for preparing for and performing a data migration from both a source server that does support the V5R2 release of OS/400 and a source server that does not support the V5R2 release of OS/400.

"Scenarios: Data migration" on page 12
Review a number of data migration examples and find information on performing these types of data migrations.

"Troubleshoot the data migration" on page 13
Find information on some of the problems that you may run into when performing a data migration.

See "What's new for V5R2" on page 2 for the new and changed information for data migration and the "Print this topic" on page 3 if you want to print the PDF for this entire topic as well as other information that may help you with your data migration.

What's new for V5R2

Here are the changes for this release:

What's new in iSeries servers

IBM introduces the iSeries Models 810, 825, 870, and 890. In addition, Capacity Upgrade on Demand, which allows you to immediately activate extra processing power for new workloads or spikes in demand, is now standard on select iSeries models.

For additional information on the new iSeries servers, see the following:

* **IBM iSeries** Web site
* **iSeries Planning**
* **iSeries Handbook**

What's new in migration information

This information, formerly located in the iSeries 940*x* RISC-to-RISC Road Map, SA41-5155, is now available in the Information Center. In the Migration topic, you can find information to do the following:

> **"Plan the migration" on page 5**
> The Information Center now contains a comprehensive planning topic. This new Planning topic combines planning information from a variety of sources including Information Center topics, Redbooks, and Web sites. You can now use the Information Center as a central location for the information you need to plan your data migration.

> **"Perform the migration" on page 7**
> You can migrate your data to a new iSeries server in one of the following ways:
>
> * Install the new OS/400 release on your server and then move your data to the new server. This is the most reliable method of moving your data to a new server.
> * Save the data from your server and restore it to the new server. You can use this method if you cannot install the new OS/400 release on your server.

> **"Scenarios: Data migration" on page 12**
> Review a number of data migration examples and find information on performing these types of data migrations.

> **"Troubleshoot the data migration" on page 13**
> Find information on some of the problems that you may run into when performing a data migration.

For additional information related to data migrations, refer to the following:

* Preventive service planning (PSP) information
  The PSP document for V5R2 data migrations is SF98166. Information within this PSP describes high-impact and pervasive problems. Review this information before you migrate your data between servers.

* Memo to Users .
  This document provides information about software and hardware changes that could potentially affect your system operations.

Print this topic

To view or download the PDF version if this topic, select **Migration** (about 124 KB or 15 pages).

Important additional resources

The Migration topic references information found in other topics in the Information Center. Use the online version of the Migration topic to link to these other topics directly. However, if you use the printed or PDF version of the Migration topic, you should also print the following resources to use in conjunction with the Migration PDF.

Plan for migration:	
Title	**Details**
Server planning: Hardware	Identify any hardware requirements for your migration.
Server planning: Software	Identify any software requirements for your migration.
Server planning: Connecting to iSeries	Choose and plan for a console for your target server.
Prepare for migration:	
Consoles	Find information to help you choose and set up a console.
Create logical partitions	Use this information to create logical partitions on the target server.
Backup and Recovery (about 570 pages)	Use this information to perform disk unit management before migrating your data (use Chapter 19. ″Procedures for configuring disks and disk protection″).
Clean up disk storage space	Cleaning up the source server before you migrate your data ensures that you are migrating only what is needed.
Ensure you have required fixes (program temporary fixes or PTFs)	Install the most current software fixes before migrating your data to the target server.
Prepare to install the OS/400 release	Use this information to help you install OS/400 V5R2 on the source server before migrating your data.
Complete the installation of the OS/400 release	Use this information to help you install OS/400 V5R2 on the source server before migrating your data.
Print the system configuration list	Document the current server configuration before migrating your data.
Print the system configuration for logical partitions	If you have a partitioned server, document the current partitioned server configuration before migrating your data.
GO SAVE command	Back up the source server in preparation for migrating your data. You migrate your data by restoring this copy of the data on the target server.
Gather performance data	Use this information to gather performance data so that you can compare system performance before and after the migration.
Complete the migration:	

Backup and Recovery (about 570 pages)	Use this information to:
	• Migrate data from one partition to another on the same server.
	• Migrate your data from a source server that can run OS/400 V5R2 (use Appendix E. ″Recovering your server to a different server″).
	• Migrate your data from a source server that cannot run OS/400 V5R2 (use Chapter 15. ″Previous Release-to-Current Release Support″).
	• Restore your source server to its original state (use Appendix D. ″Recovering your server″).
Fix hardware resource names	Use this information if a controller or device no longer has a valid resource on the server after the migration is complete.
Install software other than the OS/400 release	Use this information to install any additional software on the target server.
GO SAVE command	Back up the target server when the data migration is complete.
Print the system configuration list	Document the new target server configuration when the migration is complete.
Print the system configuration for logical partitions	Document the new target server configuration when the data migration is complete.
Tune performance	Find information on enabling your server to make the best use of the system resources, and enabling workloads to run as efficiently as possible.

Other information

You can also view or print any of the following PDFs that are closely related to this topic:

> **Upgrades** (about 285 KB or 43 pages)
> You can use this information if you want to upgrade your server with new hardware while retaining its serial number.

> **Install the OS/400 release and related software** (about 82 pages)
> You can use this information if you are upgrading your server with a new OS/400 release.

> **Logical partitions**
> If you are upgrading from or to a partitioned server, you can use this topic to choose from a number of PDFs that contain information about logical partitions.

> **Backup and Recovery** (about 570 pages)
> You can use this information to back up your server before performing upgrade tasks. This allows you to recover a working configuration should you experience problems during any part of the upgrade.

For additional information related to migration, see "Related information for migration" on page 13.

Saving PDF files

To save a PDF on your workstation for viewing or printing:
1. Right-click the PDF in your browser (right-click the link above).
2. Click **Save Target As...**

3. Navigate to the directory in which you would like to save the PDF.
4. Click **Save**.

Downloading Adobe Acrobat Reader

If you need Adobe Acrobat Reader to view or print these PDFs, you can download a copy from the Adobe

Web site (www.adobe.com/products/acrobat/readstep.html) .

Migration concepts

A data migration is the process of moving data from one iSeries server to a new iSeries server where the source server and the target server have different serial numbers. To become familiar with the terminology used in this topic, see "Migration terminology".

Data migration process

The data migration process includes planning, ordering, preparing for, and performing the data migration. Planning is most involved and may require up to six weeks, depending on the complexity of your environment. Installing the OS/400 release on the source server requires at least one hour. Migrating the data from the source server to the target server can normally be accomplished in up to 3 days.

Migration terminology

A migration is the process of moving data or software from one iSeries server to another iSeries server. Review this information to become familiar with the terminology used to describe migrations. If you are moving from one iSeries server, hardware feature, or software version to another iSeries server, hardware feature or software version and retaining the same server serial number, see Upgrade terminology.

migration
> Any movement of software or data. When used in this topic, migration refers to any of the following:
> - Movement of software or data where the data is used on a different server (with a different server serial number)
> - Movement of software or data that skips one or more releases of the software
> - A situation where one software feature is converted to another software feature
>
> Contrast migration with upgrade, where the target server retains the serial number of the source server.

data migration
> The movement of data when the software is upgraded or the data is transferred to a different hardware server or model.

source server
> The existing server that is being migrated to a new level of software.

target server
> The planned hardware configuration and software level which will exist when the migration is completed.

Plan the migration

The time you spend planning for your data migration can help minimize your downtime and make performing the migration easier. Before you can migrate your data, you must do the following:

Plan for the hardware, which includes the following:

- Ordering the target server with feature code 0205.
  This feature code ensures that the target server is set up for the data migration and entitles you to run the new operating system on both the source and target servers for a maximum of 70 days so that you can complete the data migration. You must reinstall the previous operating system on the source server after the data migration is complete.
- Identifying disk storage requirements.
  You must ensure that you have enough disk storage capacity for the new operating system and for the data from the source server, as well as for any new data and software planned for the target server.
- Identifying any tape incompatibilities.
  You must ensure that you have a tape drive that is compatible with the target server.

  To determine if your tape drive is compatible, see the Storage Solutions Web site or the System

  Handbook . To learn more about tape devices, see the Tape topic.
- Ensuring that you have a physical plan for the target server.
  The target server is going to be set up and running beside the source server for a period of time. There are physical planning and setup implications that pertain to the target server.

Plan for the software, which includes the following:

- Evaluating disk storage space requirements.
  You must ensure that you will have adequate disk storage before you start to install or replace software.
- Identifying possible upgrade paths for licensed programs.
  When you install the new release of OS/400, some licensed programs may no longer work. You should identify licensed programs that are no longer available at this release and their replacements where applicable. Additionally, to avoid losing data that depends on these licensed programs, migrate the data from your server to an accessible location before installing the new release of OS/400.

Plan for your connection, which includes the following:

- Choosing a console.
  If you are using a twinaxial console on the source server and using Operations Console on the target server, ensure that you have a twinaxial controller for any twinaxial devices you plan to run from the target server.

When you have completed these tasks, you should have a final data migration plan that includes the following:

When you are finished
☐ Record a final hardware and software plan that includes feature code 0205 and addresses disk storage capacity and compatible tape drives. This plan might cause you to change your software or hardware order.
☐ Record a physical plan for the target server.

iSeries Planning and Migration Services can help you in planning and migrating your data to the latest

iSeries models. For information, select **Migration** on the Integrated Technology Services Web site.

The next step is to "Perform the migration" on page 7.

Perform the migration

This topic describes how to migrate data from one server to another. Before you begin these tasks, be sure you have completed the necessary "Plan the migration" on page 5. You can migrate your data by using one of these paths:

If you can load OS/400 V5R2 on your source server, perform the following tasks:

1. "Prepare for the migration".
2. "Complete the migration" on page 8.

If you cannot load OS/400 V5R2 on your source server, perform the following tasks:

1. "Prepare for the migration from a 4*xx* or 5*xx* server" on page 9.
2. "Complete the migration from a 4*xx* or 5*xx* server" on page 10.

Prepare for the migration

This topic describes how to prepare to migrate your data to a new target server. Before you begin this procedure, be sure you have completed these prerequisite tasks:

- Obtain and review the preventive service planning (PSP) information.
  The PSP document for V5R2 data migrations is SF98166. Review this document for the most current information on conditions that could affect your data migration.
- "Plan the migration" on page 5.

Then, to prepare to migrate your data, perform these tasks:

Prepare target server

1. Ensure that your console is set up and ready.
   Note: If you are using a twinaxial console on the source server and using Operations Console on the target server, ensure that you have a twinaxial controller for any twinaxial devices you plan to run from the target server.
2. Verify that the target server is set up and is running with only the Licensed Internal Code and the operating system (OS/400) installed (feature code 0205).
3. If you are configuring a server with logical partitions, you must create logical partitions on the target server and then install the Licensed Internal Code and OS/400 on each secondary partition. Allow at least two additional hours to do this for each partition.
4. Perform disk unit management (for example, manage disk protection and disk configuration).
   To do this, you can use the Work with Disk Units option from the Dedicated Service Tools display. For information, see the chapter that contains Procedures for configuring disks and disk protection in the

   Backup and Recovery Guide .

Prepare source server

1. Prepare to install the OS/400 release.
   Ensure that you do the following:

   - Use the Work with Line Descriptions command (WRKLIND) to view and delete unused lines and line descriptions.
   - Use the Work with Device Descriptions command (WRKDEVD) to delete unused device descriptions.
     Note: You can use the Work with Line Descriptions and Work with Device Descriptions commands to view and verify that all of the descriptions listed are in use. If you are sure one is not in use, delete it. If you are not sure, you should leave it.
   - Save the entire server so you can restore it to its original state after performing the data migration.
     Note: It is recommended that you have two copies of the backup media.

Feature code 0205 entitles you to run the new operating system on both the source and target servers for a maximum of 70 days so that you can complete the data migration. When the data migration is complete, you must reinstall the previous operating system on the source server to restore the server to its original state. To restore the server to its original state, follow the steps in Recovering your server in Appendix D of the Backup and Recovery Guide . Use the Backup and Recovery Guide for the release that you want to restore.

2. Complete the installation of the OS/400 release.
3. Print your server configuration information as follows:
   a. On the OS/400 command line, enter `PRTSYSINF` and then print the resulting spooled file.
      This prints reports of the hardware resources, software resources, system values, installed fixes (program temporary fixes or PTFs), and other configuration information.
   b. Print a new system configuration list and keep this list for future reference.
   c. On the OS/400 command line, enter `WRKDEVD`. Use option 6 (Print) to print the device descriptions.
   d. On the OS/400 command line, enter `WRKCTLD`. Use option 6 (Print) to print the controller descriptions.
   e. If you have a partitioned server, print the system configuration for logical partitions.

Stabilize the source server

1. Run the source server at the new release level for 2 weeks.
2. Save the entire server using option 21 of the GO SAVE command. Make sure that you specify the following options:
   a. `Vary off the network server...*ALL`
   b. `Unmount file systems..........Y`

   Note: It is recommended that you have two copies of the backup media.

The next step is to "Complete the migration".

Complete the migration

Before you begin these tasks, be sure you have completed the necessary "Prepare for the migration" on page 7. Then to migrate data to the target server or partition, perform these tasks:

1. Perform the steps in Appendix E: Recovering your server to a different server of the Backup and Recovery Guide .
   If a controller or device no longer has a valid resource on the system, follow the steps in fix hardware resource names to make the necessary corrections.
2. Install any new licensed programs (LPs).
3. Print your server configuration information as follows:
   a. On the OS/400 command line, enter `PRTSYSINF` and then print the resulting spooled file.
      This prints reports of the hardware resources, software resources, system values, installed fixes (program temporary fixes or PTFs), and other configuration information.
   b. Print a new system configuration list and keep this list for future reference.
   c. On the OS/400 command line, enter `WRKDEVD`. Use option 6 to print the device descriptions.
   d. On the OS/400 command line, enter `WRKCTLD`. Use option 6 to print the controller descriptions.
   e. If you have a partitioned server, print the system configuration for logical partition.
4. Save the entire server using option 21 of the GO SAVE command. Make sure that you specify the following options:
   a. `Vary off the network server...*ALL`
   b. `Unmount file systems..........Y`

Note: It is recommended that you have two copies of the backup media.

5. Resume normal operations and verify that all your applications run properly.
6. Tune the server performance.
   This ensures that your servers make the best use of the system resources, and allows workloads to run as efficiently as possible.

Prepare for the migration from a 4*xx* or 5*xx* server

If you cannot install V5R2 of OS/400 on your source iSeries server, you can still migrate your data by saving your source server and then performing a full server recovery onto the target server. This topic describes how to prepare to migrate your data from a 4*xx* or 5*xx* server to the new target server. Before you begin this procedure, be sure you have completed these prerequisite tasks:

- Obtain and review the preventive service planning (PSP) information.
  The PSP document for V5R2 data migrations is SF98166. Review this document for the most current information on conditions that could affect your data migration.
- "Plan the migration" on page 5.
- Review the introductory information on Previous Release-to-Current Release Support in the Backup and

  Recovery Guide .

Then, to prepare to migrate your data from a 4*xx* or 5*xx* server, perform these tasks:

Prepare target server

1. Verify that the target server is set up and is running with only the Licensed Internal Code and the operating system (OS/400) installed (feature code 0205).
2. If you are configuring a server with logical partitions, you must create logical partitions on the target server and then install the Licensed Internal Code and OS/400 on each secondary partition. Allow at least two additional hours to do this for each partition.
3. Ensure that your console is set up and ready.
   Note: If you are using a twinaxial console on the source server and using Operations Console on the target server, ensure that you have a twinaxial controller for any twinaxial devices you plan to run from the target server.
4. Perform disk unit management (for example, manage disk protection and disk configuration).
   To do this, you can use the Work with Disk Units option from the Dedicated Service Tools display. For information, see the chapter that contains Procedures for configuring disks and disk protection in the

   Backup and Recovery Guide .
5. Make sure that you have a copy of the distribution media for the target server.

Prepare source server

1. Clean up the source server as follows:
   a. Use the Work with Line Descriptions command (WRKLIND) to view and delete unused lines and line descriptions.
   b. Use the Work with Device Descriptions command (WRKDEVD) to delete unused device descriptions.
      Note: You can use the Work with Line Descriptions and Work with Device Descriptions commands to view and verify that all of the descriptions listed are in use. If you are sure one is not in use, delete it. If you are not sure, you should leave it.
   c. Clean up disk storage space.
2. Ensure you have required fixes (program temporary fixes or PTFs).
3. Gather performance data.
   This gives you a basis for comparing performance before and after the data migration.

4. On the OS/400 command line, enter `RTVSYSINF`.
   When you run this command, you will need to specify the library to use. Typically, you should specify the QUPGRADE library. If this library does not exist, create it with the Create Library (CRTLIB) command.
5. Print your server configuration information as follows:
   a. On the OS/400 command line, enter `PRTSYSINF` and then print the resulting spooled file.
      This prints reports of the hardware resources, software resources, system values, installed fixes (program temporary fixes or PTFs), and other configuration information.
   b. Print a new system configuration list and keep this list for future reference.
   c. On the OS/400 command line, enter `WRKDEVD`. Use option 6 (Print) to print the device descriptions.
   d. On the OS/400 command line, enter `WRKCTLD`. Use option 6 (Print) to print the controller descriptions.
   e. If you have a partitioned server, print the system configuration for logical partitions.
   f. If necessary, save spooled files.
      For step-by-step instructions, see Saving spooled files in Chapter 15 of the Backup and Recovery

      Guide 📖 .
   g. Job scheduler entries will not be restored on the target server. Use the print option on the Work with Job Scheduler Entries (WRKJOBSCDE) command to record your current job scheduler entries so you can manually re-create them on the target server.
6. Save the entire server using option 21 of the GO SAVE command. Make sure that you specify the following options:
   a. `Vary off the network server...*ALL`
   b. `Unmount file systems.........Y`

   Note: It is recommended that you have two copies of the backup media.

The next step is to "Complete the migration from a 4*xx* or 5*xx* server".

Complete the migration from a 4*xx* or 5*xx* server

This topic describes how to complete the data migration from your 4*xx* or 5*xx* server to the new target server. Before you begin these tasks, be sure you have completed the necessary "Prepare for the migration from a 4*xx* or 5*xx* server" on page 9.

If your target server is set up and is running with only the Licensed Internal Code and the operating system (OS/400) installed (feature code 0205), you can begin at step 1 in this procedure. If you did not get a new server with feature code 0205, follow steps 1 through 31 in the topic, Restoring previous release user data to a new system: Step-by-step instructions in Chapter 15 of the Backup and Recovery Guide

📖 to install the Licensed Internal Code and OS/400 on the target server. When you have completed these steps, continue with step 8 in this topic.

1. Sign on to the target server as user QSECOFR. You do not need to enter a password at this time.
2. At the IPL Options screen, enter the correct date and time. Verify that the following values are set as follows:
   ```
   Start to system to restricted state = Y
   Define or change system at IPL = Y
   Set major system options = Y
   ```
3. On the Set Major System Options screen, select **N** to not enable automatic configuration.
4. On the Define or Change the System at at IPL screen, do the following:
   a. Select option 3 (System value commands).
   b. On the System Value Commands screen, select option 3 (Work with System Values).
   c. On the Work with System Values screen, type 2 next to the following system values:

- Change QALWOBJRST to *ALL
- Change QIPLTYPE to 2
- Change QJOBMSGQFL to *PRTWRAP
- Change QJOBMSGQMX to a minimum of 30
- Change QPFRADJ to 2
- Change QVFYOBJRST to 1

   d. After the system changed the system values, press F3 twice to return to the Define or Change the System at IPL screen

5. On the Define or Change the System at IPL screen, press F3 to exit and continue the IPL.

6. On the Change Password screen, type `QSECOFR` as the current password. Enter a new password. Re-enter the password to verify and press **Enter**.

7. Perform steps 25 through 31 in the topic, Restoring previous release user data to a new system:

   Step-by-step instructions in Chapter 15 of the Backup and Recovery Guide .

8. If a controller or device no longer has a valid resource on the system, follow the steps in fix hardware resource names to make the necessary corrections.

9. Install any new licensed programs (LPs).

10. Follow the steps in Chapter 11. ″Checklist for Completing the Installation″ of the Software Installation

     PDF.

11. Use the Add Job Schedule Entry (ADDJOBSCDE) command and the information you printed from your source server to add job scheduler entries.

12. If you installed Windows^(R) Server for iSeries on your server and you saved your server with the Integrated xSeries^(TM) Server in a Varied off setting, follow these steps:

    a. Add the links for the server descriptions. Enter the following for each server description:

       `ADDNWSSTGL NWSSTG (storage_name) NWSD(server_description)`

    b. Vary on your Integrated xSeries Server by entering `WRKCFGSTS *NWS` and selecting option 1 to vary on each server.

13. Print your server configuration information as follows:

    a. On the OS/400 command line, enter `PRTSYSINF` and then print the resulting spooled file.
       This prints reports of the hardware resources, software resources, system values, installed fixes (program temporary fixes or PTFs), and other configuration information.

    b. Print a new system configuration list and keep this list for future reference.

    c. On the OS/400 command line, enter `WRKDEVD`. Use option 6 to print the device descriptions.

    d. On the OS/400 command line, enter `WRKCTLD`. Use option 6 to print the controller descriptions.

    e. If you have a partitioned server, print the system configuration for logical partitions.

14. Save the entire server using option 21 of the GO SAVE command. Make sure that you specify the following options:

    a. `Vary off the network server...*ALL`
    b. `Unmount file systems.........Y`

    Note: It is recommended that you have two copies of the backup media.

15. Resume normal operations and verify that all your applications run properly.

16. Tune the server performance.
    This ensures that your servers make the best use of the system resources, and allows workloads to run as efficiently as possible.

Scenarios: Data migration

This topic contains a number of data migration scenarios. Use these scenarios to help you become familiar with the details involved with migrating your data to another server.

Data migration scenario 1: Migrating from V4R5 on a 510 to V5R2 on an 810 server
In this scenario, you have a 510 server, you are running V4R5, and you want to migrate your data to an 810 server.

What to do:
You cannot install OS/400 V5R2 on your 510 server. To migrate your data, you will save the data to a tape drive that is compatible with the 810 and then restore the data on the 810.
To perform this data migration, first "Prepare for the migration from a 4*xx* or 5*xx* server" on page 9, then "Complete the migration from a 4*xx* or 5*xx* server" on page 10.

Data migration scenario 2: Migrating from V4R5 on a 740 to V5R2 on an 870 server
In this scenario, you have a 740 server, you are running V4R5, and you want to migrate your data to an 870 server.

What to do:
You can install OS/400 V5R2 on your 740 server. To migrate your data, you will first install V5R2 on your 740 server, then save the data to a tape drive that is compatible with the 870 and restore the data on the 870.
To perform this data migration, first "Prepare for the migration" on page 7, then "Complete the migration" on page 8.

Data migration scenario 3: Migrating from V5R1 on a partitioned 830 server to V5R2 on an 825 server
In this scenario, you have an 830 server, you are running V5R1, and you want to migrate your data to an 825 server.

What to do:
You can install OS/400 V5R2 on your 825 server. To migrate your data, you will first install V5R2 on all partitions of your 830 server, then save the data from each partition to a tape drive that is compatible with the 825 and restore the data on the 825.
To perform this data migration, first "Prepare for the migration" on page 7, then "Complete the migration" on page 8.

Data migration scenario 4: Installing a new version of OS/400 on your server
In this scenario, you are running V4R5 or V5R1 on your server and you want to upgrade to V5R2.

What to do:
If you are installing a new version of OS/400 on the same server, it is not necessary to perform an explicit data migration. You can use the Install the OS/400 release topic to install V5R2 on your server.

Data migration scenario 5: Upgrading your server to an 890 server
In this scenario, you want to upgrade to the new 890 server.

What to do:
If you are upgrading to a new iSeries server without changing the serial number, it is not necessary to perform an explicit data migration. You can use the Upgrades topic.

Data migration scenario 6: Migrating data from one partition to another
In this scenario, you want to migrate data from one partition to another on your server.

What to do:
If you are migrating data from one iSeries server partition to another partition on the same server, follow the instructions for Restoring a Logical Partition to Another Logical Partition—Checklist 22 in Chapter 4 of

Backup and Recovery Guide .

Troubleshoot the data migration

This topic contains information related to some data migration-specific problems that may occur. In many cases, the time you spend planning for the data migration, and performing the data migration according to instructions can prevent these problems from occurring.

*   SRC A900 2000 appears on the control panel display of the server.
    This SRC appears if the QIPLTYPE is set to 2 or if there is no device description for the console display. This SRC and message are normal during the data migration procedure. The SRC will disappear when you perform a normal IPL. If no workstation on your server is operational when you receive SRC A900 2000, call your service provider.
*   You see Message ID CPF3717: File not selected. File label or file name mismatch for file *filename*.
    This type of message occurs most frequently when the incorrect tape is inserted into the tape drive or when you have incorrect parameters for the RESTORE command.
*   Job scheduler entries are not restored on the target server when you migrate from a 4*xx* or 5*xx* server. You must manually re-create the job scheduler entries on the target server. If you did not print these entries before you migrated your data, you can get them from the source server.
*   The target server cannot read the tapes you used to save the data from your source server.
    Save the data from a source server using a tape drive that is compatible with the target server.
*   You cannot configure your twinaxial devices.
    If you are using a twinaxial console on the source server and using Operations Console on the target server, you must have a twinaxial controller for any twinaxial devices you plan to run from the target server.

For more information, see the preventive service planning (PSP) document. The PSP document for V5R2 data migrations is SF98166. This document describes high-impact and pervasive problems.

Related information for migration

Listed below are the iSeries manuals and IBM Redbooks[(TM)] (in PDF format), Web sites, and Information Center topics that relate to the Migration topic. You can view or print any of the PDFs.

Upgrades and migration
*   **Upgrades**
    Use this information if are upgrading your server with new hardware while retaining its serial number.
*   **Preventive service planning (PSP) information**
    The PSP document for V5R2 upgrades and data migrations is SF98166. Information within this PSP describes corrections that apply to migrations. Review this information before you migrate your data between servers.

*   **iSeries Server Migration**
    This book discusses the various topics that are involved in migrating to PCI technology. It also looks at other significant functions like High Speed Link (HSL) and concurrent maintenance capability. This book includes upgrade scenarios to assist with your planning. It explains such upgrade functions as load source migration and migrating to LPAR functions. And it describes the tower options that preserve an investment in hardware or that migrate to new technology.

- **iSeries Migration**
  This Web site includes information about the current migration and upgrade paths, a link to the Migration Redbook, and information about converting from SPC-attached I/O to PCI-attached I/O.

- **IBM FACT**
  This Web site contains the Find and Compare Tools (FACT) that deal with iSeries models and upgrade paths.

Planning

- **iSeries Planning**
  This Web site provides links to a variety of planning tools and information.

- **iSeries Upgrade Planning**
  This Web site provides information on iSeries products or features that may not be supported in future releases of the OS/400 operating system or on future iSeries models, Product Previews, and Statements of Directions.

Software Installation

- **V5R2 Memo to Users** (about 50 pages)
  This document provides information about software and hardware changes that could potentially affect your system operations.

- **Install the OS/400 release and related software** (about 82 pages)
  Use this information if you are upgrading your server with a new OS/400 release.

- **Software Installation** (about 250 pages)
  Use this information if you are upgrading your server with a new OS/400 release.

Logical partitions

- **Logical partitions**
  Logical partitions allow you to distribute resources within a single iSeries server to make it function as if it were two or more independent servers. This information steps you through the logical partition process, from creation to management.

- **Logical partitioning**
  This Web site contains an introduction to logical partitioning as well as information on planning, services, and education.

- **LPAR Validation tool**
  The LPAR Validation tool is a Web-based tool that assists users in planning for a partitioned environment.

Performance management

- **iSeries Performance Capabilities Reference**
  This reference provides highly technical information about server performance useful for performance benchmarking, capacity planning, and planning for server performance.

- **IBM Workload Estimator for iSeries**
  The Workload Estimator tool is a Web-based tool that provides users with a recommended model, processor, interactive feature, memory, and disk storage necessary for a mixed set of workloads.

Redbooks

- **iSeries Pocket Handbook** (about 100 pages)

  This pocket handbook serves as a quick reference for IBM Specialists, Sales Representatives, and Business Partners who are already familiar with the offerings of the iSeries server and OS/400. This document is ideal for providing customers and prospects with a quick view of the capacities and power of the iSeries product line as well as V5R2 and V5R1 software.

- **iSeries Handbook**

  This book provides hardware concepts and technical specifications for iSeries models and features.

- **iSeries System Builder**

  This book provides detailed information and configuration rules for iSeries models and features.

Services

- **Integrated Technology Services**

  This Web site contains information on the services IBM has available for helping you upgrade your server. These services can help you in planning for and upgrading to the new iSeries server. This service includes a planning session that concludes with a final hardware and software configuration and installation plan. The services specialist can also perform on-site services to upgrade the server to the latest release of OS/400, convert your SPD-attached I/O to PCI-attached I/O, perform disk unit migration, server consolidation and more.

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