IBM i
7.5

IBM i and related software
Data migrations

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 15.

Contents

Data migrations

An IBM i data migration is the process of moving data from one system or logical partition that is running IBM i to another system or logical partition running IBM i. When migrating data between systems, the source system and the target system have different serial numbers.

This information describes how to migrate your data to IBM i 7.6 from IBM i 7.4 or later.

If you are upgrading to a new system without changing the serial number, see the Upgrading the system and data migration topic for your system model in the IBM® Power Systems Hardware Information Center. If you are migrating data from one logical partition to another logical partition on the same system, follow the instructions in Restoring a logical partition (LPAR) to another LPAR–Checklist 22.

This information assumes that you are moving data from one system to another. If you are installing a new version of IBM i on the same system, it is not necessary to perform an explicit data migration. See Installing, upgrading, or deleting IBM i and related software.

Another migration tool is feature code 0205, which you can order at no charge with the new system. To use the feature, you must have a valid IBM Software Maintenance subscription for the source system. Feature code 0205 authorizes you to use the new version and release on the source system for the sole purpose of migrating your data. The earlier version and release must be reinstalled on your source system after the data migration is completed.

Related information

Installing, upgrading, or deleting IBM i and related software

IBM Power Systems Hardware Information Center

What's new for IBM i 7.6

Read about new or significantly changed information for the Data migrations topic collection.

Miscellaneous technical updates have been made since the previous publication.

How to see what's new or changed

To help you see where technical changes have been made, the information center uses:

- The » image to mark where new or changed information begins.
- The « image to mark where new or changed information ends.

In PDF files, you might see revision bars (|) in the left margin of new and changed information.

To find other information about what's new or changed this release, see the Memo to users.

PDF file for Data migrations

You can view and print a PDF file of this information.

To view or download the PDF version of this document, select **Data migrations**.

You can view or download these related topic PDFs:

Installing, upgrading, or deleting IBM i and related software
    You can use this information if you are upgrading your system with a new IBM i release.

Backing up your system
    You can use this information to back up your system before performing upgrade tasks. This allows you to recover a working configuration should you experience problems during any part of the upgrade.

Saving PDF files

To save a PDF on your workstation for viewing or printing:

1. Right-click the PDF link in your browser.
2. Click the option that saves the PDF locally.
3. Navigate to the directory in which you want to save the PDF.
4. Click **Save**.

Downloading Adobe Reader

You need Adobe Reader installed on your system to view or print these PDFs. You can download a free copy from the Adobe Web site (www.adobe.com/products/acrobat/readstep.html).

Data migration concepts

IBM i data migration is the movement of data from one system or logical partition to a new system or logical partition. When migrating data between systems, the source system and the target system have different serial numbers.

The data migration process includes planning, ordering, preparing for, and performing the data migration. Planning may require up to 6 weeks, depending on the complexity of your environment. Installing IBM i on the source system requires at least one hour. Migrating the data from the source system to the target system (sometimes referred to as the *managed system*) can normally be accomplished in up to 3 days.

Planning the IBM i migration

The time you spend planning for your IBM i data migration can help minimize your downtime and make performing the migration easier.

Related tasks

Performing the migration
To prepare for and perform a data migration from either a source system that supports IBM i 7.6 or a source system that does not support IBM i 7.6, follow these general procedures.

Preparing for the migration from a IBM i model that does not support IBM i 7.6
If you cannot install IBM i 7.6 on your source system, you can still migrate your data by saving your source system and then performing a full system recovery onto the target system.

Planning your hardware for data migration

Before you perform the actual IBM i data migration, identify your hardware requirements and prepare your hardware.

To prepare your hardware, perform these general tasks:

1. Order the target system with feature code 0205 or prepare your target system or logical partition.

   If the Licensed Internal Code is not preinstalled on the target system with IBM i 7.6, IBM recommends that you upgrade to the new release of the operating system on your source system before you migrate your data to the new system. Feature code 0205 authorizes you to use the new version and release on the source system for the sole purpose of migrating your data. You must reinstall the previous operating system on the source system after the data migration is complete.

2. Identify the hardware requirements for your data migration.

   See the IBM Power Systems Hardware Information Center for more information.

3. Identify any tape incompatibilities.

   You must ensure that you have a tape drive that is compatible with the target system. To determine if your tape drive is compatible, see the Storage Solutions Web site. To learn more about tape devices, see the Tape topic.

4. Ensure that you have a physical plan for the target system.

   The target system is going to be set up and running beside the source system for a period of time. There are physical planning and setup implications that pertain to the target system.

Related information

Storage Solutions

IBM Power Systems Hardware Information Center

Tape

Planning your software for IBM i data migration

Before you perform the actual IBM i data migration, identify your software requirements and prepare your software.

To prepare your software, perform these general tasks:

1. Evaluate disk storage space requirements.

   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.

2. Identify possible upgrade paths for licensed programs.

   When you install the new release of IBM i, some licensed programs might not work. 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 IBM i.

Related information

Ensuring the server meets disk storage requirements for upgrades

Planning for your IBM i console connection

If you plan to use a console after the data migration, ensure that the target console is prepared for your environment.

Perform these general tasks related to your console:

1. Choose a console that is supported by both the source and target systems.

   Know your current strategy for connecting a console to your system or logical partition. Your current connection strategy influences your planning activities. For more information about consoles, see the Managing IBM i consoles topic in the IBM Power Systems Hardware Information Center.

   ⚠️ **Attention:** An Operations Console directly attached to the system is not supported in IBM i 7.6. If you currently have an Operations Console directly attached to the system, you must change the console before you start to install or upgrade the IBM i software on your system. Failure to do so will cause the installation to fail with unpredictable results. For more information about changing consoles, see the Changing consoles topic in the IBM Power Systems Hardware Information Center.

2. Ensure that the target console is set up for your environment and is operational.

   The target console must be operational and tested as a stand-alone server before the data migration.

Related information

Connecting to your system

IBM Power Systems Hardware Information Center

Recording an IBM i data migration plan

When you complete the planning tasks, you should have a record of the data migration plan. If you have other individuals assisting you in your data migration, this plan will not only help them understand your situations but will also assist you if problems arise during the migration.

Include these tasks in your final data migration plan:

1. Record a final hardware and software plan that includes feature code 0205 (if possible). Record your disk storage capacity and compatible tape drive information.

   These items in the plan might cause you to change your software or hardware order.

2. Record a physical plan for the target server.

Performing the migration

To prepare for and perform a data migration from either a source system that supports IBM i 7.6 or a source system that does not support IBM i 7.6, follow these general procedures.

Before you begin these tasks, be sure you have completed the necessary planning. You can migrate your data by using one of these paths:

If you can load IBM i 7.6 on your source system, perform these procedures.

1. "Preparing for the migration with IBM i 7.6 on the source system" on page 4.
2. "Completing the migration with IBM i 7.6 on the source system" on page 6.

If you cannot load IBM i 7.6 on your source system, perform these procedures.

1. "Preparing for the migration from a IBM i model that does not support IBM i 7.6" on page 7
2. "Completing the migration from a IBM i model that does not support IBM i 7.6" on page 8

Related tasks
Planning the IBM i migration
The time you spend planning for your IBM i data migration can help minimize your downtime and make performing the migration easier.

Preparing for the migration with IBM i 7.6 on the source system

To prepare to migrate your IBM i data to a new target system when you can load IBM i 7.6 on the source system, follow these procedures.

Before you begin this procedure, complete the prerequisite task:

• Plan the migration.

Preparing the target system

1. Ensure that your console is set up and ready for your environment.

   For information, see Connecting to your system.

2. Verify that the target system is set up and is running with only the Licensed Internal Code and the base IBM i 7.6 operating system installed. (Order feature code 0205, or manually install the new system up to the point before you use GO LICPGM to install libraries QGPL and QUSRSYS and licensed programs.)

3. If you are configuring a system with logical partitions, create logical partitions on the target system and then install the Licensed Internal Code and IBM i 7.6 on each logical partition. Allow at least two additional hours to do this for each logical partition. For more information, see the Logical partitioning topic for your system model in the IBM Power Systems Hardware Information Center.

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 more information, see Configuring disks and disk protection.

Preparing the source system

1. Prepare to upgrade the IBM i release. Refer to Preparing to upgrade or replace IBM i software.

   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 WRKLIND and WRKDEVD 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, keep it.

2. Verify the status of the system library list, database cross-reference files, and the SQL catalog by signing on with QSECOFR or equivalent user then:

   a) For system ASP, run the following on the IBM i command line:

   - `CHGJOB LOG(4 00 *SECLVL) LOGCLPGM(*YES)`
   - `DSPLIBL OUTPUT(*PRINT)`
   - `SETASPGRP ASPGRP(*NONE)`
   - `RCLDBXREF OPTION(*CHECK)`
   - `CALL PGM(QSYS/QSQSQLCAT) PARM(*CHECK)`
   - `CALL PGM(QSYS/QSQIBMCHK)`
   - `DSPJOBLOG OUTPUT(*PRINT)`
   - `SIGNOFF`

   b) For each iASP attached, run the following on the IBM i command line:

   - `CHGJOB LOG(4 00 *SECLVL) LOGCLPGM(*YES)`
   - `SETASPGRP ASPGRP(asp_name)`
   - `RCLDBXREF OPTION(*CHECK)`
   - `CALL PGM(QSYS/QSQSQLCAT) PARM(*CHECK)`
   - `CALL PGM(QSYS/QSQIBMCHK)`
   - `DSPJOBLOG OUTPUT(*PRINT)`
   - `SIGNOFF`

   c) Check `DSPLIBL` to ensure QSYS2 is listed, if not then add QSYS2 to the system library using the `WRKSYSVAL QSYSLIBL` command, it should be directly below QSYS.

   d) If any job log messages reference the QSYS2 library from the CALL to QSQSQLCAT, missing items are reported from the CALL to QSQIBMCHK, or RCLDBXREF reports an error contact IBM i OS software support.

3. Print your system configuration information as follows:

   a) On the IBM i command line, enter PRTSYSINF and then print the resulting spooled files. 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. For instructions, see Printing the system configuration list.

   c) On the IBM i command line, enter `WRKDEVD`. Use option 6 (Print) to print the device descriptions.

   d) On the IBM i command line, enter `WRKCTLD`. Use option 6 (Print) to print the controller descriptions.

4. Save the entire system so you can restore it to its original state after you perform the data migration.

   Save the entire system by using option 21 of the GO SAVE command. For more information about the GO SAVE command, see Overview of the GO SAVE command. Specify the following options:

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

```
   c. Spooled file data ............*ALL
```

Note: Ensure that you have two copies of the backup media.

If the Licensed Internal Code is not preinstalled on the target system with IBM i 7.6, feature code 0205 authorizes you to use the new version and release on the source system for the sole purpose of migrating your data. To use feature 0205, you must have a valid software maintenance agreement on your source system. When the data migration is complete, you must reinstall the previous operating system on the source system to restore the system to its original state. To restore the system to its original state, follow the steps in Recovering your system. Use the recovery information for the release that you want to restore.

If feature 0205 was not ordered with your target system, use the other method for data migration in the topic "Preparing for the migration from a IBM i model that does not support IBM i 7.6" on page 7. Otherwise, continue with the next step here.

5. Complete the upgrade of IBM i 7.6.

   Refer to either Upgrading or replacing software using automatic installation or Upgrading or replacing software using manual installation.

Stabilizing the source system

1. Run the source system at the new release level for 2 weeks.
2. Refresh the PTF level.

   Check for new cumulative fix packs or high-impact pervasive (HIPER) fixes. For more information, see Using software fixes.
3. Print your system configuration information as follows:

   a) On the IBM i command line, enter PRTSYSINF and then print the resulting spooled files. 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. For instructions, see Printing the system configuration list.

   c) On the IBM i command line, enter WRKDEVD. Use option 6 (Print) to print the device descriptions.

   d) On the IBM i command line, enter WRKCTLD. Use option 6 (Print) to print the controller descriptions.
4. Save the entire system by using option 21 of the GO SAVE command. For more information about the GO SAVE command, see Overview of the GO SAVE command. Specify the following options:

   a) `Vary off the network server...*ALL`

   b) `Unmount file systems..........Y`

   c) `Spooled file data ............*ALL`

   Note: Ensure that you have two copies of the backup media.

The next step is to complete the migration. Go to "Completing the migration with IBM i 7.6 on the source system" on page 6.

Completing the migration with IBM i 7.6 on the source system

If you can load IBM i 7.6 on your source system, perform these procedures to migrate data to the target system or logical partition.

Before you begin this task, perform the steps in "Preparing for the migration with IBM i 7.6 on the source system" on page 4.

1. On the target system, perform the steps in Recovering your system to a different system. If a controller or device no longer has a valid resource on the system, follow the steps in the topic "Fixing hardware resource names after a data migration" on page 10 to make the necessary corrections.
2. Install any new licensed programs.

   For more information, see Installing additional licensed programs.

3. Print your system configuration information as follows:

   a) On the IBM i command line, enter PRTSYSINF (Print System Information) and then print the resulting spooled files. 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. For instructions, see Printing the system configuration list.

   c) On the IBM i command line, enter WRKDEVD (Work with Device Descriptions) and enter option 6 to print the device descriptions.

   d) On the IBM i command line, enter WRKCTLD (Work with Controller Descriptions) and enter option 6 to print the controller descriptions.

4. Save the entire system using option 21 of the GO SAVE command. For more information about the GO SAVE command, see Overview of the GO SAVE command. Specify the following options:

   a) `Vary off the network server...*ALL`

   b) `Unmount file systems..........Y`

   c) `Spooled file data ............*ALL`

   Note: Ensure that you have two copies of the backup media.

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

6. Tune the system performance.

   This ensures that your systems make the best use of the system resources and allows workloads to run as efficiently as possible. For details, see Tuning performance.

Preparing for the migration from a IBM i model that does not support IBM i 7.6

If you cannot install IBM i 7.6 on your source system, you can still migrate your data by saving your source system and then performing a full system recovery onto the target system.

Before you begin this procedure, complete these prerequisite tasks:

- Plan the migration.

- Review the introductory information about previous release-to-current release support. Refer to Previous release-to-current release support.

Related tasks
Planning the IBM i migration
The time you spend planning for your IBM i data migration can help minimize your downtime and make performing the migration easier.

Preparing target system

1. Verify that the target system is set up and is running with only the Licensed Internal Code and the base IBM i 7.6 operating system installed. (Order feature code 0205, or manually install the new system up to the point before you use GO LICPGM to install libraries QGPL and QUSRSYS and licensed programs.)

2. If you are configuring a system with logical partitions, create logical partitions on the target system and then install the Licensed Internal Code and IBM i 7.6 on each logical partition. Allow at least two additional hours to do this for each logical partition. For more information, see the Logical partitioning topic for your system model in the IBM Power Systems Hardware Information Center.

3. Ensure that your console is set up and ready.

   For information, see Connecting to your system

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 Configuring disks and disk protection.

5. Make sure that you have a copy of the distribution media for the target system.

Preparing the source system

1. Clean up the source system:
   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 WRKLIND and WRKDEVD 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, keep it.

   c) Clean up disk storage space. For more information, see Cleaning up disk storage space.
2. Ensure that you have the required fixes (also called program temporary fixes or PTFs). For more information, see Using software fixes.
3. Gather performance data.

   This gives you a basis for comparing performance before and after the data migration. For details, see Collecting system performance data.
4. On the IBM i command line, enter RTVSYSINF (Retrieve System Information).

   When you run this command, specify the library to use. Typically, you can specify the QUPGRADE library. If this library does not exist, create it with the Create Library (CRTLIB) command.
5. Print your system configuration information:
   a) On the IBM i command line, enter PRTSYSINF and then print the resulting spooled files. 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. For detailed instructions, see Printing the system configuration list.
   c) On the IBM i command line, enter WRKDEVD and enter option 6 (Print) to print the device descriptions.
   d) On the IBM i command line, enter WRKCTLD and enter option 6 (Print) to print the controller descriptions.
   e) Job scheduler entries will not be restored on the target system. Use the print option on the Work with Job Scheduler Entries (WRKJOBSCDE) command to record your current job scheduler entries. Then you can manually re-create them on the target system.
6. Save the entire system by using option 21 of the GO SAVE command. For more information about the GO SAVE command, see Overview 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`
   c) `Spooled file data ............*ALL`

      Note: Ensure that you have two copies of the backup media.

The next step is to complete the migration. Go to "Completing the migration from a IBM i model that does not support IBM i 7.6" on page 8.

Completing the migration from a IBM i model that does not support IBM i 7.6

If you cannot load IBM i 7.6 on your source system, perform these procedures to migrate data to the target system or logical partition.

Before you begin this task, perform the steps in "Preparing for the migration from a IBM i model that does not support IBM i 7.6" on page 7.

If you did not get a new system with feature code 0205, follow steps 1 through 38 in Restoring previous release user data to a new system on the target system. When you complete those steps, continue with step "8" on page 9 in this procedure.

If your target system is set up with only the Licensed Internal Code and IBM i 7.6 installed (feature code 0205), follow these steps.

1. Perform a manual IPL
2. At the IPL Options display, 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 display, select **N** to not enable automatic configuration.
4. On the Define or Change the System at IPL display, do the following steps:

   a) Select option 3 (System value commands).

   b) On the System Value Commands display, select option 3 (Work with System Values).

   c) On the Work with System Values display, enter 2 to change the following system values:

      - Change QALWOBJRST to *ALL (Allow all object restore options).
      - Change QFRCCVNRST to 0 (Do not convert anything).
      - Change QINACTITV to *NONE (The system does not check for inactive interactive jobs).
      - Change QIPLTYPE to 2 (Attended IPL, console in debug mode).
      - Change QJOBMSGQFL to *PRTWRAP (Wrap the job message queue and print the messages that are being overlaid because of wrapping).
      - Change QJOBMSGQMX to a minimum of 30 and 64 is suggested (Job message queue maximum size of 30 MB).
      - Change QLMTDEVSSN to 0 (Do not limit).
      - Change QLMTSECOFR to 0 (Explicit device access not needed).
      - Change QLOGOUTPUT to *JOBLOGSVR (The job log will be produced by a job log server).
      - Change QMAXSIGN to *NOMAX (No maximum number of sign-on attempts).
      - Change QPFRADJ to 2 (Performance adjustment at IPL and automatic adjustment).
      - Change QPWDEXPITV to *NOMAX (A password can be used an unlimited number of days).
      - Change QSCANFSCTL to *NOPOSTRST (After objects are restored, they will not be scanned just because they were restored).
      - Change QVFYOBJRST to 1 (Do not verify signatures on restore. Restore all objects regardless of their signature).

   d) After the system changed the system values, press F3 (Exit) twice to return to the Define or Change the System at IPL display

5. On the Define or Change the System at IPL display, press F3 to exit and continue the IPL.
6. On the Change Password display, either type the current password (if this is not the first IPL), or type QSECOFR as the current password. Enter a new password. Reenter the password to verify and press Enter.
7. Perform steps 31 through 38 in the topic Restoring previous release user data to a new system.
8. If a controller or device no longer has a valid resource on the system, follow the steps in the topic "Fixing hardware resource names after a data migration" on page 10 to make the necessary corrections.
9. Install any new licensed programs.

   For more information, see Installing additional licensed programs.
10. Follow the steps in Checklist: Completing the IBM i upgrade or replacement.
11. Add job scheduler entries using the Add Job Schedule Entry (ADDJOBSCDE) command and the information you printed from your source system.

    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 server by entering WRKCFGSTS *NWS and selecting option 1 to vary on each server.

12. Print your system configuration information:

      a) On the IBM i command line, enter PRTSYSINF and then print the resulting spooled files. 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. For instructions, see Printing the system configuration list.

      c) On the IBM i command line, enter WRKDEVD (Work with Device Descriptions) and enter option 6 to print the device descriptions.

      d) On the IBM i command line, enter WRKCTLD (Work with Controller Descriptions) and enter option 6 to print the controller descriptions.

13. Save the entire system using option 21 of the GO SAVE command. For more information about the GO SAVE command, see Overview of the GO SAVE command. Specify the following options:

      a) `Vary off the network server...*ALL`

      b) `Unmount file systems..........Y`

      c) `Spooled file data ............*ALL`

    Note: Ensure that you have two copies of the backup media.

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

15. Tune the system performance.

    This ensures that your systems make the best use of the system resources and allows workloads to run as efficiently as possible. For details, see Tuning performance.

Fixing hardware resource names after a data migration

Following a data migration, you may have hardware resources that are in different locations than they were on your source server.

To fix these hardware resource names, follow these steps:

1. At the IBM i command line, enter WRKHDWPRD.

2. On the Work with Hardware Products display, select option 5 (Change description label locations) and press Enter.

3. Read the information about the Using Change Label Locations display and press Enter.

4. Compare the label information on the display with the source server's label locations. Label information matches if the Label column on the display matches that of the source server. Label information does not match if any one of the following is true:

    • The display has label information, but the source server did not have label information in that location.

    • The source server label information does not match the information found in the *Label* column on the display.

    • *NONE appears in the Label column on the display, and there is label information for the source server.

    Note: When *NONE appears in the Label column for a controller or device that was added or upgraded, select option 2 (Change). Then select the correct label description from the list provided. If you experience any problems, call your service provider.

    • *INCORRECT or *INVALID appears in the Label column. This means that the type and model number of the hardware resource information does not match the type and model of the

configuration description that is currently associated with that resource. The server cannot vary on the configuration description.

- *INCORRECT -- where the physical location is also '**'. This identifies a controller or device description that no longer has a valid resource on the server.

5. If there are any locations where the server label information is not the same as the (physical) label, on the Change Description Label Locations display, type 2 in the Opt column for each location that requires a label change. Press Enter. The Change Description Label display appears.

   Note: You may make more than one selection at a time, but if More... appears on the bottom of the display, do not press Enter. Instead, page forward to select the remaining labels.

6. A list of possible label names is shown. To select the label name (on the display) that matches the label that was on the source server, type 1 in the Opt column for each location that you want to change and press Enter.

   Note: If you cannot find the label (on the display) that matches the label on the source server, contact your service representative.

7. If you chose to change more than one label, the Change Description Label display appears for the next label. A message at the bottom of the display indicates whether the previous change was successful.

8. For all the labels that need a change, repeat the previous three steps.

9. After you change the last label, the Change Description Label Locations display appears with the updated information. A message at the bottom of the display indicates whether the last change was successful. If More... appears on the bottom of the display, scroll forward to view more information.

10. Press the F17 key on the Change Description Label display to request a printout of the new information for your records.

    Note: The printout will be in the default output queue for your workstation. You can print it later when you vary on your printer devices and start printer writers.

11. Verify that the labels on the printout match the labels in the Label column on your source server. If you find any errors, go back to step and repeat the steps.

⚠️ **Attention:** Do not exchange cards for problem analysis purposes. Card and device serial numbers are tied to the server configuration.

Scenarios: Data migration

These scenarios show different migration situations for moving data to another system.

Migrating from IBM i 7.3 on a Power Systems model 520 to IBM i 7.6 on a Power Systems model 730 system

In this scenario, you have a model 520 system, you are running IBM i 7.3, and you want to migrate your data to a Power Systems model 730.

What to do:

You cannot install IBM i 7.6 on your model 520. To migrate your data, you need to save the data to a tape drive that is compatible with model 730 and then restore the data on the model 730.

To perform this data migration, complete the steps in the following topics:

- "Planning the IBM i migration" on page 2
- "Preparing for the migration from a IBM i model that does not support IBM i 7.6" on page 7
- "Completing the migration from a IBM i model that does not support IBM i 7.6" on page 8

Migrating from IBM i 7.3 on a Power Systems model S814 to IBM i 7.6 on a Power Systems model S914

In this scenario, you have a Power Systems model S814, you are running IBM i 7.3, and you want to migrate your data to an IBM Power Systems model S914.

What to do:

To migrate your data, you can install IBM i 7.6 on your model S814. You then need to save the data from your model S814 to tape drives that are compatible with the model S914, and restore the data on the model S914.

To perform this data migration, complete the steps in the following topics:

- "Planning the IBM i migration" on page 2
- "Preparing for the migration with IBM i 7.6 on the source system" on page 4
- "Completing the migration with IBM i 7.6 on the source system" on page 6

Upgrading to a new version of IBM i on your system
In this scenario, you are running IBM i 7.4 or i 7.4 on your system and you want to upgrade to i 7.6.

What to do:

If you are upgrading to a new version of IBM i on the same system, it is not necessary to perform an explicit data migration. You can follow the steps in Checklist: IBM i software upgrade or replacement readiness to upgrade to i 7.6.

Upgrading your system to a new IBM Power Systems model
In this scenario, you want to upgrade your system to a newer model.

What to do:

If you are upgrading to a new IBM Power Systems model without changing the serial number, it is not necessary to perform an explicit data migration. You can follow the directions in the Upgrading the system and data migration topic for your system model in the IBM Power Systems Hardware Information Center.

If you are moving hardware to your new system, then your data will transfer. If your hardware is not compatible with your new system, you can perform a data migration.

To perform this data migration, complete the steps in the following topics:

- "Planning the IBM i migration" on page 2
- "Preparing for the migration with IBM i 7.6 on the source system" on page 4
- "Completing the migration with IBM i 7.6 on the source system" on page 6

Migrating data from one logical partition to another
In this scenario, you want to migrate data from one logical partition to another on your system.

What to do:

If you are migrating data from one IBM i logical partition to another logical partition on the same system, follow the instructions in Restoring a logical partition (LPAR) to another LPAR–Checklist 22.

Related information
IBM Power Systems Hardware Information Center

Troubleshooting the data migration

This information contains information related to specific data migration problems and how to resolve them.

Error messages and reference codes (also known as system reference codes or SRCs) let you know that an error occurred during the process.

Table 1. Data migration problems and resolutions	
Description	**Resolution**
Reference code A900 2000 appears on the control panel display.	This reference code appears if the QIPLTYPE is set to 2 or if the console display has no device description. This reference code and message are normal during the data migration procedure. The reference code disappears when you perform a normal IPL. If no workstation on your system is operational when you receive reference code A900 2000, call your authorized 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 system when you migrate from a system that does not support IBM i 7.6	You must manually re-create the job scheduler entries on the target system. If you did not print these entries before you migrated your data, you can obtain them from the source system.
The target system cannot read the tapes you used to save the data from your source system.	Save the data from the source system using a tape drive that is compatible with the target system.

Related information for IBM i data migration

Product manuals, IBM Redbooks® publications, websites, and other information center topic collections contain information that relates to the Data migration topic collection. You can view or print any of the PDF files.

Websites

- **IBM Planning**

  This website provides links to a variety of planning tools and information.

- **Support Planning: Migration and Upgrades**

  This website provides information about products or features that may not be supported in future releases of the IBM i operating system or on future models, Product Previews, and Statements of Directions.

- **IBM Systems Workload Estimator**

  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.

Other information

- **Memo to Users**

  This document provides information about software and hardware changes that can potentially affect your system operations.

- **Installing, upgrading, or deleting IBM i and related software**

  Use this information if you are upgrading your system with a new IBM i release.

- **Preventive service planning (PSP) information**

  Information within the PSP describes corrections that apply to migrations. Review this information before you migrate your data between systems.

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