
Chapter 1. Print Support in JDE OneWorld Xe

For more than 22 years, J.D. Edwards & Company has provided innovative and flexible business solutions essential to running complex and fast-moving multi-national organizations. It has grown into the leading provider of agile and collaborative solutions for the Internet economy.

JDE OneWorld Xe is a network-centric solution that separates business rules from the underlying technology. As new technologies evolve, customers can add them to the framework without disrupting their ongoing business.

In October of 2000, J.D. Edwards announced a significant new release of their OneWorld Xe product. One of the enhancements was the addition of support to output AFPDS from the OneWorld report generator. Previous to that, only PCL, PostScript, or unformatted Line Printer output in EBCDIC or ASCII would be generated. Most available documentation describes printing in PCL or PostScript. This document focuses on configuration tasks and usage considerations that are specific to AFPDS and EBCDIC Line Printers. In addition, this section describes how these two types of output can be used and enhanced for enterprise printing.

1.1 General print setup

When J.D. Edwards OneWorld Xe is used to generate a report, it first creates the output in PDF format in a physical file. It then uses the various transformations as selected in the Printer Setup to convert the output to PCL, PostScript, Line Printer data (EBCDIC or ASCII) or AFPDS.

Detailed information, including sample screen shots, on configuring printing in J.D. Edwards OneWorld can be found in the redbook *J.D. Edwards OneWorld Implementation for AS/400*, SG24-5195. The process is summarized in the following steps:

1. From the main OneWorld display, select GH9013 to bring up the **Printers** menu.
2. Double-click the **Work With Physical Printers** option.
3. Click **Add Printer**.
4. A welcome screen appears. Click **Next**.
5. Enter the Platform Type (AS/400) and the corresponding output queue and library name to associate with the JDE printer definition. Click **Next**.

Note: The AS/400 or iSeries output queue, and its corresponding printer device description, must be created separately as an iSeries task. This is not done by the J.D. Edwards software.

6. Enter the Printer Model and a description of the printer location. Select the default paper type. Click the **Details** tab.
7. You are presented with the **Printers - [Printer Setup]** Details panel. At this point, you have the opportunity to select the data stream or Printer Definition Language that you want to generate. This is described in greater detail in 1.1.1, "AFPDS printing from JDE OneWorld Xe" on page 4, and 1.1.2, "Line printing from JDE OneWorld Xe" on page 6.

8. After you complete the printer setup, you are taken back to the panel that was displayed in Step 3. You can click **Define Default Printer** to set it as the default for the appropriate user or group.
9. On the work with Default Printers panel, click the **Add** button.
10. Enter the appropriate User ID, Printer Name (library/output queue), Host Name, and Object Status. Click the **OK** button.

1.1.1 AFPDS printing from JDE OneWorld Xe

The latest release of JDE One World provides support for generating AFPDS. This new support gives iSeries users of JDE OneWorld the ability to print to a wide range of IPDS printers. This offers the fidelity and recoverability not usually offered by PCL or PostScript print solutions. See the section on Print Services Facility/400 in the Printing Software chapter. for more information on the advantages of printing AFPDS spooled files using PSF/00.

1.1.1.1 Configuration

Follow the normal J.D. Edwards OneWorld menus as described in 1.1, "General print setup" on page 3, until you reach the **Printers - [Printer Setup]** panel. Click the **Details** tab to see the panel shown in Figure 1.

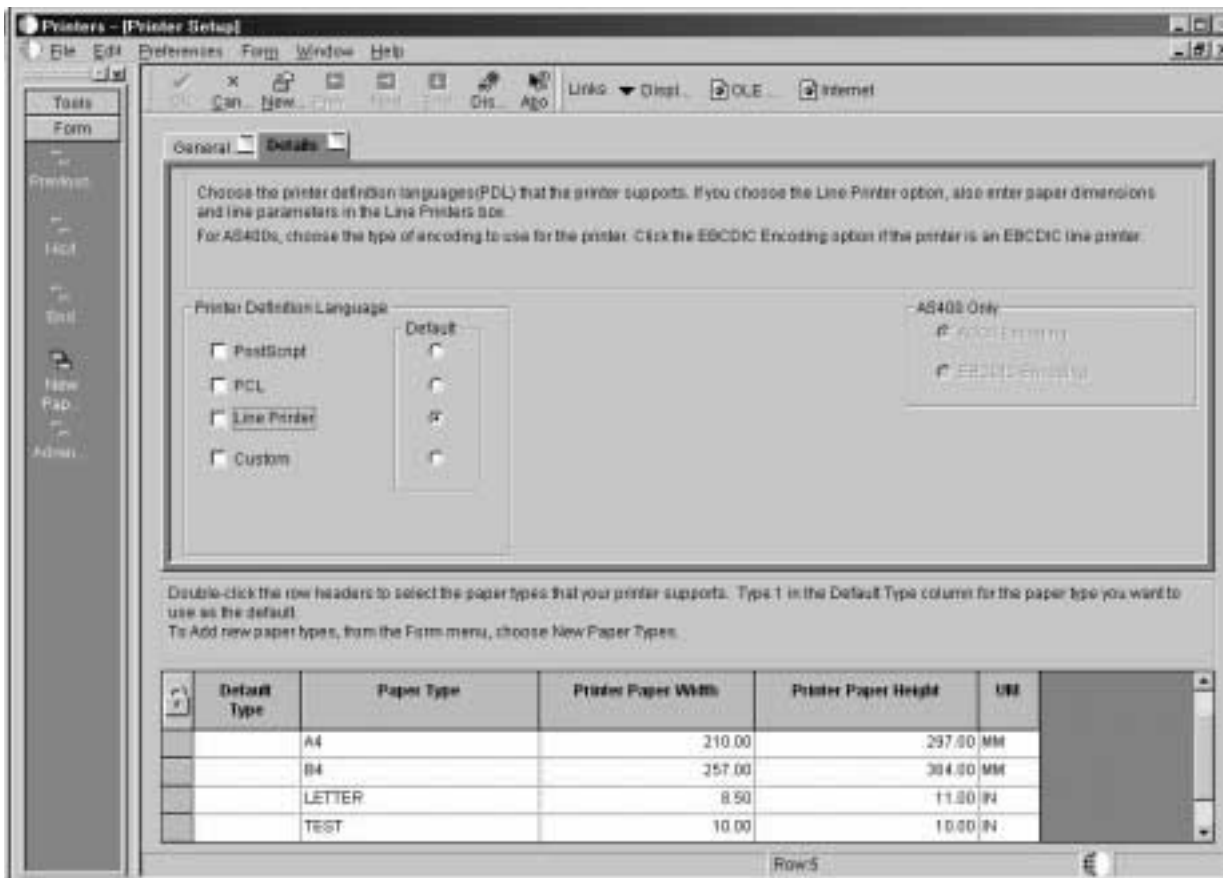


Figure 1. Printers - [Printer Setup]

For AFPDS printing, select **Custom** under Printer Definition Language, and click the corresponding radio button to make it the Default.

At this point, you must complete the customization. Click on **Advanced** from the **Form** menu on the left of the display. The **Printers- [Work with Conversion Programs]** panel appears as shown in Figure 2.

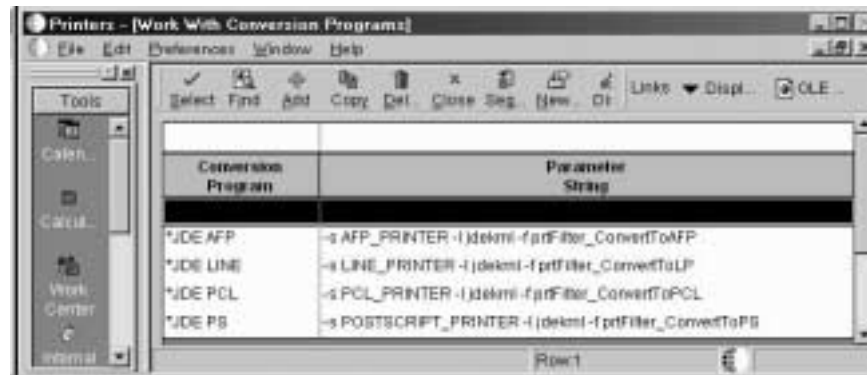


Figure 2. Printers - [Work With Conversion Programs]

Highlight the *JDE AFP Conversion program from this panel and click **Select**. If the AFP conversion program is not shown (which may be the case if you upgraded to JDE OneWorld Xe from an earlier release), you must add it. Click the **Add** icon to display the Printers - [Advanced Conversion Program] panel as shown in Figure 3.



Figure 3. Printers - [Advanced Conversion Programs]

Enter the following information in the fields shown in Figure 3:

- Conversion Program: *JDE AFP
- Parameter String: -s AFP_Printer -l jkekml -f prtFilter_ConvertToAFP

For other printer configuration tasks, see *J.D. Edwards OneWorld Implementation for AS/400*, SG24-5195, and other documentation available from J.D. Edwards. Remember that you associate the JDE OneWorld printer definition with an iSeries output queue. This output queue, in turn, is associated with a printer device description that is configured with TYPE(*IPDS) and AFP(*YES). It is the user's responsibility to create the iSeries device description. This is not done automatically by JDE software.

1.1.1.2 Considerations

Almost all functions that are supported through the JDE print interface can be printed on an IPDS printer that is configured with AFP(*YES). There are some important restrictions of which users must be aware:

- The text output is generated using host outline font resources. These are supported on most of the current IBM laser printer product line, such as the Infoprint 20, 21, 32, 40, 60, 62, 2000, 3000, and 4000.

If you are printing to a Network Printer 12, 17, or 24, Print Services Facility converts the request for a host font resource to the corresponding printer resident outline font. Fractional point sizes are not supported on these printers, and rounding may impact column alignment.

Older laser printers and impact printers do not support outline fonts, and they do not work in this environment.

- Although JDE supports color printing, this support is not transferred to the AFP support.
- Bar Codes are not supported.
- There is no support for DBCS.
- There is no support for overlays as there is no place to specify the overlay in the JDE panels.
- Paper trays cannot be configured with the JDE printer setup. Output defaults to the primary bin of your printer.
- For those who are familiar with the concept of form definition, understand that an inline form definition is generated as part of the spooled file. This prevents any external form definition from acting on the spooled file.

Note: Print Services Facility/400 (PSF/400) is required to print AFPDS spooled files to a printer configured with TYPE(*IPDS) and AFP(*YES).

AFPDS output is also supported on other OneWorld Xe platforms, such as AIX or Windows NT. The appropriate Infoprint Manager software is required on those platforms to print AFPDS spooled files.

1.1.1.3 When to use J.D. Edwards support for AFPDS printing

AFPDS provides the type of mission critical print that many businesses require. This was previously unavailable on earlier versions of the JD Edwards solutions. If page level recovery and print fidelity is important to your business, and the formatting provided from within JD Edwards OneWorld Xe is sufficient for your needs, then use the AFPDS support described in this section. This provides you with a robust printing solution with the least amount of effort.

1.1.2 Line printing from JDE OneWorld Xe

J.D. Edwards OneWorld Xe supports the generation of unformatted line data in EBCDIC or ASCII format. If EBCDIC is selected, the data is placed in a spooled file that is designated with DEVTYPE(*SCS). ASCII spooled files are generated with DEVTYPE(*USERASCII).

This type of output can be sent to traditional iSeries server impact line printers (such as 4230 or 6400 in SCS mode), or to other printers in ASCII mode.

SCS spooled files can be reformatted and enhanced using the AFP tools described in Formatting your variable data in the software chapter, and Building or obtaining external resources in the Printing Software chapter.

1.1.2.1 Designing a OneWorld report to run on a line printer

When you run a report for printing on a line printer, or a report to be passed to other tools for future processing, you must follow certain guidelines to ensure that the information is formatted on the page correctly. If a report is to be used for line printing and printing to other types of output, you should create separate versions of the report for each destination type.

In the Report Design Tool, you must make the following changes:

1. Set the vertical grid spacing in the Alignment Grid form to 16.
2. Select a fixed pitch font, such as Courier New.
3. Adjust the width of some fields on the report as necessary. Repeat this action for any Group sections in the report.
4. Align the report to the Top Edge.

For more information on these steps, refer to the following JDE OneWorld documents:

- *Enterprise Report Writing Guide*
- *Printing OneWorld Reports in the System Administration Guide.*

1.1.2.2 Configuring a JDE OneWorld Xe for line printing

The initial configuration step for line printing are the same as the steps for AFPDS until you get to the **Printers - [Printer Setup]** panel as shown in Figure 1 on page 4. Select **Line Printer** under Printer Definition Language. You are prompted to select either ASCII or EBCDIC encoding (this option is for iSeries servers only; other JDE platforms support only ASCII encoding).

You are then asked to select the values for characters per inch, lines per inch, characters per page, and lines per page that are used by this printer, as shown in Figure 4 on page 8. These values determine the paper dimensions that your line printer uses when printing OneWorld reports. If the same physical printer is used to print different applications using different values for these settings, you must set multiple JDE printer definitions. These, in turn, point to different iSeries output queues, which could point to the same A/400 printer device.

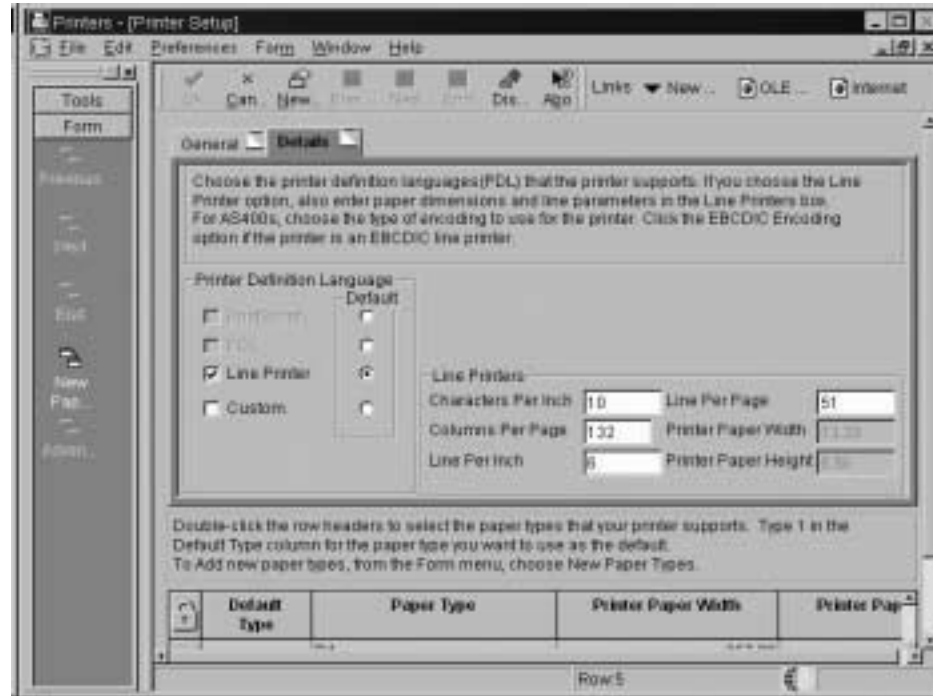


Figure 4. Setting up a Line Printer

1.1.2.3 Enhancing your JDE OneWorld Xe output

Once you have generated SCS spooled files on your iSeries server, you can send them to a line printer, such as a 6400 impact printer. At this point, it is also possible to use some of the solutions described in the *Formatting your data* section in the *Printing Software* chapter to convert the SCS spooled files to AFP and print them on a laser printer. This allows you to take advantage of the wide variety of formatting options.

This provides two advantages. The first is the ability to output to an IPDS printer and have the recoverability associated with Print Services Facility/400 printing. The second is that the limitations described 1.1.1.2, "Considerations" on page 6 no longer apply. You are able to use any type of font that your printer supports. You can convert fields to bar codes, add overlays, and add graphics. Fields can be moved around or suppressed. You can print multiple copies of selected pages, and you can control the paper source for each copy.

The easiest route is probably APU, since the spooled files coming out of JDE are in SCS format. See the description of APU in the *Printing Software* chapter. In addition, it is a fairly easy task to set up the APU monitor to match up the spooled file with the required APU print definition. A separate tool (such as AFP Utilities/400) is required to create other fixed resources, such as overlays or page segments.

Infoprint Designer for iSeries or PPFA can be used to create form definitions and page definitions to enhance the way the output looks. However, those objects require that the spooled file be in LINE format. This means that you must write or acquire a monitor program to catch any new spooled files as they arrive in the output queue, copy them to a physical file, and then copy them back to a new printer file. See the *Output Queue Monitor Appendix* for tips on writing such a monitor program. Infoprint Designer includes components for the creation of

overlays and page segments. If you use PPFA, you require a separate tool to create those resources.

1.1.2.4 Differentiating the output

Before you apply either APU, PPFA, or Infoprint Designer formatting objects to the SCS output from J.D. Edwards OneWorld Xe, you must identify which resources are going to be used with which spooled file. In most cases, the spooled file name corresponds to the application that created it. You can use this information in the APU monitor or if you use a custom monitor to work with Infoprint Designer for iSeries objects or PPFA (Figure 5).

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Work with Output Queue

Queue:  DEVDES3A      Library:  QGPL      Status:  HLD/WTR

Type options, press Enter.
 1=Send  2=Change 3=Hold 4=Delete 5=Display 6=Release 7=Messages
 8=Attributes      9=Work with printing status

Opt  File      User  User Data  Sts  Pages  Copies  Form Type
  R0008P      JDEOW      RDY    1*      1    *STD
  R0513P      JDEOW      RDY    1*      1    *STD
  R47071      JDEOW      RDY    1*      1    *STD

Bottom

Parameters for options 1, 2, 3 or command
===>
F3=Exit  F11=View 2  F12=Cancel  F20=Writers  F22=Printers

```

Figure 5. Sample output queue showing different spooled file names

1.1.2.5 When to use Line Printer output from J.D. Edwards OneWorld Xe

This is the obvious choice when printing to impact printers, either traditional EBCDIC (or SCS) printers attached directly to the iSeries server, or ASCII printers attached remotely.

This method can also be used if you want the recoverability available when printing to an IPDS printer with PSF/400 and you also want to format the output beyond what is available today using the new AFPDS print support provided with J.D. Edwards OneWorld Xe. Features that may lead to this decision would include adding an electronic form, barcodes, and complex reformatting of the data.

