



Hardcoding Page Orientation using a Modified WSCST Object

Technote

Note: This document was previously entitled "Hardcoding Print Orientation".

This document provides instructions for forcing spooled files to print with a particular paper orientation (such as portrait or landscape) when printing through Host Print Transform (HPT). This is done by retrieving and modifying a Workstation Customization Table (WSCST) and changing the values in the Paper Orientation (PRTORIENT) tags.

Caution: These instructions are provided **as is**. Any assistance with editing the Workstation Customization Table must be done through a consulting agreement.

Basic Steps for Creating and Using a Workstation Customization Object

The following are the basic steps for creating and using a Workstation Customization Object (WSCST). Regardless of the particular issues you are attempting to resolve, these steps must always be taken. This information is intended to provide a 'quick start' to creating a WSCST object for users who have at least some familiarity with creating them and with configuring printers.

Note: Additional, in-depth details for creating a WSCST object can be found in the following document:

8692422, [Instructions for Modifying a Workstation Customization Object \(WSCST\)](#):

The following are the basic 'quick start' steps.

Step 1: Retrieve the WSCST source code. Type the following command on the operating system command line:

Important Note: Use the Manufacturer type and model (MFRTYPMDL) that is appropriate for your printer. Also, the Source member (in the following example, **HP4**) is a name that is appropriate to your customizing object. This is what you will be calling your workstation customizing object in Step 3.

```
RTVWSCST DEVTYPE(*TRANSFORM) MFRTYPMDL(*HP4)
SRCMBR(HP4) SRCFILE(QGPL/QXTSRC)
```

Press the Enter key.

Step 2: Edit the source code by using PDM or SEU:

o To use PDM, on the operating system command line type the following:

```
WRKMBRPDM FILE(QGPL/QXTSRC) MBR(HP4)
```

Press the Enter key. Select Option 2 to edit.

o To use SEU, on the operating system command line type the following:

```
STRSEU SRCFILE(QGPL/QXTSRC) SRCMBR(HP4)
```

Press the Enter key.

Make any changes necessary changes to the WSCST object source. Refer to the following section [Changing the Paper Orientation \(PRTORIENT\) Tags in the WSCST Source Code](#) to make your changes, then save and

Document information

Product categories:

Software

Operating System

i family of operating systems (formerly i5/OS family)

Attached devices

Operating system(s):

OS/400

Software version:

V4R4M0, V4R5M0, V5R1M0, V5R2M0, V5R3M0, V5R4M0, V6R1M0

Reference #:

862566970060EC34

IBM Group:

iSeries

Modified date:

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exit. Continue with Step 3.

Step 3: Create the WSCST object using the **CRTWSCST** command. On the operating system command line, type the following:

Important Note: Match the SRCMBR name from Step 1 to the WSCST object name that is created in this step.

CRTWSCST WSCST(QGPL/HP4) SRCFILE(QGPL/QTXTSRC)

Press the Enter key.

Step 4: Add the WSCST to the printer configuration by using the Change Device Print command (**CHGDEVPRT**), the Change Output Queue command (**CHGOUTQ**), or by changing the PC5250 printer emulation session configuration.

- o To add the WSCST to a device description, on the operating system command line type the following:

```
CHGDEVPRT DEVD(device_name) TRANSFORM(*YES)
MFRTYPMDL(*WSCST) WSCST(QGPL/HP4)
```

Press the Enter key.

- o To add the WSCST to a remote output queue description, on the operating system command line type the following:

```
CHGOUTQ OUTQ(queue_name) TRANSFORM(*YES)
MFRTYPMDL(*WSCST) WSCST(HP4)
```

Press the Enter key.

- o To add the WSCST to a PC5250 printer emulation session, do the following:
 - a In the PC5250 printer session, click on **Communication > Configure**.
 - b Click on the Setup button.
 - c In the Configure PC5250 Printer Emulation window, select the box next to **Transform Print Data to ASCII on the iSeries** and select the Printer Model value of *WSCST.
 - d In the same window, specify the name of the WSCST in the Customizing Object parameter and the library where it is found in the Library parameter (for example, Customizing Object HP4 and Library QGPL).
 - e Click OK three times.
 - f Click **File > Save** to save the configuration.

Note: If any changes are made to the WSCST object source code after the CRTWSCST command has been issued, it is necessary to issue the CRTWSCST command again. The printer writer must be ended and restarted for the changes to take effect.

Changing the Paper Orientation (PRTORIENT) Tags in the WSCST Source Code

If orientation is causing a problem, modify the **:PRTORIENT** tags. Do not change the 'ORIENT = ' values, because the writer needs these to send the 'DATA = ' value. For instance, if printing landscape and portrait is required, find the 'ORIENT = LANDSCAPE' and change the data value to the same as in the 'ORIENT = PORTRAIT' tag.

The default setting for the Paper Orientation (PRTORIENT) tags in the WSCST source code for *HP4 is as follows:

```
:PRTORIENT
  ORIENT=PORTRAIT
  DATA = '1B266C304F'X.
:PRTORIENT
  ORIENT=LANDSCAPE
  DATA = '1B266C334F'X.
:PRTORIENT
```

```
ORIENT=RTT180
DATA = '1B266C324F'X.
:PRTORIENT
ORIENT=RTT270
DATA = '1B266C314F'X.
```

There is a **:PRTORIENT** tag for each of the four orientations: PORTRAIT (0 degrees), LANDSCAPE (90 degrees), RTT180 (180 degrees or upside-down portrait), and RTT270 (270 degrees or landscape right). If you need to change one of them, read the printer documentation for correct control string or just copy the DATA value from one of the other tags. Change only the DATA value.

Examples of Changing the Paper Orientation (PRTORIENT) Tags

To print everything in portrait, set the DATA portion to '1B266C304F'X for all four orientations. For example:

```
:PRTORIENT
ORIENT=PORTRAIT
DATA = '1B266C304F'X.
:PRTORIENT
ORIENT=LANDSCAPE
DATA = '1B266C304F'X.
:PRTORIENT
ORIENT=RTT180
DATA = '1B266C304F'X.
:PRTORIENT
ORIENT=RTT270
DATA = '1B266C304F'X.
```

To print landscape with the opposite orientation, for instance if using pre-punched paper and the holes are on the wrong side, swap the DATA portions for the LANDSCAPE and RTT270 orientations. For example:

```
:PRTORIENT
ORIENT=PORTRAIT
DATA = '1B266C304F'X.
:PRTORIENT
ORIENT=LANDSCAPE
DATA = '1B266C314F'X.
:PRTORIENT
ORIENT=RTT180
DATA = '1B266C324F'X.
:PRTORIENT
ORIENT=RTT270
DATA = '1B266C334F'X.
```

To create the WSCST object and implement it, perform Steps 3 and 4 (above).

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