



Instructions for Modifying a Workstation Customizing Object (WSCST)

Technote

Several documents have been created on specific modifications to workstation customizing objects (or WSCSTs) for use with Host Print Transform (HPT). This document was created to provide standard instructions for:

- o Deciding which MFRTYPMDL setting to use as a base,
- o Retrieving the source for the system-supplied workstation customizing object,
- o Modifying the workstation customizing object source,
- o Creating the modified workstation customizing object, and
- o Using the modified workstation customizing object with a *LCL or *RMT device description, a *LAN device description, a Remote Output Queue (RMTOUTQ) , a Personal Communications 5250 (PC5250) printer session, or a third-party printer emulation package.

The section on using the modified workstation customizing object consists of links to other documents (for example, one document is for using the modified workstation customizing object with a *LCL or *RMT device description, and another document is for using the modified workstation customizing object with a *LAN device description, and so on.

Note: A single modified workstation customizing (or *WSCST) object can be used with any number of *LCL or *RMT device descriptions, *LAN device descriptions, Remote Output Queues (RMTOUTQs), Personal Communications 5250 (PC5250) printer sessions, or third-party printer emulation sessions. However, if any changes are made to the WSCST source code and the *WSCST object is recreated, then each writer using that modified *WSCST object must be ended and restarted for the change to take affect for that writer.

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

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Deciding Which MFRTYPMDL Setting to Use as a Base

First, you decide which Manufacturer type and model (MFRTYPMDL) setting to use as a base for the modified workstation customization object (WSCST). If you are already using Host Print Transform (HPT) to print to this printer, then display the printer device description using the Display Device Description (**DSPDEV**) command or display the Remote Output Queue using the Work with OUTQ Description (**WRKOUTQ**) command and look at the value for the Manufacturer type and model (MFRTYPMDL) parameter .

If you do not know which WSCST to retrieve, type the **RTVWSCST** command, and press the **F4** key to prompt the command. Type ***TRANSFORM** for the device type, and press the **Enter** key, then press the **F4** key to prompt on the manufacturer type and model. This gives you a long list of all supported workstation customization tables. Compare this to the user's guide for your printer to decide which is the best choice for your printer. When in doubt, configure your printer to use Host Print Transform before modifying a WSCST to verify that it prints correctly. Once you have decided which manufacturer type and model works for your printer, proceed to the next step.

The examples to follow are using a manufacturer type and model value of ***HP4** (which is used for HP LaserJet 4 and compatible printers) and a source member value of **HP4** .

Retrieving the Workstation Customizing Object (WSCST) Source

You are ready to retrieve the source for the system-supplied workstation customizing object. It is recommended that you retrieve the source into a QXTSRC file that is in a library in your System Library List. This makes it easier to configure the device description because it defaults the library name of the WSCST to ***LIBL**. The best choice is probably the library QGPL because it is typically in the System Library List and generally already has a QXTSRC file.

The Retrieve WSCST source (**RTVWSCST**) command for an HP LaserJet 4 printer looks similar to the following:

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:
V5R2M0, V5R3M0, V5R4M0, V6R1M0

Reference #:
862565C2007D0EF0

IBM Group:
iSeries

Modified date:
2009-04-16

```
RTVWSCST DEVTYPE(*TRANSFORM) MFRTYPMDL(*HP4) SRCMBR(HP4)
SRCFILE(QGPL/QTXTSRC) TEXT('Modified WSCST for HP LaserJet 4')
```

If needed, press the **F4** key to prompt the command. Press the **Enter** key to run the command.

Making Additional Changes to a Modified Workstation Customizing Object (WSCST) Source

If you have already made some modifications to a WSCST source member, you will want to edit the source member again without retrieving the source for the system-supplied workstation customizing object over again. If you have already made changes to a WSCST source member and then use the **RTVWSCST** command a second time, you will overwrite the changes that you previously had made to that WSCST source member.

If you have created a modified WSCST object, but cannot find the WSCST source code used to create that WSCST object, refer to the following Rochester Support Center knowledgebase document:

15433348, [Finding the Source Code for a Modified Workstation Customizing Object \(WSCST\)](#): 

Modifying the Workstation Customizing Object (WSCST) Source

Use PDM or SEU to edit the source file member. To do this, type **one** of the following commands:

- o **WRKMBRPDM FILE(QGPL/QTXTSRC) MBR(*ALL) MBRTYPE(*ALL)**
- o **STRSEU SRCFILE(QGPL/QTXTSRC) SRCMBR(*SELECT)**

If needed, press the **F4** key to prompt the command. Press the **Enter** key to run the command.

Select Option **2** (Edit) next to the name of your source file member, and press the **Enter** key to edit the source file member.

Suggestion: To help remember which MFRTYPMDL setting was retrieved to create the WSCST source member, add a comment at the top of the source member that shows details on the Retrieve WSCST source (**RTVWSCST**) command that was used. For example:

```
Columns . . . :   1  71          Edit
  QGPL/QTXTSRC
SEU==>
      HP4
  FMT **   ...+... 1 ...+... 2 ...+... 3 ...+... 4 ...+... 5
...+... 6 ...+... 7
      ***** Beginning of data
*****
0000.01 :WSCST DEVCLASS=TRANSFORM.

0000.02
/*****
0000.03      /* RTVWSCST DEVTYPE(*TRANSFORM) MFRTYPMDL(*HP4)
SRCMBR(HP4)  */
0000.04      /*          SRCFILE(QGPL/QTXTSRC)
          */
0000.05      /*          TEXT('Modified WSCST for HP LaserJet
4')          */
0000.06      /*
          */
0000.07      /* Modified WSCST object based on *HP4 that ....
          */
0000.08
/*****
0000.09
0000.10      :TRNSFRMTBL.
0000.11      :PRDTASTRM
0000.12      DATASTREAM=HPPCL5.
0000.13      :NOPRTBDR
0000.14      OPTION=TOP
0000.15      ORIENT=PORTRAIT
```

```

0000.16          DATA = 240.

F3=Exit    F4=Prompt    F5=Refresh    F9=Retrieve    F10=Cursor
F11=Toggle
F16=Repeat find          F17=Repeat change          F24=More keys

```

Creating the Modified Workstation Customizing Object (WSCST)

After the WSCST source member has been edited and saved, you are ready to create a new Workstation Customization Table (WSCST). The Create WSCST (**CRTWSCST**) command looks similar to the following:

```

CRTWSCST WSCST(QGPL/HP4) SRCMBR(*WSCST) TEXT(*SRCMBRTXT)
SRCFILE(QGPL/QXTSRC) AUT(*LIBCRTAUT) REPLACE(*YES)

```

If needed, press the **F4** key to prompt the command. Press the **Enter** key to run the command.

Using the Modified Workstation Customizing Object (WSCST)






After the WSCST object has been created, it must be specified in the configuration on the IBM Power Systems so the writer knows to call HPT with the modified WSCST object, rather than using one of the system-supplied WSCST objects. How this is specified depends on how the printer is configured on the Power Systems.

For *LCL, *RMT, and *LAN printer device descriptions, the modified WSCST object can be specified in the printer device description by ending the writer and varying off the printer device description. Then use the Change Device Desc (Printer) (**CHGDEVPRT**) command to set the Workstation customizing object (WSCST) parameter to the name of the modified WSCST object. Then the printer device description can be varied back on and the printer writer started again.

For Remote Output Queues, the modified WSCST object can be specified in the output queue description by ending the writer and using the Change Output Queue (**CHGOUTQ**) command to set the Workstation customizing object (WSCST) parameter to the name of the modified WSCST object. Then the remote writer can be started again.

For *VRT device descriptions, it depends on printer emulation software or hardware being used. Some third party printer emulation software requires you to manually change the WSCST parameter in the printer device description, just like for a *LCL, *RMT, or *LAN printer device description. However, other printer emulation software, including PC5250, require that any modified Workstation Customizing Object (WSCST) be specified in the printer session profile; the change will be automatically reflected in the *VRT printer device description the next time the printer session connects to the Power Systems. If the WSCST is manually changed in the printer device description, as in the case of a PC5250 printer session, then it will get set back to *NONE when the printer session connects to the Power Systems.

For specific instructions on using Host Print Transform (HPT) with your device descriptions and/or Remote Output Queues, refer to one of the following documents:

- 7532429, [Using Host Print Transform \(HPT\) with an *LAN Device Description:](#) 
- 11401901, [Using Host Print Transform \(HPT\) with a Remote Output Queue \(RMTOUTQ\):](#) 
- 11402020, [Using Host Print Transform \(HPT\) with an *LCL or *RMT Device Description:](#) 
- 23354524, [Using Host Print Transform \(HPT\) with a PC5250 Printer Session at V5R1M0 and Above:](#) 
- 13235847, [Using Host Print Transform \(HPT\) with a Third-Party Emulation Package:](#) 

▼ For More Information

For More Information

Sources for additional information on workstation customizing objects include the following:

- IBM Redbooks publication **IBM AS/400 Printing IV** (GG24-4389) has a section going into detail for customizing a WSCST object. This document is available on the Internet using the following Web site:

Redbooks publication **IBM AS/400 Printing IV** abstract: [http://publib-boulder.ibm.com/Redbooks.nsf/9445fa5b416f6e32852569ae006bb65f/5ad1f339df9fa03a8525659d002a567b?OpenDocument](http://publib.boulder.ibm.com/Redbooks.nsf/9445fa5b416f6e32852569ae006bb65f/5ad1f339df9fa03a8525659d002a567b?OpenDocument)

Redbooks publication **IBM AS/400 Printing IV** (GG24-4389-00):

<http://www.redbooks.ibm.com/pubs/pdfs/redbooks/gg244389.pdf>

- The **Printer Device Programming** publication documents the parameters in the printer device description for host print transforms. Remote writers only have the MFGTYPMDL parameter. This document is available on the Internet using the following Web sites:

AS/400e Printer Device Programming Version 4 , SC41-5713-03:

<http://publib.boulder.ibm.com/pubs/pdfs/as400/V4R4PDF/QB3AUJ03.PDF>

IBM eServer iSeries Printer Device Programming Version 5 , SC41-5713-04:

<http://publib.boulder.ibm.com/pubs/html/as400/v5r1/ic2924/books/c4157134.pdf>

- The **Workstation Customization Programming** publication has detailed documentation of the tags within the WSCST object source. This document is available on the Internet using the following Web site:

AS/400e series Workstation Customization Programming Version 4 , SC41-5605:

<http://publib.boulder.ibm.com/pubs/pdfs/as400/V4R3PDF/QB3AQ600.PDF>

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