Tips & Tricks Using HP Designjet Printers with AutoCAD® Applications

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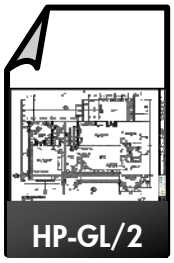
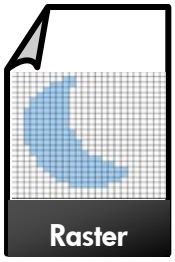
Printing to HP Designjet printers

The following tips and tricks will help you when printing to your HP Designjet printers.

Choosing the right driver



If HP-GL/2 is available, always use it.



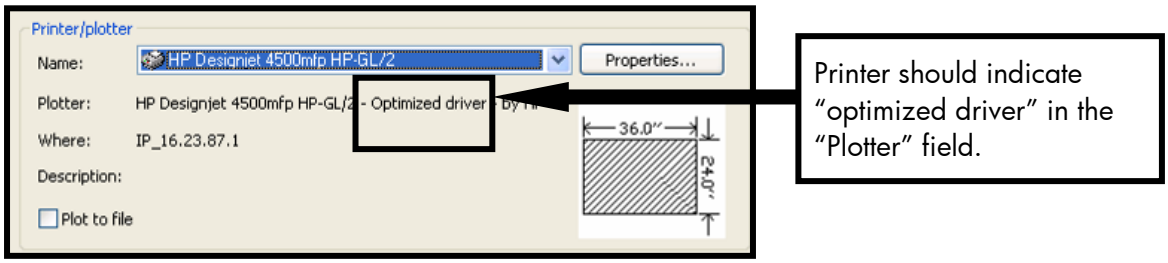
If HP-GL/2 is not available, use the Raster driver.

Never use an Adobe® PostScript® driver.

There are no HDI drivers for HP Designjet printers. Microsoft Windows HP-GL/2 and Raster drivers are optimized to work with AutoCAD through a special software module in the application

Optimized drivers

HP has developed the only Windows large-format printer driver optimized for AutoCAD combining high quality and performance in the technical market.

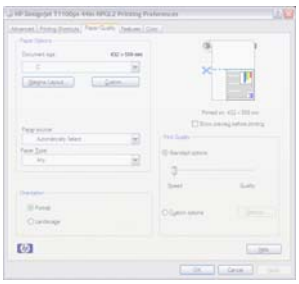


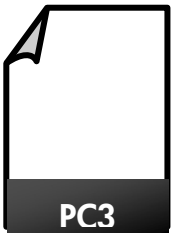
Using the optimized driver has the following advantages:

- Installed during the standard Windows installation process
- Provides a common user interface for all applications, including AutoCAD
- Interfaces transparently with AutoCAD
- Produces better line quality than standard Windows drivers
- Includes HDI driver features (e.g., landscape pages available in the page size list)
- Designed by HP working directly with Autodesk engineers to provide best-in-class AutoCAD integration

Using plotter configuration files and filtering page sizes

Create a plotter configuration file to maintain consistent quality, print after print.





Printer driver settings

- Print quality
- Paper source and type
- Color options
- etc.

AutoCAD plotter configuration

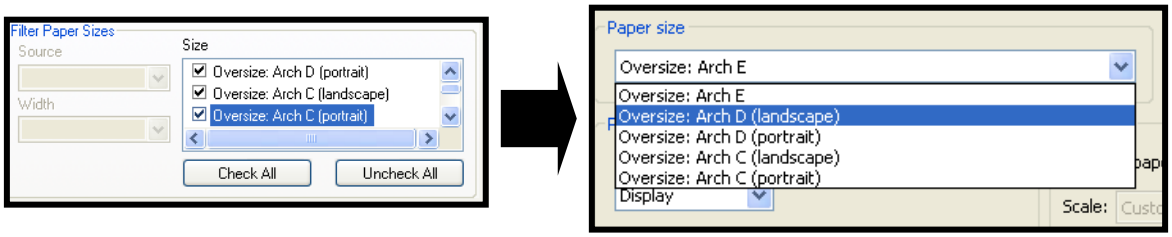
- Filter page sizes
- Raster and OLE object resolution
- Plotter calibration
- etc.

AutoCAD Plotter configuration file

Filter paper sizes

Specify the paper sizes you use most often by selecting the ones you want in:

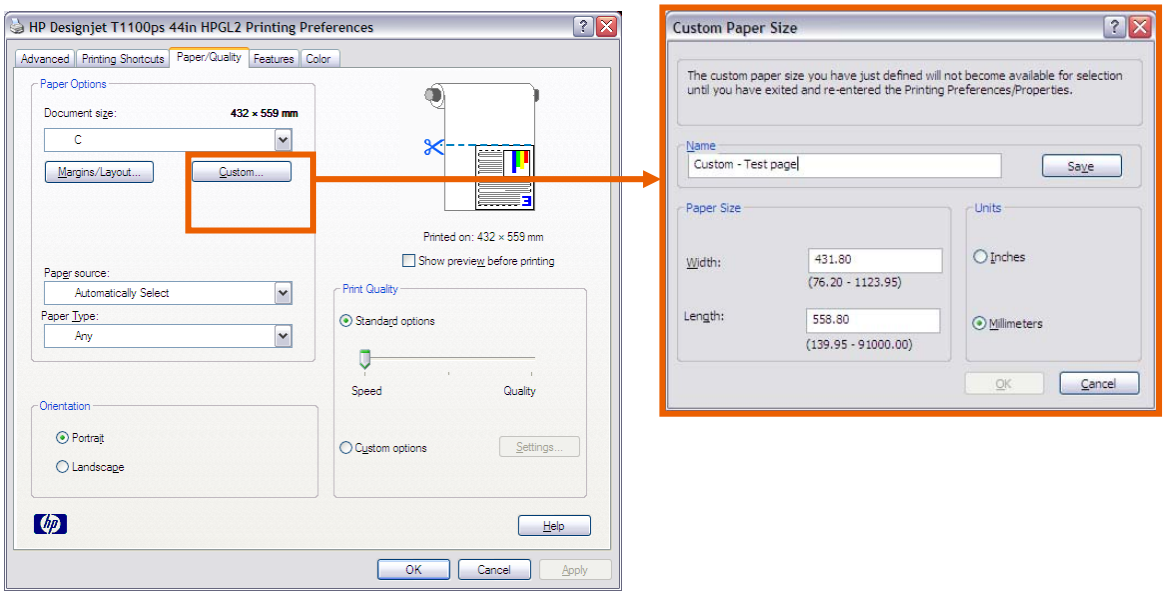
Plot dialog → Printer properties → Plotter configuration editor → Filter paper sizes



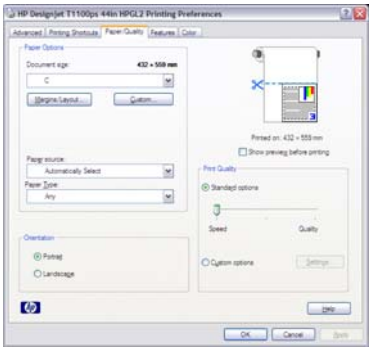
You can restore it later by rechecking the boxes

Creating and sharing custom page sizes

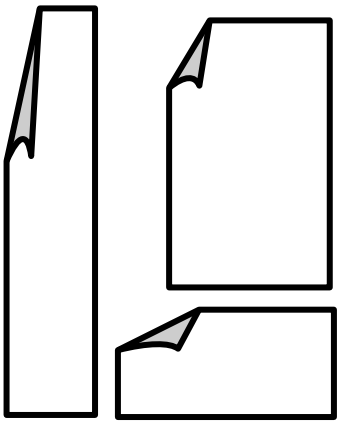
Custom page sizes created from the driver are local. This means that they can only be accessed from the computer where the page size was created, even if the driver is shared



This has an impact on workflows where PC3 files are created in a server and shared:



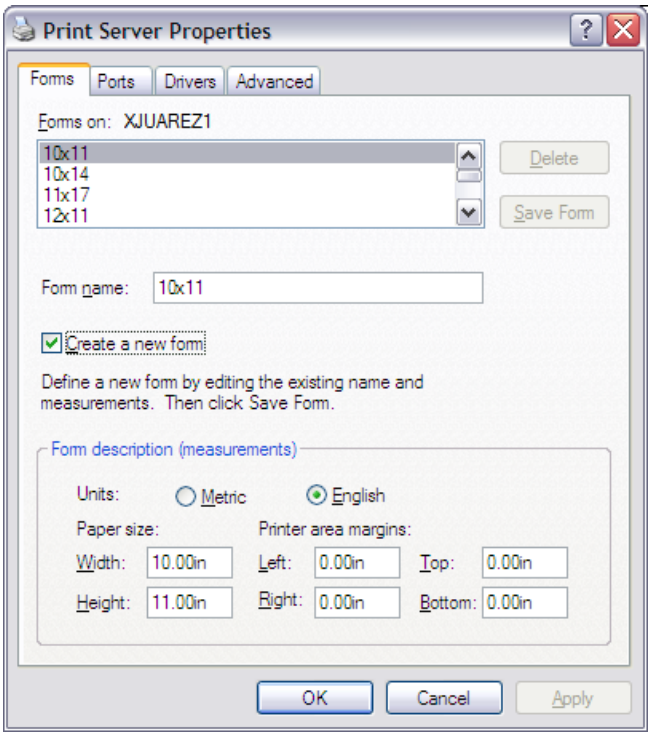
If the PC3 file is created in the server with a custom page size it won't work on other workstations, since their local copies of the shared driver won't have access to the page that was created in the server



A user with administrative rights can create custom sizes in the server that will be shared to client workstations by using the following process:

1. Click **Start** and choose **Printers and Faxes**.
2. From the File menu, choose **Server properties**.
3. On the Forms tab, create a new Form with the desired custom size.

This form will be available in the driver and shared to client workstations, enabling the previous PC3 file sharing workflow.



Getting the right colors

Blue looks purple

Some users don't like the default colors of HP Designjet 500, 800 and 1050 printers.

New color maps improve blue (and other colors).

- HP Designjet 500/800: during the paper load process, select a paper type from the Enhanced Colors group
- HP Designjet 1050: in the driver, select a paper type labeled as Enhanced Colors.

My colors do not match my previous HP Designjets

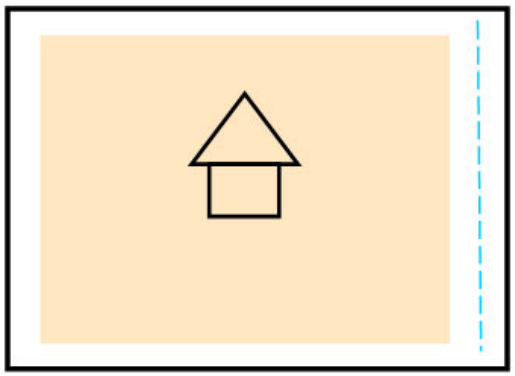
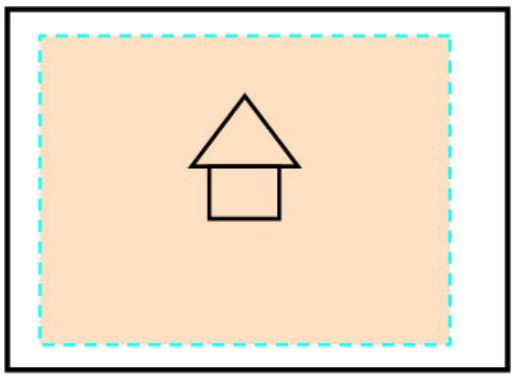
Newer HP Designjet printers have improved inks and color management systems, providing a better match to the screen.

This means that, by default, their colors will be different from previous models. In order to provide backwards compatibility, emulation modes are included:

- HP Designjet 4000/4500 emulates HP Designjet 1050/1055
- HP Designjet Z6100 emulates HP Designjet 5500 and HP Designjet 1050
- HP Designjet T1100 and T610 emulate HP Designjet 1050 and HP Designjets 500/800

Managing layout

Crop Lines for HP Designjets T1100 and Z6100

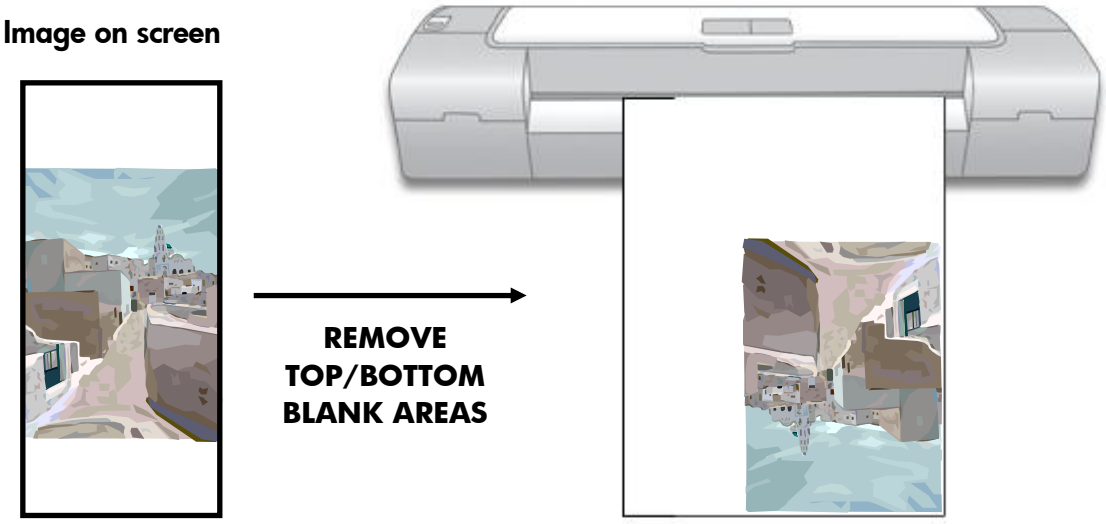
Standard margins clip contents by margins	Oversize margins
	
Paper edges are the same as the plot except for the right side—this is why the crop line is drawn only on the right.	None of the paper edges match the plot, so 4 crop lines are drawn.

Saving paper and ink

The following are the easiest ways to save paper.

- Remove the top/bottom blank areas
- Autorotate
- Nesting

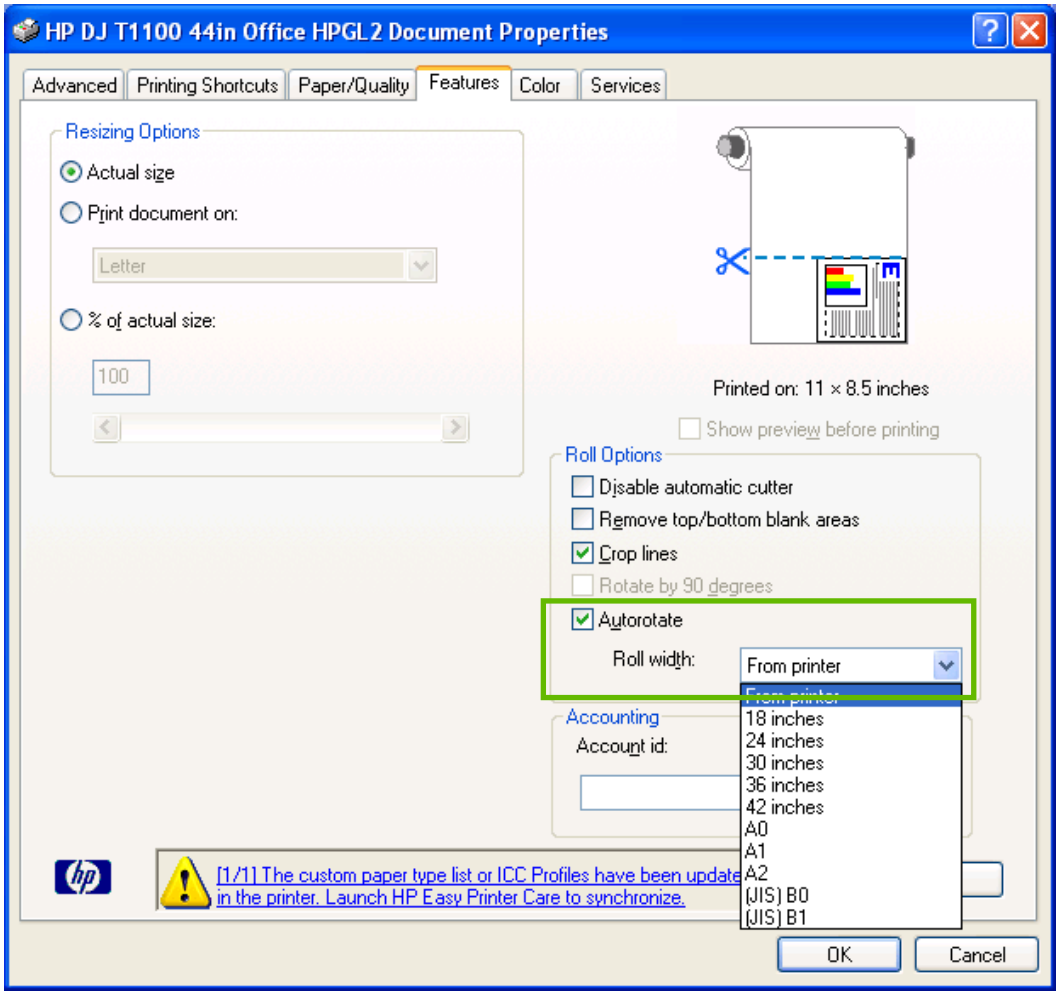
Remove the top/bottom blank areas



Autorotate

The Autorotate feature rotates the drawing only if:

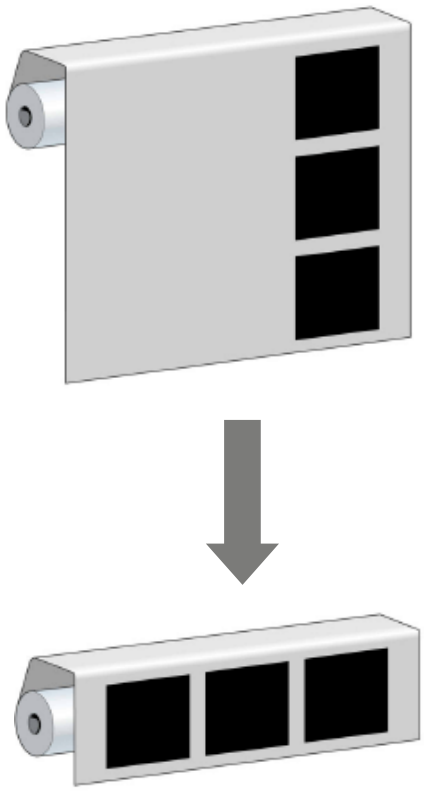
- The plot fits on the loaded roll with no clipping
- It saves paper



Nesting

Nesting places pages side by side on the paper, rather than one after the other

- Avoids wasting paper
- Can be accessed through
  - Front panel
  - The EWS
- HP Designjet T1100 and Z6100 adds two new nesting features:
  - Nesting in optimized order
  - Crop lines when nesting



Saving Ink

Use the following features to save ink.

- Economodes
- Automatic drop detection to maximize the efficiency of the service routines

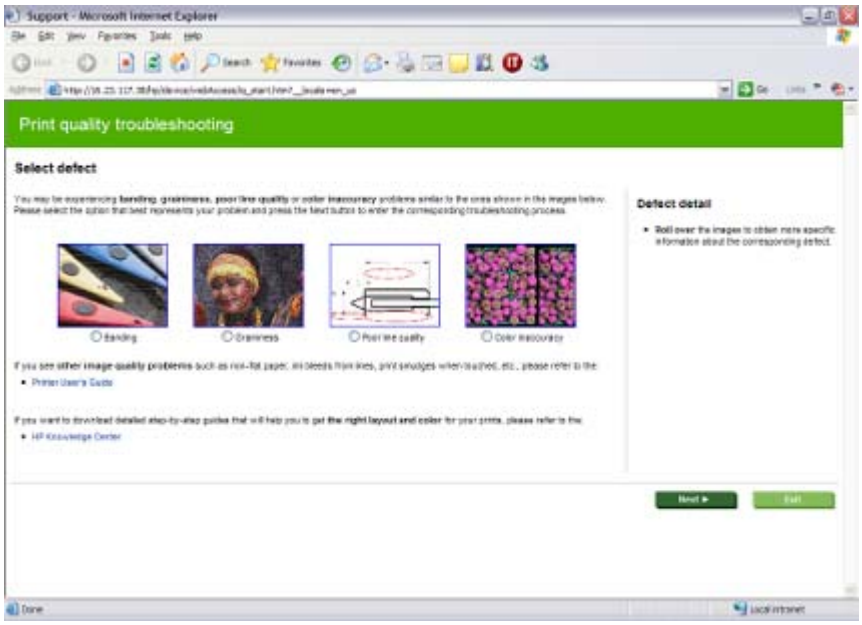
Troubleshooting common problems

- Print quality
- Clipping
- Out of memory

Print quality

- Print quality problems can be the result of the following:
    - The printheads are in bad shape
    - The printheads are misaligned
    - Paper is not advancing correctly
- Correct these problems by:
    - cleaning printheads
    - aligning printheads
    - calibrating paper advance.

To simplify the task, HP Designjet T and Z series printers include a *Print quality troubleshooting* wizard.

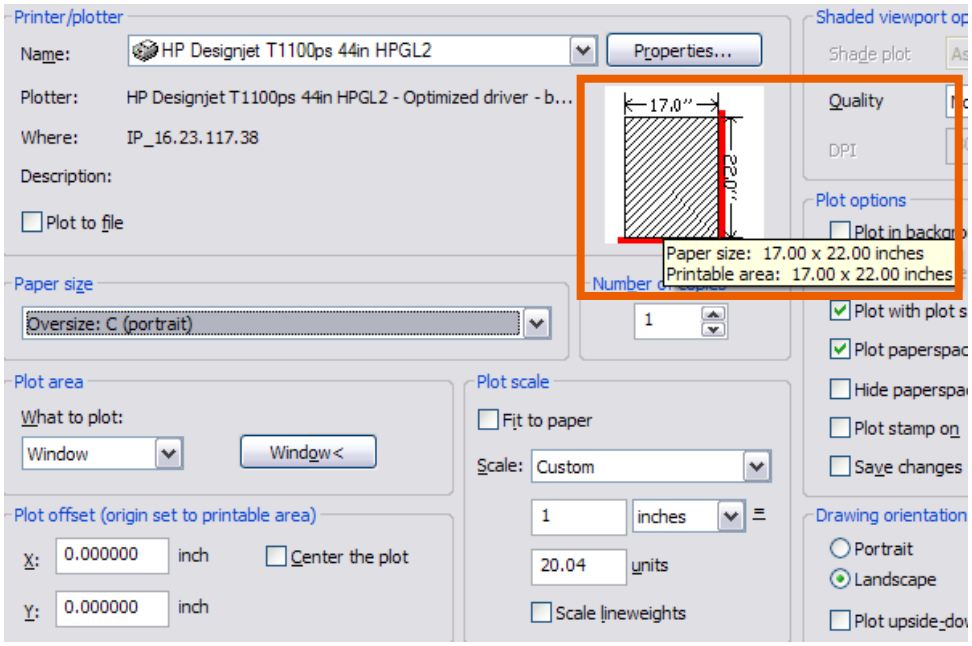


Clipping

Clipping can occur because of the following:

- Incorrect page size selected
- Incorrect orientation (portrait or landscape) selected
- Incorrect margins setting
- Incorrect scaling

Use the concept preview to see where clipping is occurring when you specify the page size. Adjust the effective printable area with the selected margins as necessary.



Out of memory

Out of memory problems can happen in different stages of the printing workflow

The symptoms can be:

- A explicit message in the computer or the printer
- Slow performance of the computer or the printer
- Missing content from the output

Download and install the latest firmware update for your HP Designjet printer from www.hp.com.

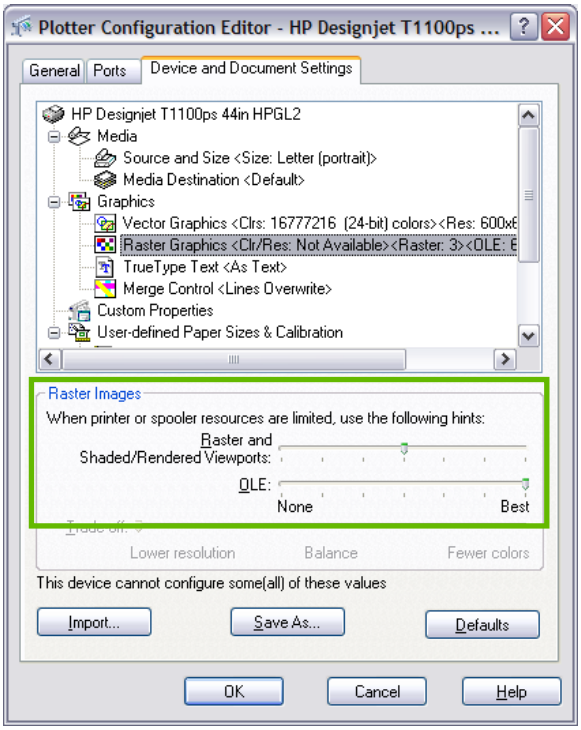
The following settings can also help solve out of memory issues:

In the driver:

- Advanced tab → Send job as bitmap
- Advanced tab → Max. Application resolution = 300dpi

In the application:

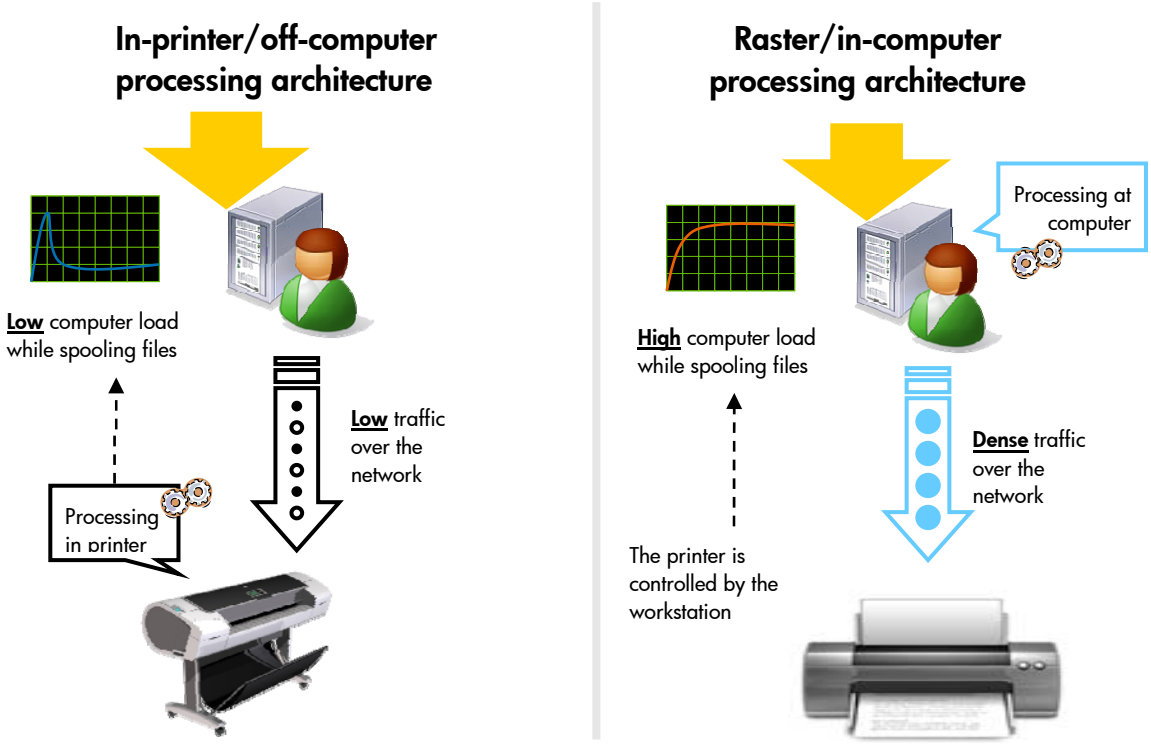
- Properties → Graphics → Raster graphics
- Lower the resolution of OLE objects and shaded viewports



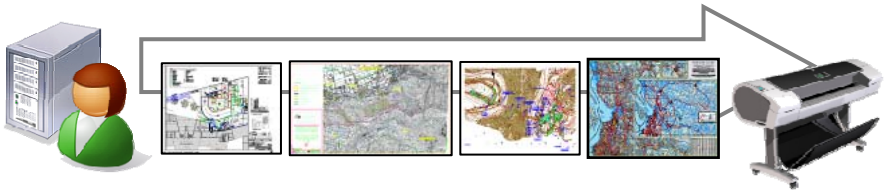
Technologies that help to maximize productivity

- Job management technologies
- Cost tracking
- HP Instant Printing

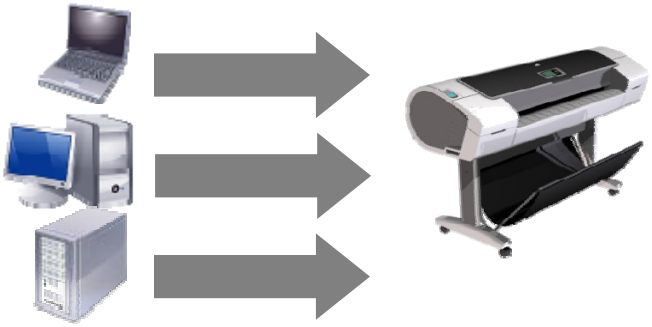
Off-loading as much processing as you can to the printer frees up your computer and network, increasing overall productivity.



Free up your workstation



Send and print jobs reliably over the network



Technical/Office Printers

Photo/Graphics Printers

Express

HP Designjet T1100 Printer series

HP Designjet 4000/4500 Printer series

HP Designjet Z3100ps Photo Printer series

HP Designjet Z6100 Printer series

Basic

HP Designjet T610 Printer series

HP Designjet 510 Printer series

HP Designjet Z2100 Photo Printer series *

HP Designjet Z3100 Printer Photo*

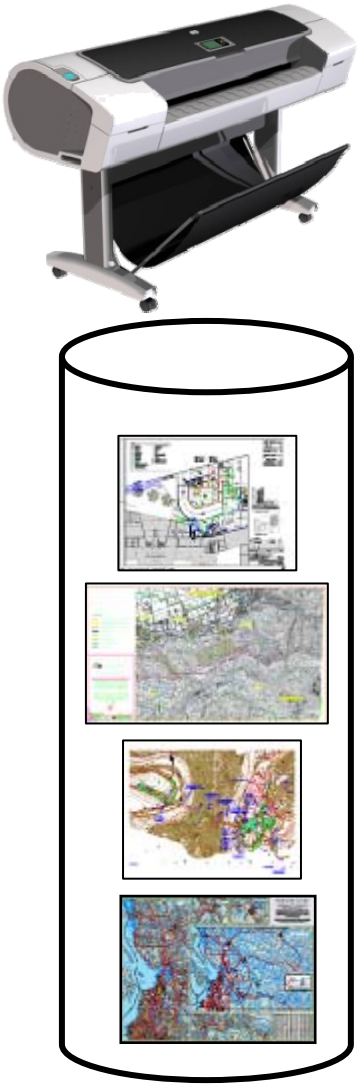
None

HP Designjet 70/110plus Printer series

HP Designjet 90/130 Printer series

* Only with HP-GL/2 accessory

Job management



A job queue allows you to:

- Manage job priorities
- Manage the printer from the desktop
- Free users' computers from the task of queuing jobs
- Parallel processing and printing

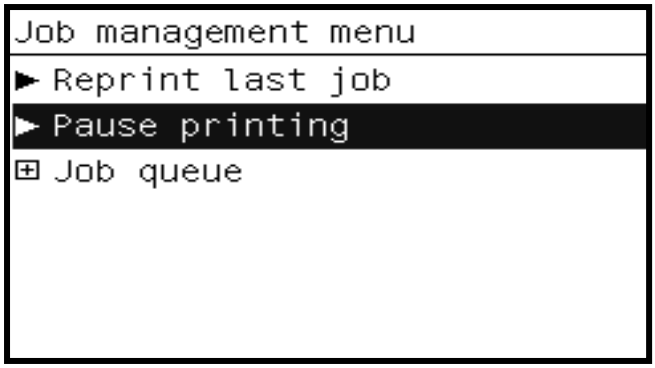
You can also use job management when:

- Different papers are needed for different jobs in the queue
- The queue is full but an intervention on the printer is needed

Pause the queue

You can temporarily pause the queue of jobs to:

- Replace consumables
- Load media
- Perform other activities to prepare the printer for unattended printing



Menu -> Job management

To continue printing, use the “Release” option that appears in the same menu.

Job alerts for HP Designjet T1100 Printer series

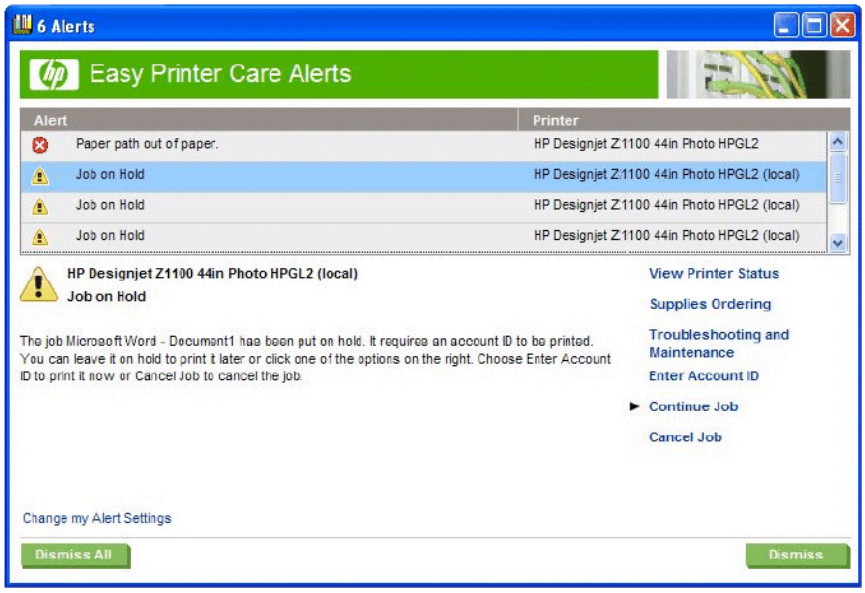
If configured to do so, the printer will hold jobs if the paper requirements can't be met for:

- Paper type
- Paper size (clipping)
- Paper source (sheet vs. roll)

Job alerts are sent directly to user's computer.

Held jobs won't be printed until the proper corrective action has been taken:

- The user continues them proactively through the Front Panel, the EWS, or the Printer Utility.
- The required paper is loaded

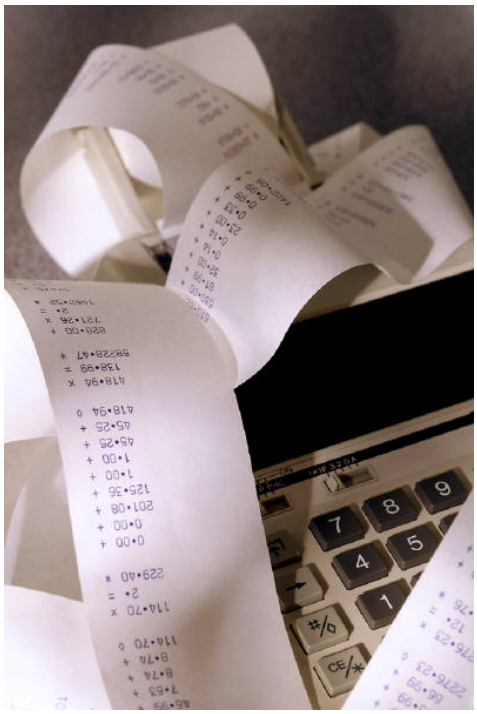


Cost tracking

www.hp.com/go/designjet/accounting

Workgroup HP Designjet printers allow you to track and report precise consumption and cost data for each of the following:

- Job
- User
- User group
- Type of plot (ink coverage)

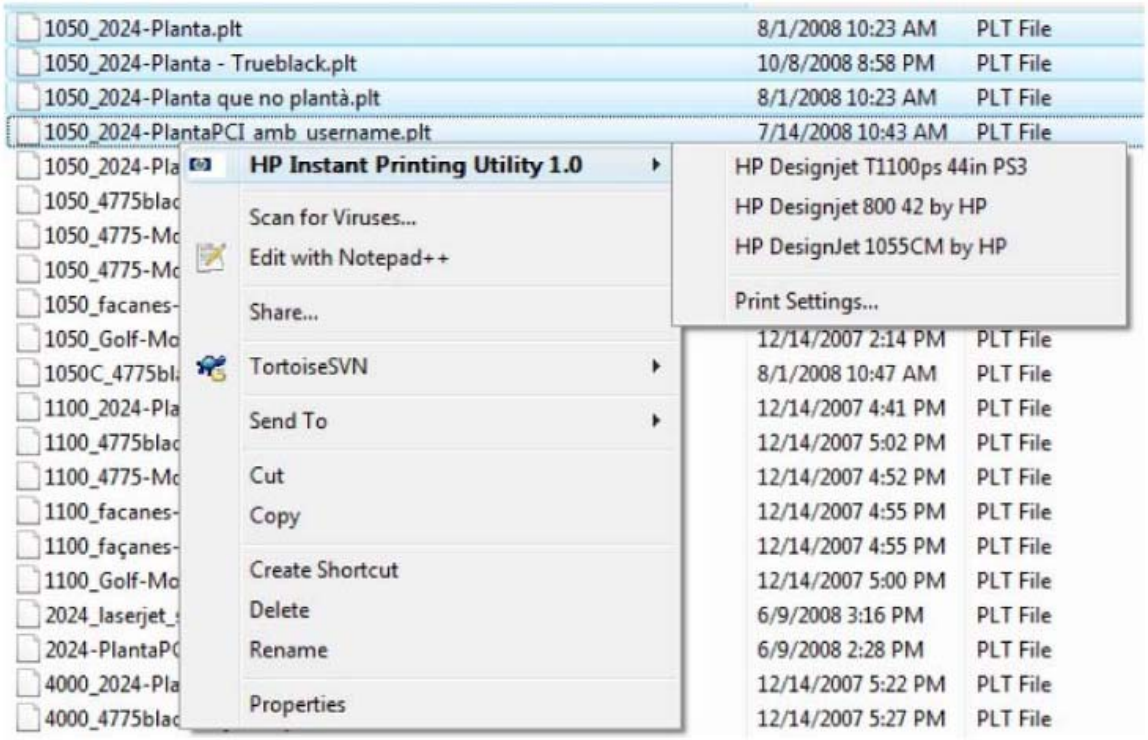


HP Instant Printing Utility

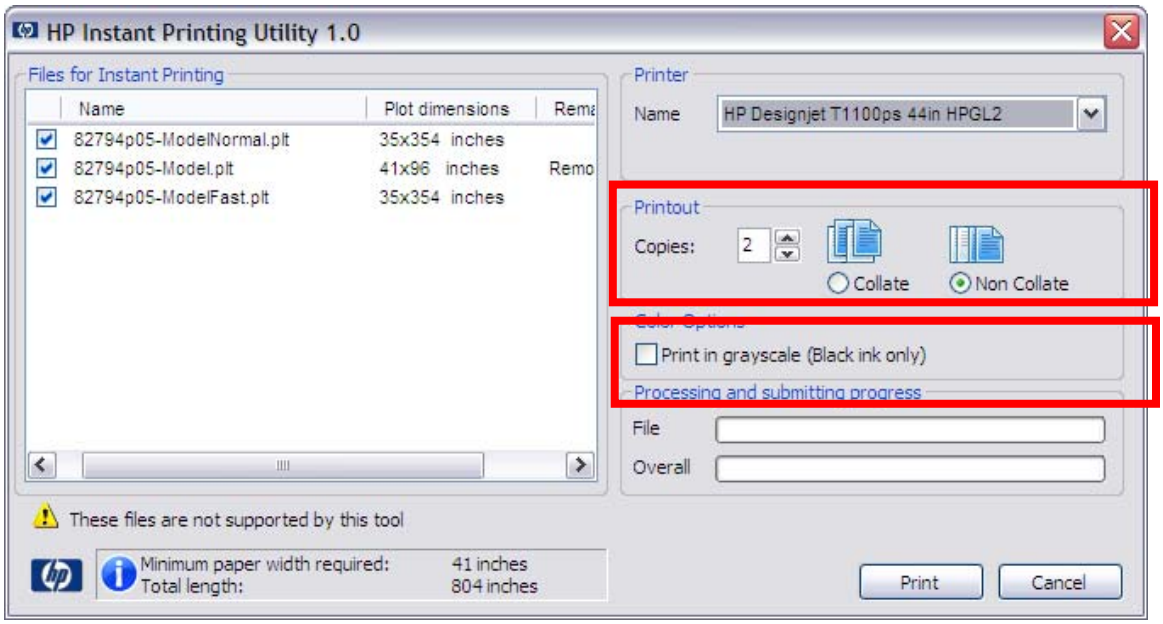
HP Instant Printing lets you quickly and easily send your HP-GL/2 files to any HP large format printer installed in your printer folder. HP-GL/2 is a ready-to-print file format optimized for CAD printing.

- Provides 1-click printing of HP-GL/2 and PDF files.
- Gives the same results on any HP Designjet printer that supports HP-GL/2 and avoids trial and error.
- Works with the nearly 2,000,000 HP Designjets that HP has sold in its 25 year history of large format printing.
- The new HP Designjet 510 Printer series is the first printer series that includes HP Instant Printing Utility as part of its software installation.
- Available to download for free at www.hp.com/go/hpinstantprintingutility.

From your Windows Explorer window, select your HP-GL/2 files to print.



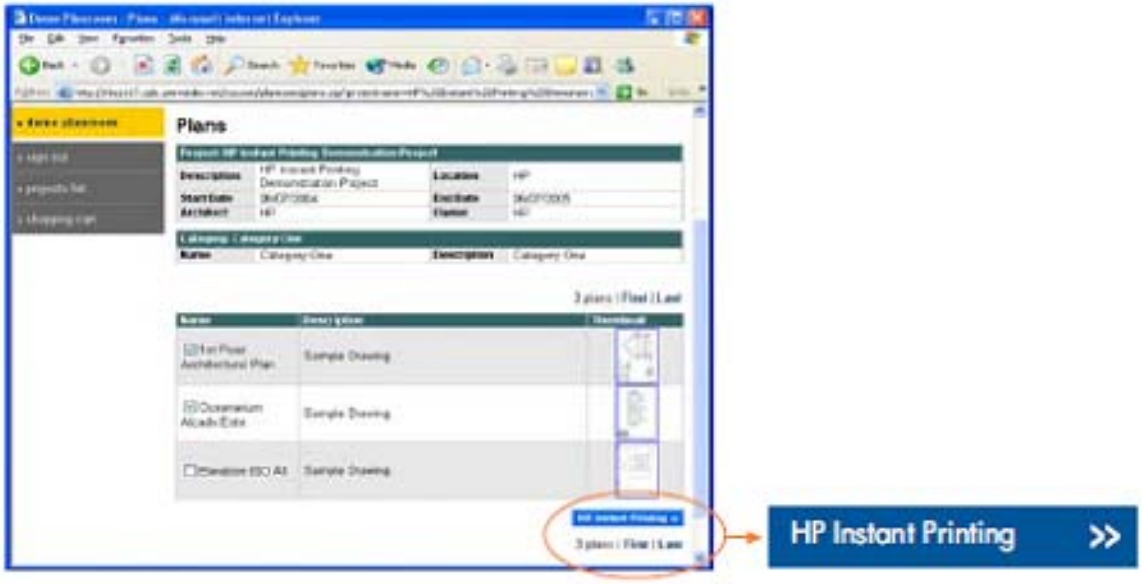
When you select Print Settings, you can select options for specific files.



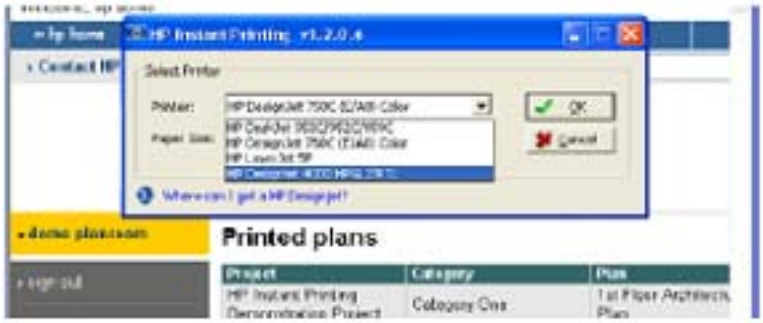
HP Instant Printing Utility for Online Planrooms

Local printing from online planrooms made easy

1. Planroom customers select the drawings they want to print, and then click the HP Instant Printing button.

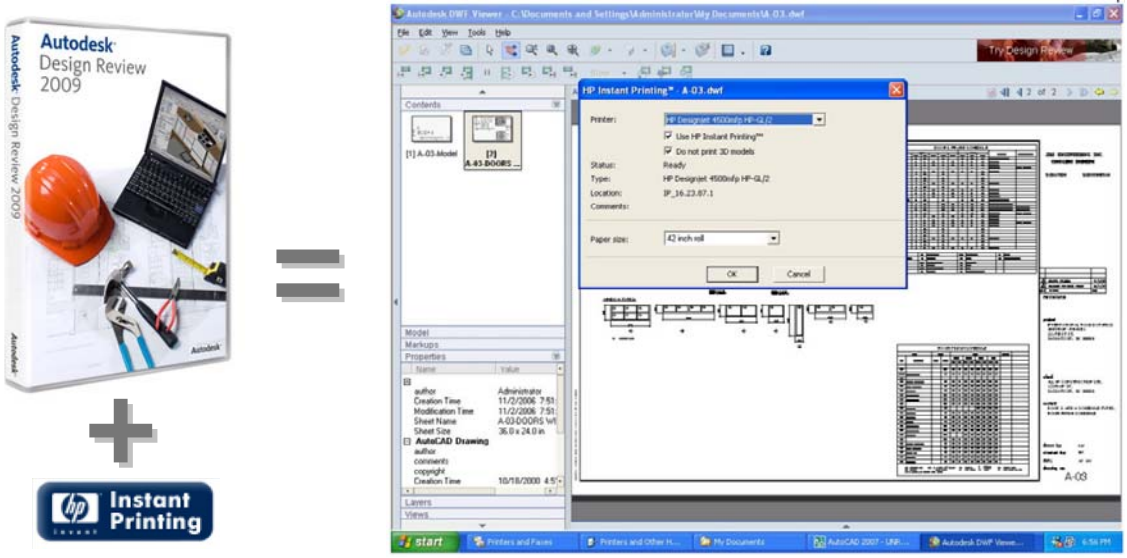


2. They select the printer and then specify the paper size.



HP Instant Printing Utility for Autodesk® DWF™

Allows users of Autodesk® DWF™ applications (Autodesk® Viewer , Autodesk® Composer and Autodesk Design Review) the possibility to print their drawings with a one-click printing experience.



For more information about HP Designjet printers, go to: www.hp.com/go/designjet.