



1

Managing Files and Viewing Images

Preview

In this lesson you will learn how to:

- Start MicroStation Descartes
- Setup the MicroStation Descartes Workspace
- Open an Image
- Display and Explore an Image
- Add Images to Several Views
- Add Several Images to a View
- Apply Images to Other Views
- Control Image Visibility
- Print a View
- Save a Project

File Management and Viewing Images

► Setup MicroStation Descartes

1. Start MicroStation.
2. From the MicroStation Manager dialog box, select Workspace > dcartes.

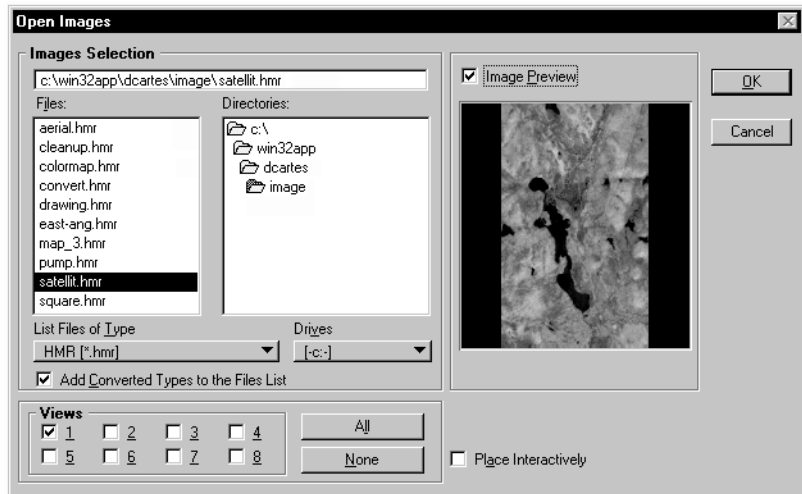


3. Open the LESSON1.DGN file that is supplied with the tutorial. The file should be in the ...\\dcartes\\tutorial directory.
4. From the MicroStation Tools menu, select Image > Image Control and dock it under the Main tool box of MicroStation.

► Open an image

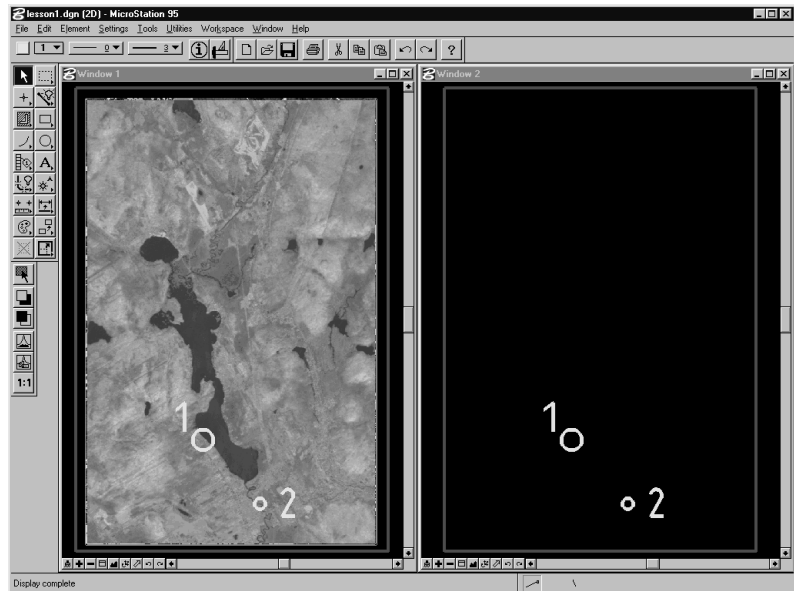
1. From the MicroStation File menu, select Open > Image. The Open Images dialog box opens. You can also access this dialog box from the Open Image tool of the Image File tool box (Tools > Image > Image File).
2. Find the SATELLIT.HMR image that is supplied with the Tutorial. The file should be in the ...\\dcartes\\tutorial directory. Highlight the image.

3. Set the Image Preview setting to on. Notice the display of a thumbnail of the image in the Preview window.



4. Ensure that the setting for View 1 is set to on. Click OK to open the image.

The screen appears as follows.



► Display and explore the image



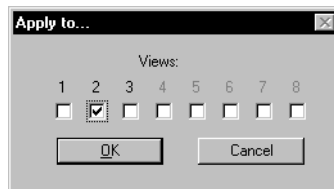
1. From the Image Control tool box, select the *Fit Images to View* tool and click in Window **1**.

The image that was added to the list for View **1** now displays at such a scale that the complete image fits into the view.

2. From the MicroStation View Control bar in Window **1** select the *Update View* tool and notice that the design file and the image are redrawn.
3. To experience the speed of Image Manager and to demonstrate its integration into MicroStation, use all the *View Control* tools on the image (*Window Area*, *Zoom +*, *Zoom -*).
4. Execute a *Fit View* and then a *Dynamic Pan* (<Shift> data button). The image pans effortlessly.
5. *Window Area* on the image and then try the Pan again. The Pan feature may be used at any time, at any scale, and in any view to move around on the image.
6. Execute a *Fit View* in Window 1.

► Add an image to another View

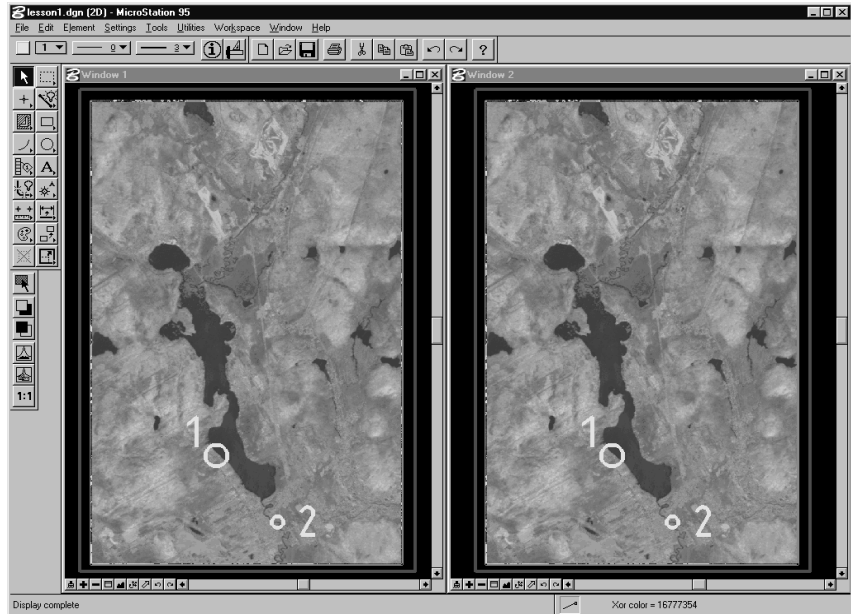
1. From the MicroStation *File* menu, select *Image Display > Apply To*.
2. Enter a data point in Window **1**. The Apply to dialog box opens.
3. Set View 2 to on and click OK.



4. From the Image Control tool box, select the *Fit Images to View* tool and click in Window **2**.

The image that was added to the list for View **2** now displays at such a scale that the complete image fits into the view.

The result should look as follows.



► Add several images to a View

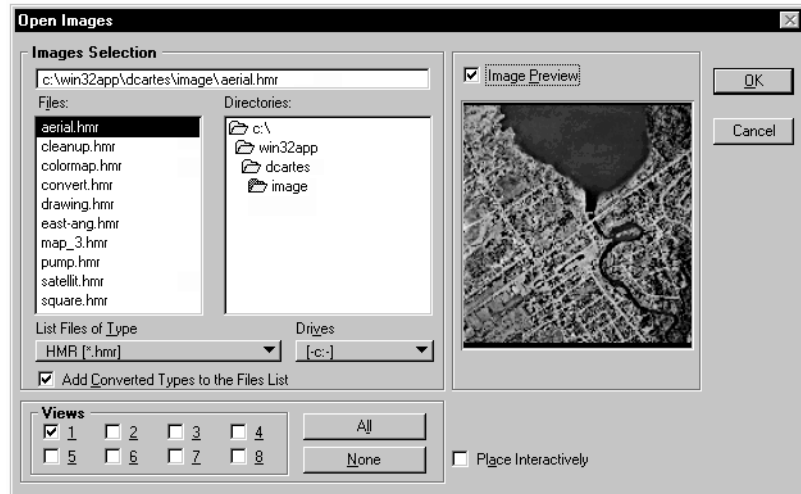
MicroStation Descartes permits you to open several images in the same View.

1. From the MicroStation File menu, select Open > Image.
The Open Images dialog box opens.
2. Find the AERIAL.HMR image that is supplied with the Tutorial. The file should be in the ...\\dcartes\tutorial directory. Highlight the image.

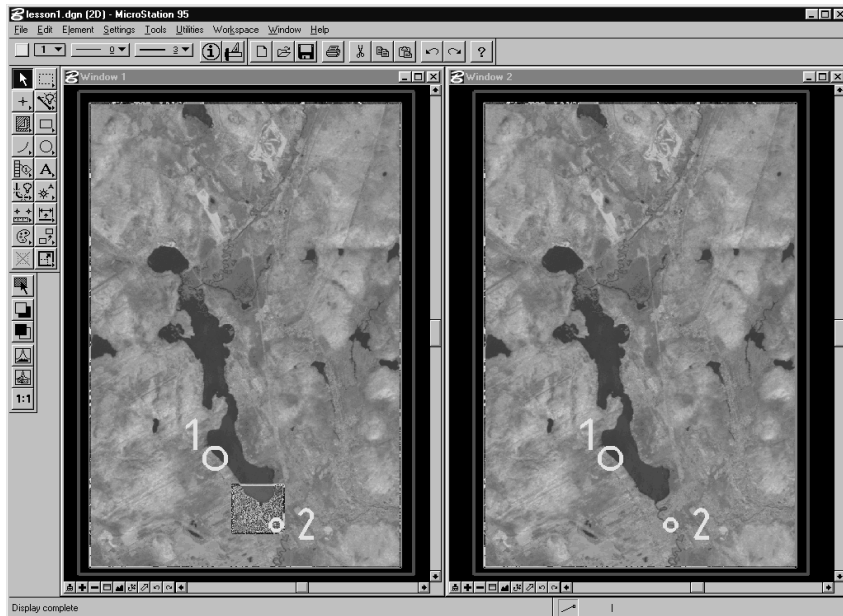
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- Set the Image Preview setting to on. Notice the display of a thumbnail of the image in the Preview window.



- Check that the setting for View 1 is set to on. Click OK. Notice that both images are now visible in your display.



- From the Image Control tool box, select the *Select Images/Active Image* tool.

6. Select the image in Window **1** by entering a data point at location **2**.

Notice the border that appears around the image. This border indicates that the image is part of the active selection set.

7. From the Image Control tool box, select the *Fit Images to View* tool and click on View 1.

The image now displays at such a scale that the complete image fits into the view.

8. From the View Control Bar of Window **1**, select *Fit View*.

This action allows you to view both images simultaneously.



► To Apply All Images of a Window to All Open Windows

1. From the MicroStation File menu, select Image Display > Apply to All.
2. Enter a data point in Window **1**.
This action copies the images from Window **1** to Window **2**.
3. *Fit View* in Window **2**.



W Applying a set of images of one view to another view overwrites the set of images in the target view.

- From the View Control Bar of Window **2**, select *Window Area* and define the area by snapping to locations **1** and **2**. Observe the following result.



- From the Image Control tool box, select the *Fit Images to View* tool and click on View 1.



- From the Image Control tool box, select the *Actual Image Resolution (1:1)* tool and click on View 1.



- Fit View* in Window **1**.

► Turn images on or off

You can control the display of each image in a view by turning the image on or off.

1. From the Image Control tool box, select the *Select Images/Active Image* tool.
2. Select the image in Window 1 by entering a data point at location 1.

Notice the border that appears around the image. This border indicates that the image is part of the active selection set.



3. From MicroStation File menu, select Image Display > Image Off.

- Click anywhere in Window 1. The action updates the view and applies the on or off action to all images in the selection set.

Notice that SATELLIT.HMR does not display. Only AERIAL.HMR is now visible.



- Turn SATELLIT.HMR back on. From the MicroStation File menu, select Image Display > Image On. Click anywhere in Window 1.
Notice that the image is turned on.
- You may also turn more than one image on or off at a time. Select the *Select Images/Active Image* tool and select both images in Window 1.
Select the first image by entering a data point at location 1.
Press and hold down the <Ctrl> key and enter a data point at location 2.
- From MicroStation File menu, select Image Display > Image Off. Click anywhere in Window 1.
Notice that both images are turned off.
- From the MicroStation File menu, select Image Display > Image On. Click anywhere in Window 1.
Notice that both images are turned on.

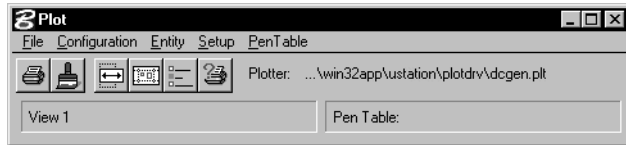
Printing

► Print a View

In this exercise, you will print the present contents of Window **1** with your Windows system printer. If you have a DOS installation, skip this exercise and try the next one: Create a Plot File.

1. From the MicroStation File menu, select Print/Plot.

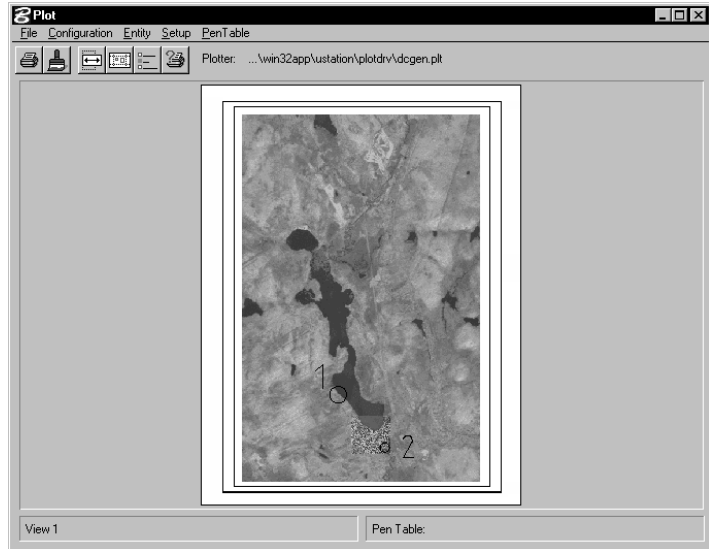
The MicroStation Plot dialog box opens.



2. From the Setup menu of the Plot dialog box, select Driver. The Select Plotter Driver File dialog box opens. Find and select the DCGEN.PLT file located in the PLOTDRV sub-directory of MicroStation.
3. From the Entity menu, select View > 1.
4. From Setup menu, select Device. The Descartes - Image Plotting dialog box opens.
5. Turn on Plot Raster Images and Gray Scale. Accept all other default values by clicking OK.
6. From the Setup menu of the Plot dialog box, select Page.
7. Select the appropriate printer and paper size, and turn on Landscape in the Orientation box.
8. Click OK to confirm.

9. From the File menu, select Preview.

The MicroStation Plot Preview dialog box opens. The Setup menu items allows you to set the correct parameters for your printer.



10. When you are satisfied with the preview, select Plot from the File menu.

This action initiates the printing of all the vector and raster elements found in Window **1**. The resulting page will be printed on your system printer.

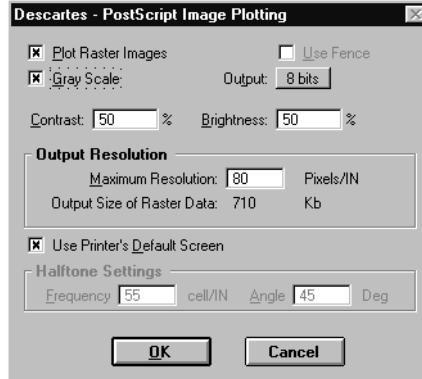
11. Exit the Plot Preview dialog box by selecting Exit from the File menu.

► Create a plot file

In this exercise, you will prepare a plot file from the present content of Window **1** and use a DOS command to send it to your printer.

1. From the MicroStation File menu, select Print/Plot.
The MicroStation Plot dialog box opens.
2. From the Entity menu, select View > 1.
3. From the Setup menu, select Driver. This action opens the Select Plotter Driver File dialog box. Find and open the DCPS.PLT (PostScript) or DCRTL.PLT (HP/RTL) file located in the PLOTDRV sub-directory of MicroStation.

4. From the Setup menu, select Device.
The Descartes - Image Plotting dialog box opens.
5. Turn on Plot Raster Images and Gray Scale. Accept all other default values by clicking OK.



6. From the Setup menu, select Page.
The Page Setup dialog box opens.
7. Select the appropriate paper size and turn on Rotate 90°. Click OK to confirm.
8. From the File menu, select Preview.
The MicroStation Plot Preview dialog box opens. The Setup menu items allow you to set the correct parameters for your printer.
9. When you are satisfied with the preview, select Plot from the File menu.
This action opens the Save Plot As dialog box to enter the filename of the plot file that will be created. Find the ... \dcartes\tutorial directory and accept the default plot file name (lesson1.000).
Click OK to initiate the creation of your plot file. The plot file will include all the vector and raster elements found in view 1.
10. Exit the Plot Preview dialog box by choosing Exit from the File menu.
11. To print or plot your work, exit to DOS and send the file to your printer or plotter with the command:
COPY /B LESSON1.000 LPT1 (or the appropriate printer port).

Projects

MicroStation Descartes permits you to save the status of your working environment at a given time as a project. Projects can be saved in two distinct fashions.

- By saving all the settings in a Project File (.PRJ file).
In this case, a file is created and it contains all the settings at the time the project was last saved. The project can then be opened at any time using the MicroStation File > Image Project > Open item.
- By attaching the current status to a design file.
When attached to a design file, the project automatically opens and loads each time the design file is opened.

► Attach/Detach and setting Automatic Save and Attach Project to a design file

1. At this point, the project attached to the design file is attached. From the MicroStation Settings menu, select Image > Project.

The Project Settings dialog box opens.



When on, a project file, named after the design file prefix, is automatically created, attached and saved upon closing and/or exiting MicroStation Descartes and/or MicroStation.

When off, you must manually attach and save your project file.

► Save a project under a different name

1. From the MicroStation File menu, select Image Project > Save As.
You will be prompted to enter a file name in the Save Project dialog box.
2. Browse through the ...\\dcartes\tutorial directory.
3. Enter the file name LESSON1A.

Practice

This lesson does not cover all of the functions related to File Management and Viewing Images. You should explore other functions by reviewing chapter 5 “Displaying Images with Image Manager” and chapter 15 “Plotting and Printing Images with MicroStation Descartes” of the *MicroStation Descartes User’s Guide*.

Here are a few of the functions that you should explore:

- Open Target Image Formats
- Save as Target Image Formats
- Batch Conversion
- Image Properties
- Bring to Front
- Send to Back