2 MicroStation Descartes Overview

This chapter shows how the *MicroStation Descartes User's Guide* is constructed. You will find the title and a short description of the contents of each chapter composing the present documentation. All parts and all features of MicroStation Descartes are covered in this book and this chapter indicates where to look.

Fundamentals

Chapter 3 briefly presents the basic concepts, mechanisms and features of MicroStation Descartes, or indicates where to find relevant detailed information in this guide. Each basic aspect of MicroStation Descartes is covered, such as the user interface conventions, the project paradigm, the tool boxes, the image mosaicking capabilities, or the handling of colors associated with images. Setting preferences are also covered.

Navigating MicroStation Descartes

Chapter 4 describes how to load and start MicroStation Descartes and how to navigate through the user interface to access all functions or features such as dialog boxes, tool boxes, tools, or any specific menu item.

Displaying Images with Image Manager

Chapter 5 describes how Image Manager is used to control all aspects of image display, to manage Image files, to open images in various formats, and to save images where changes occur. All MicroStation Descartes imaging tools require the capabilities of Image Manager as the foundation tools.

Enhancing Images

Chapter 6 describes image enhancement tools. You can use these functions to display or analyze the histogram of an image, to produce images with a color palette, to improve the quality of an image or to change its color rendition by editing its color palette.

Transforming Images

Chapter 7 shows how you can use the Local Transform or the Image Transform tool boxes for quick transformations of raster objects, of image files or parts of image files in different geometric spaces.

Registering Images and Vector Data

Chapter 8 describes the Register utility and all the related features. Register is used to geometrically correct images or vector data to a given coordinate system by warping them to fit a reference or base document. The base document can be an image, a vector file, a drawing, a map sheet, or a list of known points (from a GPS system, for example).

Mosaicing Tools

Chapter 9 describes how to prepare and assemble mosaics. This chapter focuses on how to balance colors between images and how to create seamless cut lines between images.

Preparing and Managing Color Filters

Chapter 10 discusses how to prepare color filters that will be used by various editing or vectorizing tools, as well as local transformation tools. The Color Filter dialog box is used to create or edit color filters, to add or remove color filters from a set, to save a set into a color filters file, or to restore a set of color filters by opening an existing file.

Editing Images

Chapter 11 describes a set of tools that permit drafting and drawing in raster, erasing raster objects, cleaning images, converting vector elements into raster objects, copying and pasting pieces of images, as well as undoing and redoing image editing operations.

Preparing Theme Symbology

Chapter 12 presents a set of tools used to prepare or edit themes, and to manage Theme files. By attaching a theme to a vector element, you automatically assign a symbology to this element and a set of parameters that defines its characteristics and meaning.

Vectorizing

Chapter 13 presents the Vectorizing tools, which are used to create vector data from scanned drawings or images. Combined with the display speed of Image Manager, these tools provide an efficient environment for data conversion projects.

Converting Text and Cells from Raster to Vector

Chapter 14 describes a set of tools that you can use to extract text or symbols from scanned drawings or images and to place them into a design file. Combined with the Vectorize tools presented in the previous chapter, these tools provide an efficient environment for data conversion projects.

Converting Image Formats

Chapter 15 explains how to use the Batch Conversion dialog box to convert images from or to a large number of formats or image types that are supported by MicroStation Descartes.

Image Draping

Chapter 16 explains how to configure MicroStation Descartes and MicroStation in order to produce 3D scenes using MicroStation Descartes images as rendering textures and applying them to 3D surfaces such as DTM, DEM, etc. This chapter also explains how to save your draped images and create snapshots of draped views.

Plotting, Printing and Publishing Images

Chapter 17 explains how you can use MicroStation Plot capabilities and image print add-ons to plot or print with MicroStation Descartes.

Customizing MicroStation Descartes

Chapter 18 explains how to customize MicroStation Descartes:

- How to use the workspace editing capabilities of MicroStation to create workspaces by yourself.
- How to build your own tool boxes or tool frames by selecting any tool from MicroStation Descartes or from MicroStation itself.
- How to use the MicroStation BASIC macro recorder and the MicroStation Descartes key-ins to build your own commands or applications.

Installing MicroStation Descartes To Run from a Network Server

Chapter 19 explains how to install and setup MicroStation Descartes as a shared application running from a network server computer.

MicroStation Descartes as a MSI Client

Chapter 20 explains how to setup MicroStation Descartes' Image Manager to enable it to display images from a ModelServer

Imager server. This chapter will guide you through the entire process from the setup and configuration procedures through connecting and displaying images published by a ModelServer Imager server.

MicroStation Descartes Key-in Tables

Appendix A provides a comprehensive list of the MicroStation Descartes key-ins. More than 1000 key-ins are listed and defined.