

TCDView

This document describes TCDView Product

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Chapter 1. User Manual

Introduction

TCDView is a composite document viewer. It allows to collect a set of raster or vector documents into a single composite document. Individual drawings in the composite document can be selected to allow changing of their parameters, their position in common world coordinates and their visible areas (viewports). The current coordinates of the mouse cursor in the composite document world are displayed in the status bar. It is also possible to measure distances between selected points. *TCDView* can print composite documents. Composite documents are stored in files with the *TCD* (*Tessel Composite Document*) extension and can also be embedded in other documents. Composite documents currently contain references to document files but do not contain document files themselves. Composite documents are especially useful in GIS applications for seamless display of neighbouring or overlapping sections of raster and vector maps.

TCDView displays composite documents that refer to document files saved in various raster and vector formats. The full list of formats supported by *TCDView* can be found in the section called "Appendices" at the end of this manual. File names of raster and vector documents must have extensions appropriate for their formats. Several composite documents can be open in one *TCDView* session. You may arrange the positions and sizes of windows, as to view all or selected documents that are open in the session.

Individual documents and composite documents can be selected for viewing by entering their file names or using 'drag and drop' technique.

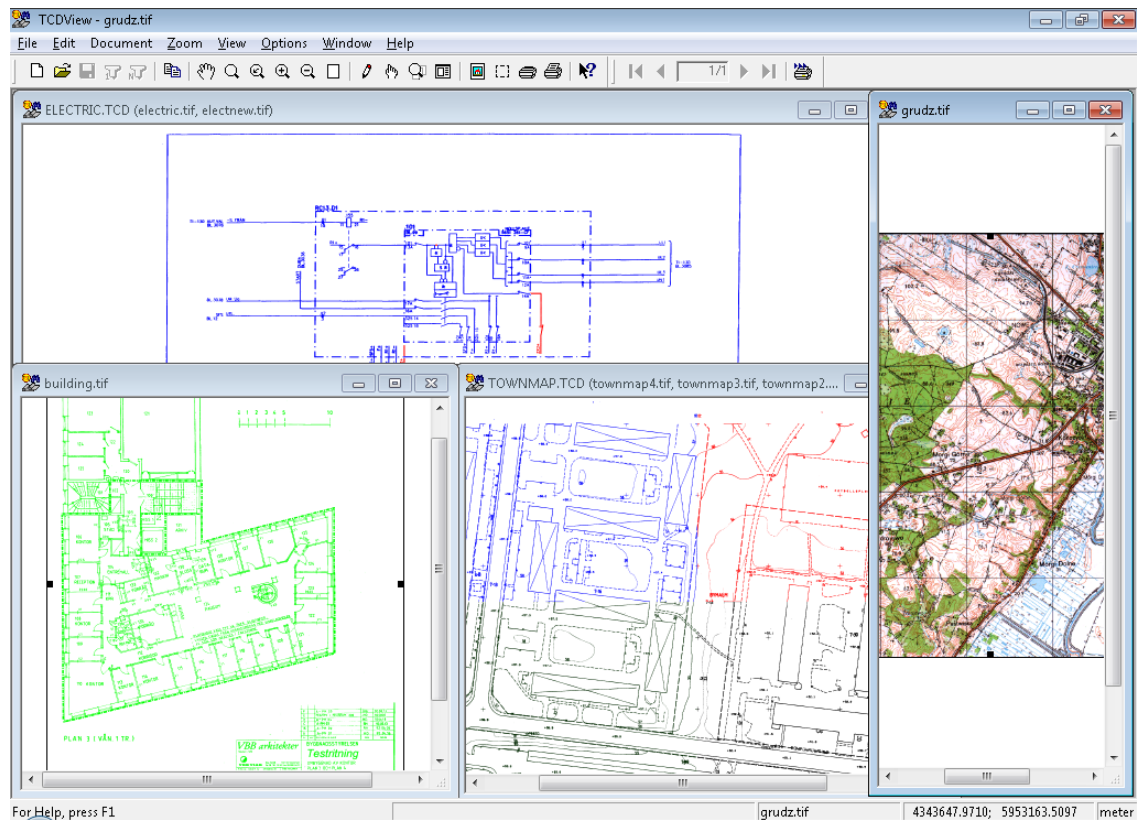
Document files can come from outside of the system or they can be acquired with an installed scanner. *TCDView* cooperates with any scanner that is compatible with the *TWAIN* standard.

Scanned and vector documents displayed by *TCDView* can be printed on any device, printer or plotter, which is controlled by an MS Windows graphics printer driver. *TCDView* can print to standard MS Windows drivers, drivers provided by printer/plotter vendors or drivers developed by Tessel Systems for selected raster devices.

TCDView can efficiently print documents of any size supported by given output device. The printing process is always performed using full resolution data from scanned or vector document file scaled to the demanded output size.

Windows and menus layout

The figure below shows the *TCDView* program window.



The TCDView main window title bar contains not only application name but also the name of the file with the active (current) composite document, i.e. the document displayed in the active window (active window title bar is displayed in a different color). After the name of the current document there is a list of the first three component drawings of this composite document in brackets. Below there is the main menu bar with the program's menus. Each of them is an entry to a pull-down menu with a set of commands. An optional toolbar is displayed under the main menu bar and contains icons, which allow access to the most frequently used commands. Documents are displayed in the remaining place of the main window. A status bar, also optional, is displayed under window(s) with documents. It shows the information supporting the user such as messages, system Help information, selected information concerning the active document and some keyboard status information.

Each of composite documents displayed by TCDView (an open document) has its own window with scrollbars. In the caption bar of each document window, after the document name, there is a list of the first three component drawings of this composite document (in brackets). The layout of windows with documents can be changed automatically (with commands invoked from the Window menu) or manually according to specific user's needs. A document window can be minimized to a TCDView icon labelled with the document name. Such a document is still present on the list of open documents in the Window menu.

When none of documents is open, for example immediately after program start-up or after closing all of document windows, the program main menu is in shortened form with only File, View, Options and Help entries. Using them you can open document(s), configure system by attaching printer, plotter or scanner, start acquiring document from a scanner and perform raster files format conversion. You can also disable or enable the toolbar and status bar. The Help command is always accessible.

When the first document is opened, the main menu is extended with new commands, so that all program functions are available. They are described in detail in the section “TCDView commands”.

TCDView and Clipboard operations

The ability to transfer data between applications is one of the most important features of the MS Windows system. It allows, for example, to place a document created by one application inside a document in another application. Copy and Paste commands are used for transferring data between applications. The Copy command puts information in an appropriate format to the MS Windows Clipboard. The Paste command gets information from the Clipboard to another application in one of the formats supported by that application.

A document can be copied to the *Clipboard* in one of the standard MS Windows document formats:

- Device Dependent Bitmap
- Device Independent Bitmap
- MS Windows metafile

TCDView allows to control formats of data copied to the Clipboard. Relevant parameters in **TSLTCDVIEW.INI** file, described in the section called “TSLTCDV.INI file”, are used for switching on and off the copying of data in different formats. Moreover, it is also possible to control the moment, in which data will be copied to the *Clipboard*. Document data can be copied immediately after issuing the `Copy` command or only when the data is embedded to a document in client application.

TCDView commands

File menu commands

New	Ctrl+N
Open...	Ctrl+O
Close	
Save	Ctrl+S
Save As...	
Convert...	
Print...	Ctrl+P
Print Preview	
Print Window	
Print Setup...	
Scan	▶
Select Source	
1 GRUDZ.TIF	
2 BUILDING.TIF	
3 TOWNMAP.TCD	
4 ELECTRIC.TCD	
Exit	

The **File** menu commands are used for selection of documents to be opened, for selection of scanner and for starting the scanning, for document printing or conversion to different raster formats, for closing the documents and for exiting the program.

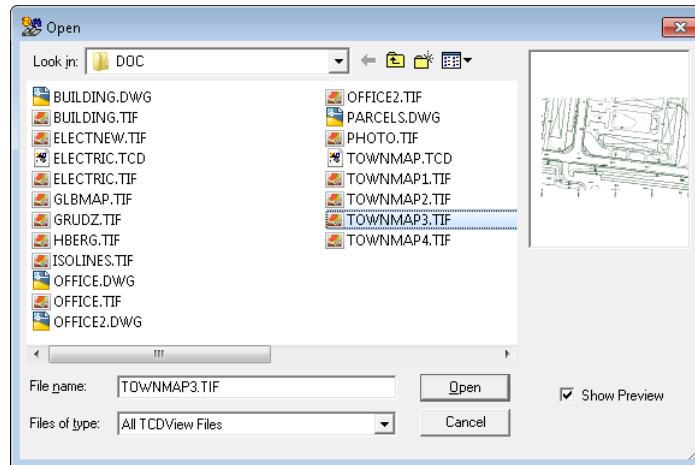
This menu also shows up to four file names of documents that were most recently used. Clicking on a name opens the selected document. Names of these files are stored in the TSLTCDVIEW.INI file in the section [Recent File List].

New

The **New** command is used to create a new empty composite document. Drawings can be added to such a document using the **Add Subdoc** command from the **Document** menu.

Open...

The **Open** command is used for selection of a composite document or a single drawing file, which is to be opened by TCDView. In the dialog box, launched by the **Open** command, you should select a needed file format type, disk drive and directory on this drive.



As a result of these selections the program will display the list of all files in the selected directory with the selected extension. Every change of the format type or of a disk and/or directory is immediately reflected in the displayed list of files. Opening of a document file from that list is done by its selection with the left mouse button click and then clicking the OK button; the left mouse button double click on the file name on the list is an alternative method.

When you select raster or vector drawing file for opening, TCDView creates a new composite document, which contains a single drawing just selected.

When the **Shift** or **Control** key is pressed, it is possible to select multiple file names. When the **Shift** key is pressed, you select only the first and the last of files you want to open and all the files between them on the list will also be selected. When the **Control** key is pressed, you select multiple file names by clicking on each of them separately - they do not have to be neighbours on the list. After selecting all desired file names, you click the OK button and all selected files are opened - each in its own window.

The **Open** command can be always used, i.e. you can view more than one document at any given moment. Documents are displayed in separate windows. Only one of them is active at any given moment - its title bar is displayed in a different color - and all commands apply to this document. To make another document window active, you simply click this window area. If it is invisible, you select it from the list available in the **Window** menu. The **Window** menu is also used for document windows ordering.

Close

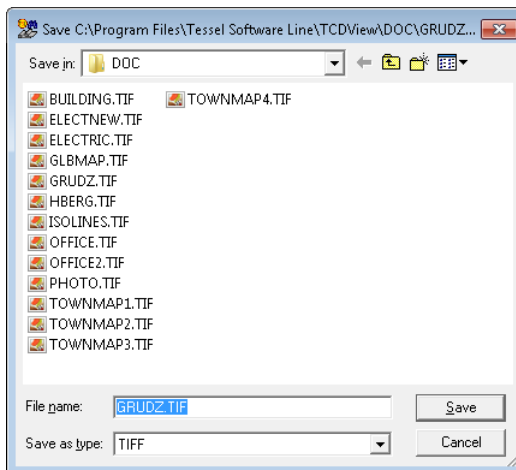
The **Close** command is used to terminate displaying a document by closing the file with its contents. When multiple documents are open simultaneously, the command refers only to the active document. When in the course of the session the document has been modified, the user is asked to decide whether to save the changes. If positive, the document will be saved in the same file from which it has been loaded (opened).

If a composite document being closed was created by opening a single raster or vector drawing and no viewport or parameter changes were made, then **Close** does not ask for saving this document and, if it is to be saved, it must be done explicitly using the **Save As...** or **Save** command. This facilitates the viewing of single raster and vector files without creating trivial composite documents that refer to one file only.

Save

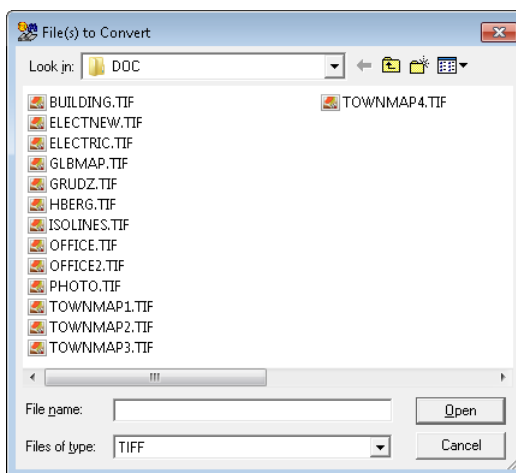
The **Save** command is used for saving the changes to the current composite document in the same file from which the document has been loaded (opened). The **Save** command is available if the current document is a new document or if it has been modified using commands from the Document menu.

Save as...



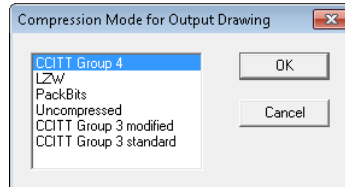
The **Save as...** command is used to save the current document in a file different from which that document has been loaded. When several documents are loaded, the **Save as...** command refers only to the active document. In the dialog box, invoked by this command, you select a disk drive and a directory on this drive. Then enter, or select from the displayed list, a file name with TCD extension. If the file with the entered name exists, the program launches additional dialog box that asks you, if you want to overwrite the existing file.

Convert...



The **Convert...** command is used to create a new version of a drawing in a raster format different than the original. This command launches the dialog box named Input File, otherwise identical to the dialog box in the **Open** command and serving the similar purpose of the drawing

file selection. The selected file in this case will not be displayed but only read in order to be converted. After the input file is selected, the analogical dialog box Output File appears. It allows to select a new drawing format, file name and destination (disk drive and directory). If the newly selected file format supports multiple compression modes, an additional dialog box appears for precise selection of a desired file subformat.



The list of output file formats and compression modes depends on the format of the converted (input) file. The full list of formats that are available in each case is displayed in the *File Type* list box.

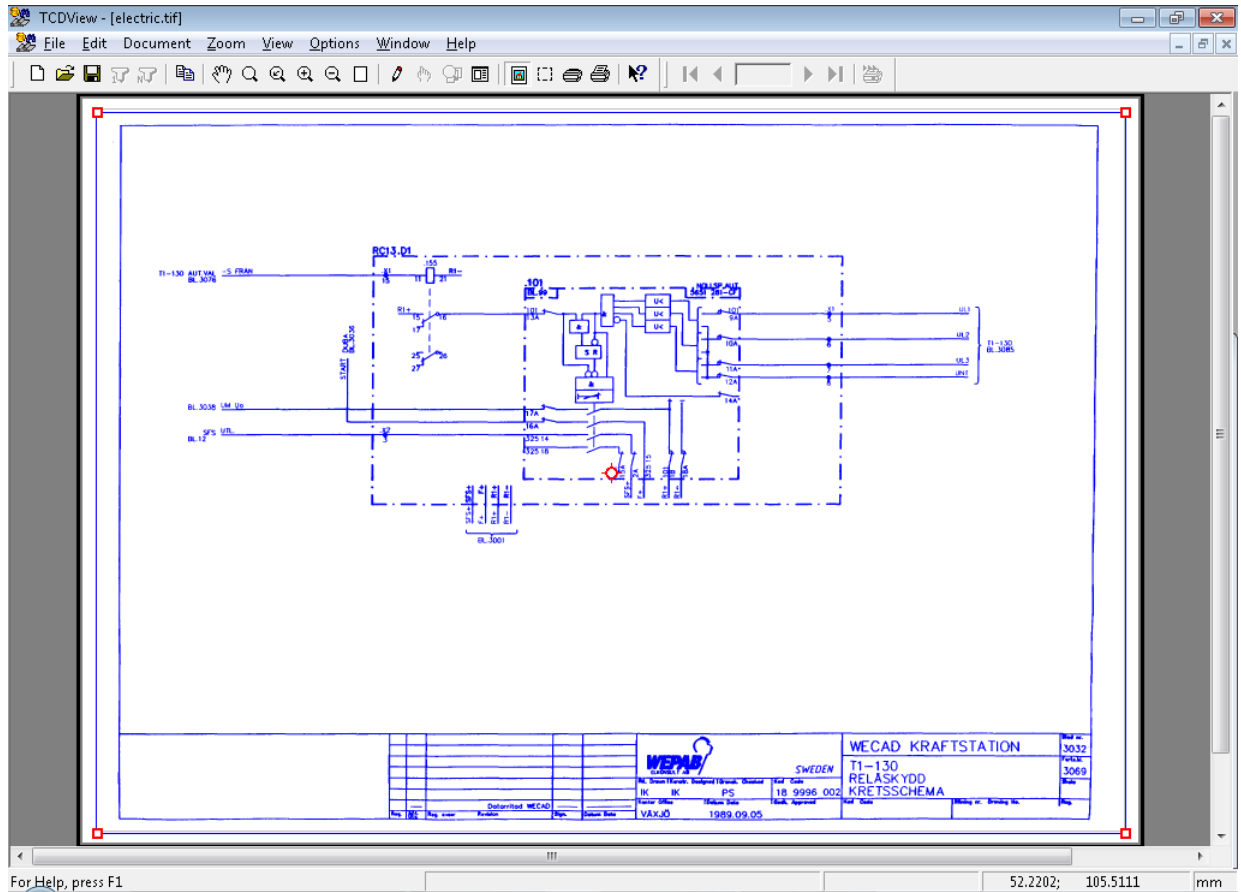
When multiple input files are selected, they are converted to a single file in one of multi-page formats (TIFF, DCX). Each page in the resulting document contains data from the corresponding input file. You can suppress this feature and convert each input file to a separate destination file by setting the `ConvertToOneFile` parameter in the `TSLTCDVIEW.INI` file to 0 (see the section called “TSLTCDV.INI file”).

Print

The `Print` command starts printing selected document or launches the *Print* dialog box that is based on which printer was chosen in *Print Setup* dialog (see below). So before printing please first open *Print Setup* dialog

Print Preview

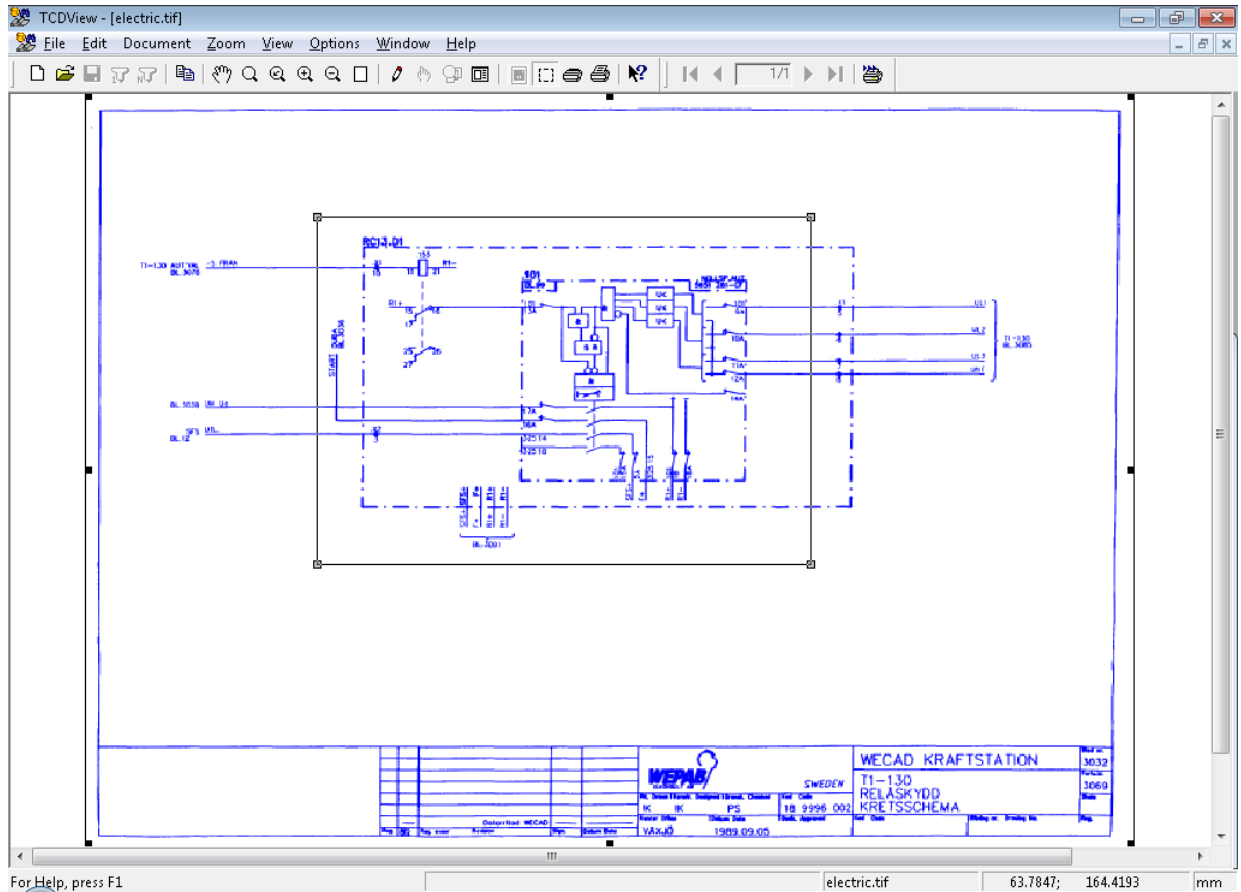
The `Print Preview` command launches *Page Preview* window. This is the window showing what will be printed - it allows setting the layout of the printed document view on the displayed paper sheet.



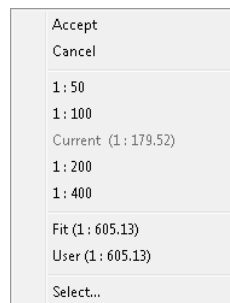
Print Window

Print Window command starts launches resizable box on current document that can be used to control the printing scale and area of picture to be printed.

You can grab each corner of the box using Left Mouse Button and drag it to set the area for printing.

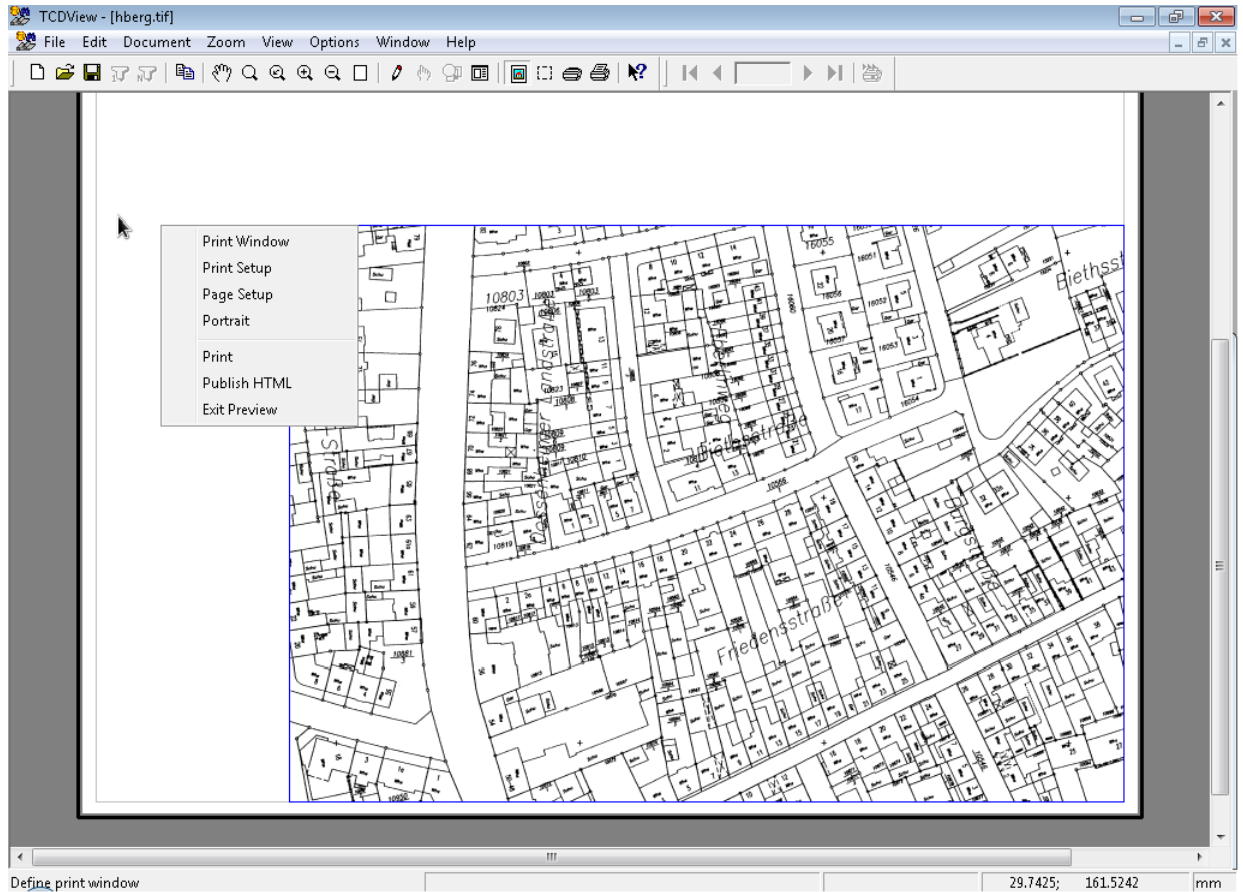


When you have set area for printing, click Right Mouse Button to open context menu:

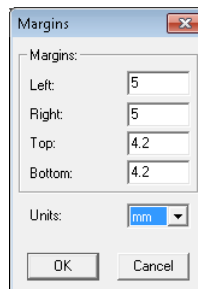


- Accept command cuts the picture to the selected area and enables new commands from context menu.

1. If you have focus on hole printing page (by default after clicking Accept command) then in context menu you will have:

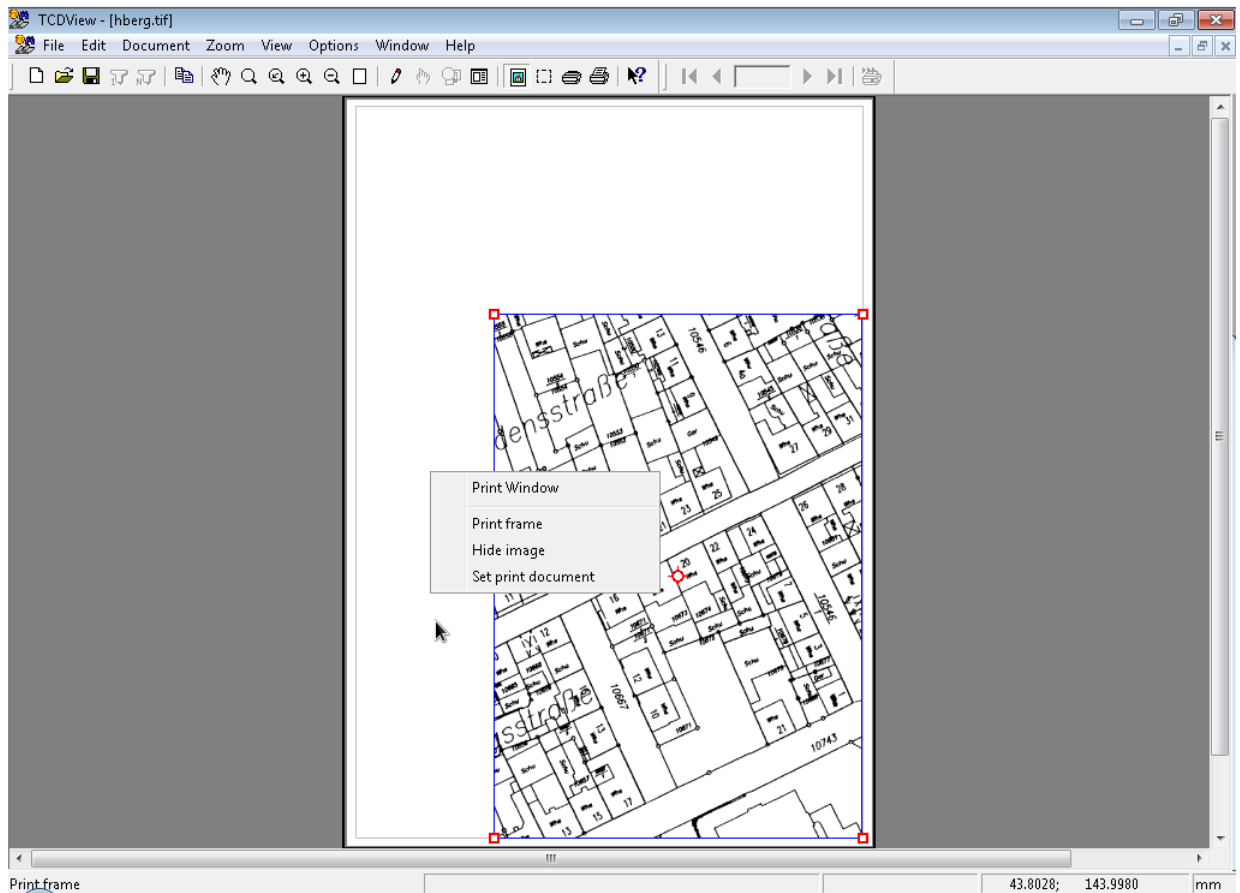


- **Print Window** - goes back to *Print Window* where you can again choose area for printing,
- **Print Setup** - opens *Print Setup* dialog (see below for more information on this dialog),
- **Page Setup** - opens *Margins* dialog where margins can be set,



- **Portrait/Landscape** - changes the picture orientation.
- **Print** - starts Printing based on the chosen printing configuration selected in *Print Setup* dialog,
- **Publish HTML** - creates simple HTML page with the image for print linked to it.

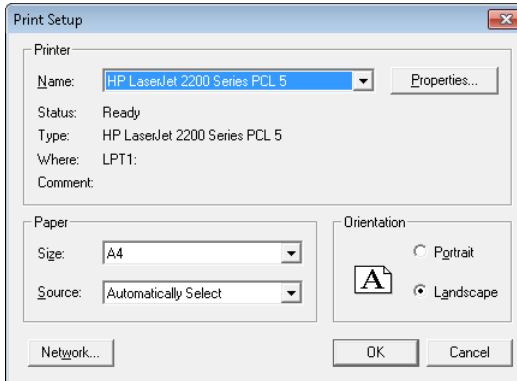
- `Exit Preview` - goes back to standard TCDView screen.
2. If you have focus on the area selected for printing, (it can be easily distinguish by red squares on each of the area corners) then this context menu will show:



- `Cancel` - goes back to Print Preview look,
- Various scales values that can be chosen for the printing area,
- `Select...` - opens a dialog where you can set your own scale.

Print Setup

The `Print Setup...` command launches the *Print Setup* dialog box.



In this dialog box it is possible to:

- select the current print device from the list of available devices,
- change some printer parameters (e.g. print orientation, paper size, paper source),
- set print quality parameters in the Properties dialog box, which is displayed after pressing the `Properties...` button.

New printer drivers can be added and printer to port mappings can be changed using the MS Windows system Control Panel.

Scan

The *Scan* command is used to start scanning of a new document. Depending on the kind of scanned document (single-page or multiple-page) one of two options can be selected:

- One page,
- Multiple pages.

Before scanning it is necessary to select a file name and a raster format of the drawing that will be created as a result of scanning. After scanning, a new composite document is created, containing a single raster file with the scanned image.

One page

This command starts scanning of a single-page document.

Depending on the type of the selected scanner it may be necessary to start scanning physically, e.g. by pressing a button on the scanner. Some scanners can start scanning automatically, others can display their proprietary window with information about scanning progress. The scanned document is then displayed in a window labelled with a temporary name, e.g. `SCAN_1`.

Multiple pages

This command starts scanning of a multiple-page document.

The process of multiple-page scanning is similar to the single-page scanning. After each page the dialog box appears and informs about the number of pages scanned so far. Four buttons are available (some of them can be disabled, depending on the situation):

- `Next` - confirms the last scanned page and starts scanning of the next one;

- The `Same` - repeats scanning of the last page;
- `Close` - confirms the last scanned page and stops scanning; the file will contain the number of pages as currently displayed in the dialog box;
- `Cancel` - stops scanning and discards pages scanned so far.

The first page of the scanned document is displayed in a window labelled with a temporary name, e.g. `SCAN_1`.

Select Source

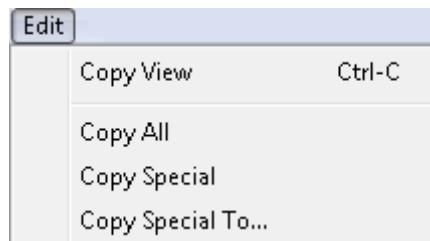
The `Select Source` command is used for selection of the current scanning device. The `Select Source` command is relevant only when more than one scanner is installed.

Click a name and press the `Select` button to choose a scanning device. Particular scanning parameters can be set using the `Scan Parameters` command from the *Options* menu. The list shows only *TWAIN*-compatible devices that have been properly installed. When the part of scanning software that is responsible for cooperation with applications that use the *TWAIN* standard is present, the device should appear on the list of available scanners (no additional installation on the part of *TCDView* is required).

Exit

The `Exit` command closes the *TCDView* application. If the user has made any changes to a document(s), he can choose to save or cancel the changes using buttons of the dialog box that appears automatically.

Edit menu commands



Copy View

The `Copy View` command is used to transfer the current view of the current document to the MS Windows system Clipboard. Only the currently visible part of the document is transferred in its current scale. Independently of the values of `CopyEmbedded` and `CopyLink` variables in the `TSLTCDVIEW.INI` file, the `Copy View` command does not allow to embed or link data from the Clipboard to other applications. The copy of the document view can be prepared only in DDB bitmap, DIB bitmap and metafile formats.

Copy All

The `Copy All` command is used to send a copy of the current document to the MS Windows system Clipboard. Basically it is used for simple interchange of documents between different MS Windows applications.

The `Copy All` command, unlike the `Copy View` command, prepares data from the whole document, no matter what the current view is. It is also possible to define sizes and resolution for preparing a copy of the document. Four variables are used for this purpose, *Width*, *Height*, *Xres* and *Yres*, all with the *ClipboardCopy* prefix defined in the *TSLRVC Library Settings* section of the `TSLTCDVIEW.INI` file. All these parameters can be changed by editing this file. New values are used next time the program is run.

The default settings of variables result in making a copy of a document that is 6.67 inches wide and 5 inches high with 96 dots per inch resolution. These parameters reflect the size and resolution of a typical monitor screen. A document will be scaled in such a way that it will cover the demanded area as fully as possible. A document can be copied in every available format (embedded object, link, bitmaps and metafile).

When multiple documents are displayed, the command acts only on the current document.

Copy Special

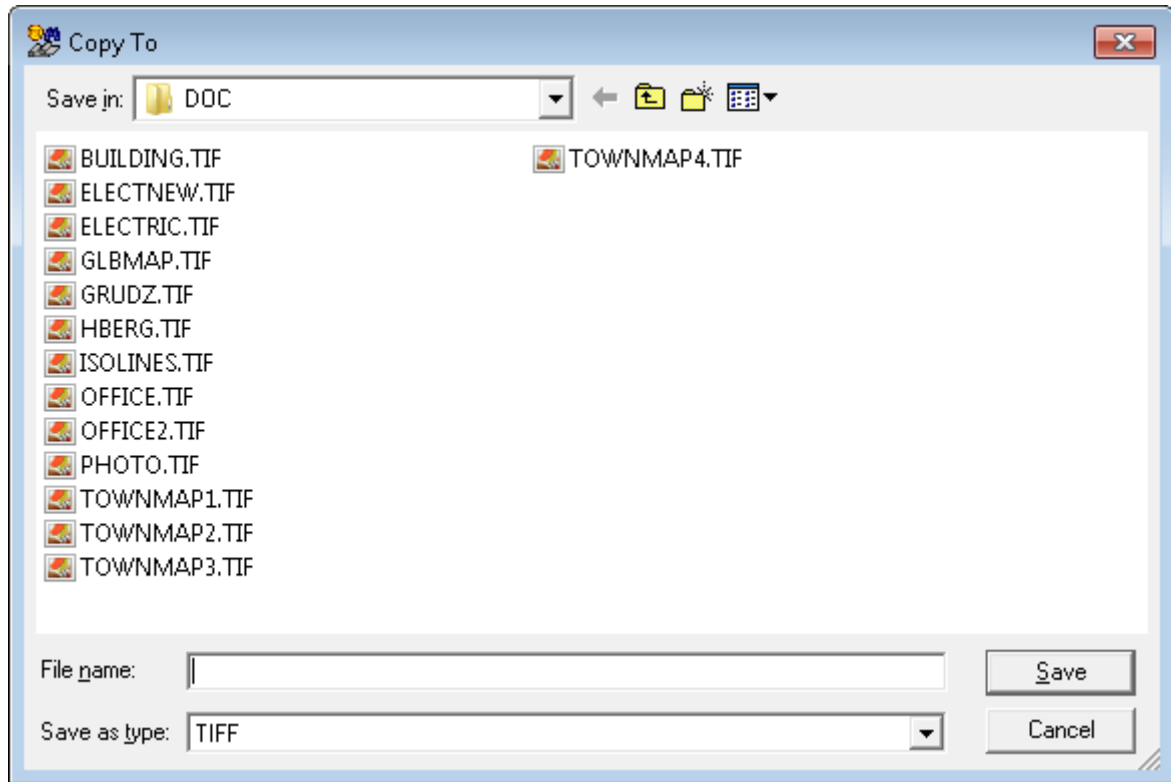
The `Copy Special` command is used for sending a copy of the current document to the MS Windows system Clipboard. Basically it is used for an interchange other than simple interchange of documents between different MS Windows applications (see `Copy All`). The command also copies the whole document, no matter what the current view is, but it uses parameters defining sizes and resolution of the document copy, different than the `Copy All` command. These parameters are read from four variables, *Width*, *Height*, *Xres* and *Yres*, all with the *ClipboardCopySpec* prefix defined in the *TSLRVC Library Settings* section of `TSLTCDVIEW.INI` file. All these parameters can be changed by editing this file. New values are used next time the program is run.

The default parameter values are prepared for 1:1 copying of documents in a typical fax format, i.e. 8 inches wide, 11 inches high, 96 dots per inch of vertical resolution and 203 dots per inch of horizontal resolution.

If the current document is greater than the demanded copy size, then it is scaled, so that it fills the requested copy size as fully as possible. A document can be copied in every available format (embedded object, link, bitmaps and metafile). When multiple documents are displayed, the command acts only on the current document.

Copy Special To...

The `Copy Special To...` command is used to make a copy of a document and save it to a selected file. The width, height and resolution of created file are defined by the same parameters as in the `Copy Special` command.



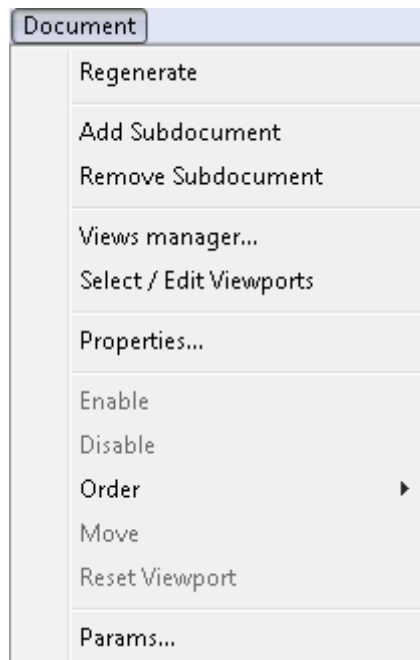
The default parameters are set for copying to the A4-size page with a resolution typical for fax devices. These parameters are read from four variables, *Width*, *Height*, *Xres* and *Yres*, all with the *ClipboardCopySpec* prefix defined in the *TSLRVC Library Settings* section of the *TSLTCDVIEW.INI* file. All these parameters can be changed by editing this file. New values are used next time the program is run.

Saving a document in a new file can be combined with changing of the raster format and compression mode (see the *Convert...* command from the File menu).

When multiple documents are displayed, the command acts only on the current document.

(CTXTDEF:HIDD_SUBFORMAT) In the dialog box invoked by the *Copy Special To...* command you select a raster format type, a disk drive and a directory on this drive. Next, you enter a file name with an extension that is appropriate for the selected raster format type. You may type it or select it from the displayed list of files with previously chosen extension. If another file with the same name exists, the program asks you, if you want to overwrite the existing file. If the selected output file type supports multiple compression modes, you can choose a compression mode in an additional dialog box *Compression Mode for Output Document*, which opens automatically.

Document menu commands



The *Document menu* commands are used for composite document management. Using these commands it is possible to add and delete drawings to/from composite document, to change the order in which they overlap one another, to change properties of individual drawings belonging to the composite document (like their position, current page or visibility status) and to change parameters of the composite document as a whole (e.g. its presentation units).

For each component drawing its visible area, called *viewport*, is defined. Initially (after adding the drawing to the document) it is set to full drawing extents. *Viewport* areas can be changed after entering the *Selecting* mode using the *Selecting* command from the *Document* menu (also available on toolbar). The *Reset Viewport* command sets the viewports of currently selected documents to their initial size (full extents of each respective drawing).

Entering the *Selecting* mode is also necessary when one of: *Enable*, *Disable*, *Change Link...*, *Copy...*, *Order*, *Move*, *Properties...*, *Undo*, *Redo* commands from the *Document* menu is to be issued, because each of these commands operates on currently selected drawings (*Change Link...*, *Copy...*, *Properties...*, *Undo*, *Redo* are active only when exactly one drawing is selected).

Regenerate

TCDView is performance-optimized for viewing large raster and vector documents. For each open document it keeps a full view of this document. This feature allows to execute the *Zoom-Extents* command very fast. In some situations, however, the use of full view cache can somewhat decrease the quality of document display. In this case the user can issue the *Regenerate* command which forces full resolution redraw without using the stored view. Storing and using of full view cache can be disabled by setting the *UseFullViewCache* parameter in the *TSLTCDVIEW.INI* file to 0 (see *TSL_0050_Appendices_0020_SUPEREDINI*-file).

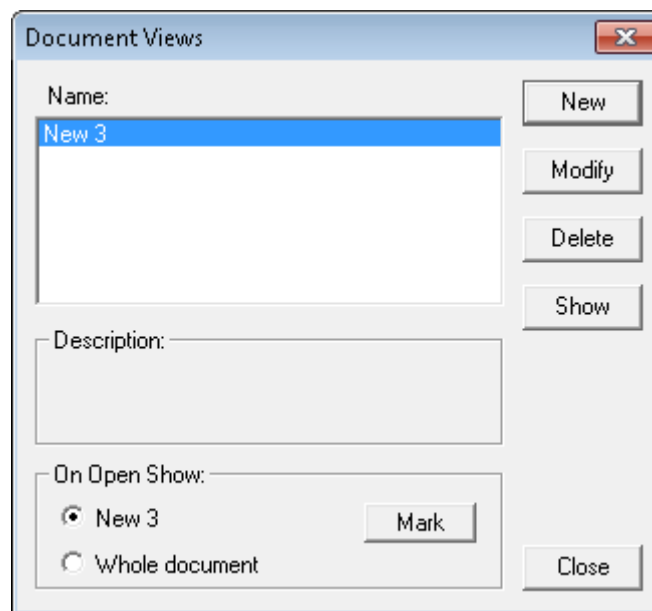
Add Subdocument

The `Add Subdocument` command from the Document menu is used to add a new component drawing to the current composite document. It launches a dialog box for selection of a drawing to be added.

Remove Subdocument

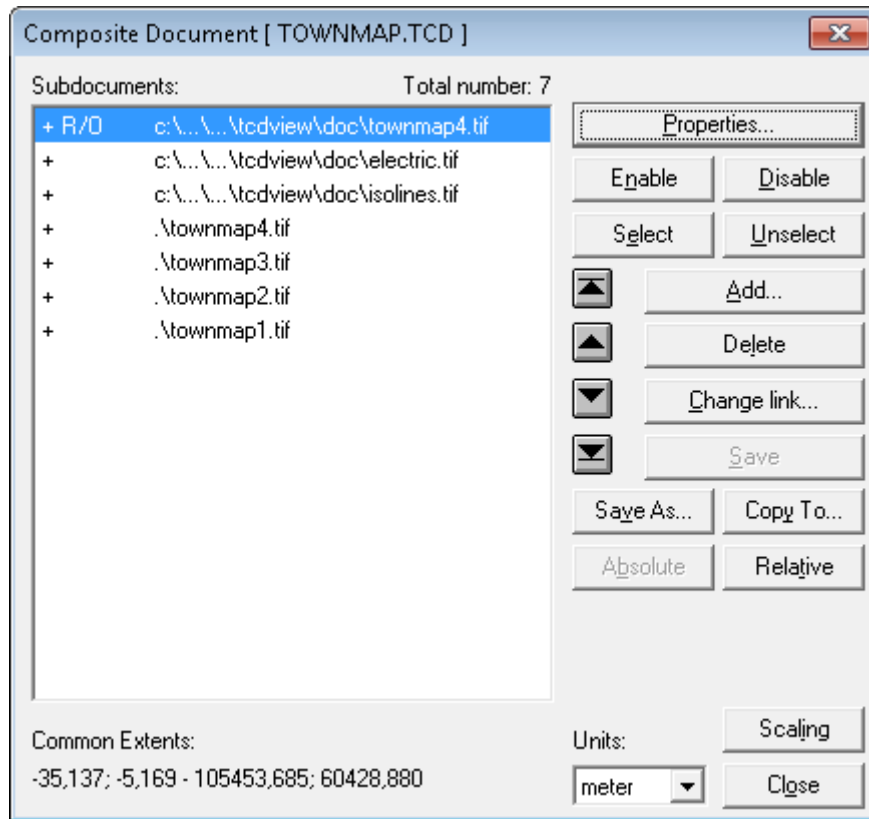
The `Remove Subdocument` command from the Document menu removes currently selected drawings (see the `Selecting` command) from the current composite document. Of course, it does not delete the drawing's file.

Views Manager



Select / Edit Viewports

Properties...



The `Properties...` command launches the *Composite Document* dialog box. This dialog box groups together most of commands available in the *Document* menu (described in following sections). In addition to buttons for issuing these commands, the *Composite Document* dialog box displays a list of component drawings in the current composite document. Using this list it is easy to select drawings as arguments to commands that operate on specified drawings.

The *Composite Document* dialog box lists the component drawings in four columns. The first, the second and the third column show the drawing status information, and the fourth one displays drawing file names. The first column contains plus sign (+), if the corresponding drawing is enabled (visible) or minus sign (-), if the drawing is disabled (invisible). The second column can be empty or it can contain either the "N/A" text, if the drawing's file can not be found, or the "R/O" text, if the drawing is open in the read-only mode. The third column contains "S" character, if the corresponding drawing is selected.

If the `Properties...` command is issued in the selecting state (see description of the *Selecting* command), currently selected drawings will be shown as selected in the dialog box list. After closing the *Composite Document* dialog box in the selecting state, drawings which were selected in the dialog box list remain selected and the other drawings are not selected. This way it is possible to perform drawing selection from the list of component drawings. This selection method is alternative to the mouse click selection method described in the *Selecting* command section below.

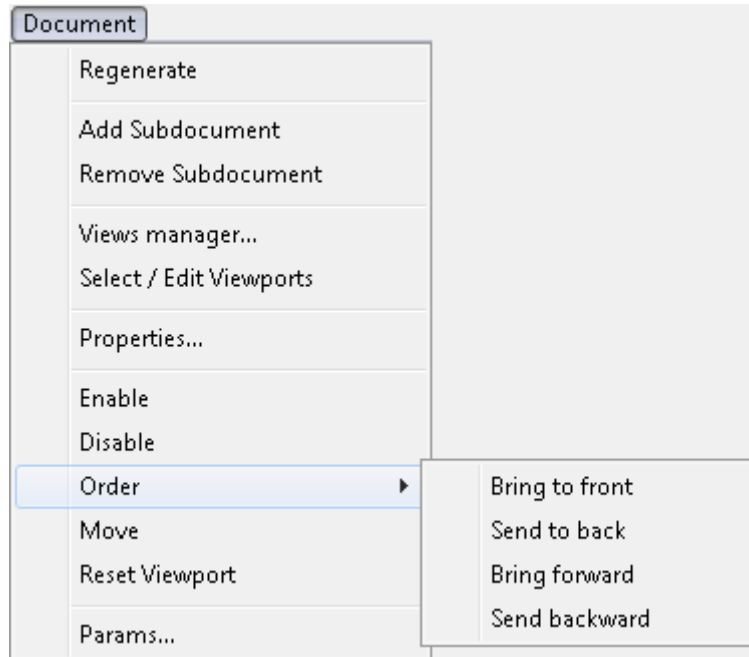
Enable

The `Enable` command from the *Document* menu turns the currently selected drawings visible.

Disable

The `Disable` command from the `Document` menu turns the currently selected drawings invisible.

Order



The `Order` command from the `Document` menu allows to control the order in which component drawings overlap one another, when the composite document is displayed or printed. The `Order` command has four subcommands described below. Each of them moves selected drawings on the composite document's drawing list.

Bring to front

The `Bring to front` command moves selected drawings to the front end of the composite document's drawing list, i.e. makes them cover the other drawings.

Send to back

The `Send to back` command moves selected drawings to the back end of composite document's drawing list, i.e. puts them under the other drawings.

Bring forward

The `Bring forward` command moves selected drawings (see the `Selecting` command) one step in the front direction on the composite document's drawing list, i.e. makes them cover the drawing which preceded them immediately on the composite document's drawing list. Issuing the `Bring forward` command sufficient number of times is equivalent to issuing the `Bring to front` command one time.

Send backward

The `Send backward` command moves selected drawings one step in the back direction on the composite document's drawing list, i.e. puts them under the drawing which followed them

immediately on composite document drawing's list. Issuing the `Send backward` command sufficient number of times is equivalent to issuing the `Send to back` command one time.

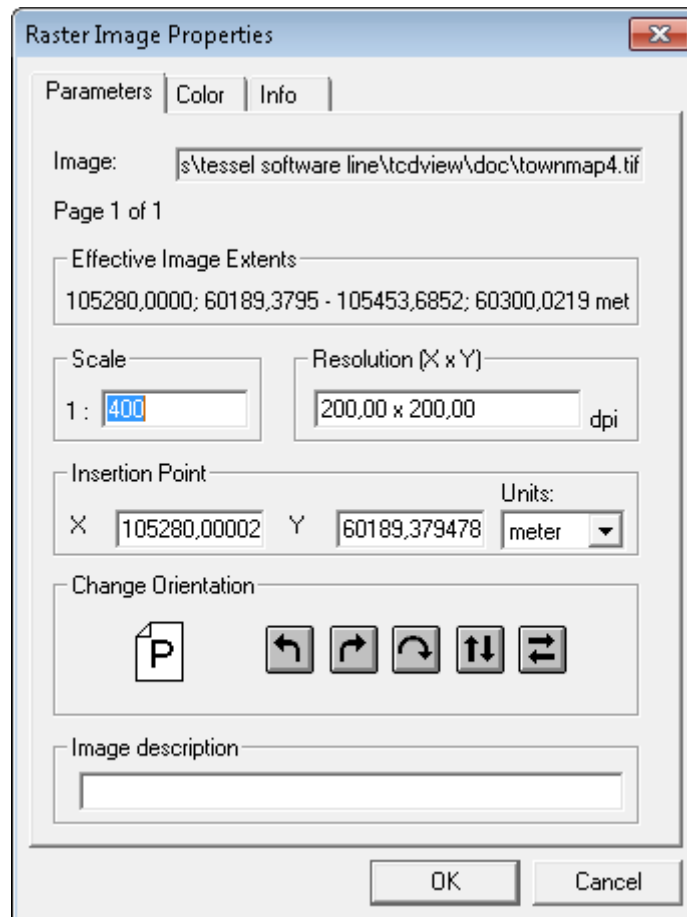
Move

The `Move` command from the *Document* menu allows to change the position of the selected drawing in the composite document world coordinate system. After selecting one drawing and issuing the `Move` command, click the point (within the selected drawing) to be moved and then click at the place that you want the first point to be moved to. The viewport (i.e. visible area) of the drawing being moved is moved with it as well. This way the same area of the drawing remains visible.

Reset Viewport

The `Reset Viewport` command from the *Document* menu resets the viewports of currently selected documents to their initial sizes (full extents of each respective drawing).

Params...



The `Params...` command from the *Document* menu is active only when exactly one drawing is selected. This command launches the *Raster Drawing Parameters* dialog box (or *Vector Drawing Parameters*, depending on the current drawing type), which allows to edit technical parameters of the selected drawing.

The *Raster Drawing Parameters* dialog box is a tabbed dialog. It can have from one up to three pages. The page titled *Parameters* is always present. The page titled *Pages* is present only when properties of multipage raster drawing are shown. The page titled *Colors* is present only when at least one drawing page is monochrome. On the *Parameters* page you can set the following:

- *Effective Drawing Extents* - values calculated from the other parameters;
- *Scale* - it is possible to set the nominal scale of the document;
- *Resolution X x Y* - it is possible to set the nominal horizontal and vertical resolutions of the bitmap in dots per inch;
- *Insertion Pointio* - it is possible to enter the insertion point coordinates, i.e. world coordinates of the bottom left corner of the drawing;
- *Unitsu* - list box allowing to select units for the insertion point;
- *Change orientation* - it is possible to rotate the view of the drawing left, right, by 180 degrees or perform vertical or horizontal mirroring of the view;
- *Colorc* - pressing this button launches the Raster Color dialog box; color can be defined only for monochromatic raster drawings;
- *Drawing Description* - it is possible to add textual document description.

On the *Pages* page you can select the current page of multipage raster drawing.

On the *Colors* page you can select color of monochrome raster drawing.

Vector Drawing Parameters dialog box is a tabbed dialog. It has two pages: *Parameters* and *Layers*. On the *Parameters* page you can set the following parameters:

- *Units*- list box allowing to select units for the vector drawing;
- *Change orientation* - it is possible to rotate the view of specified drawing left, right, by 180 degrees or perform vertical or horizontal mirroring of the view;

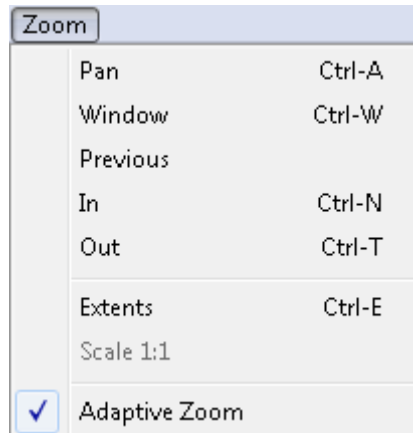
On the *Layers* page it is possible to enable or disable displaying of particular layer of the vector drawing.

In the *Change Orientation* group of both drawing parameter dialogs there are icons with arrows describing available orientation changes. To make orientation changes even simpler there is also an icon with the **P** character. After entering the *Drawing Parameters* dialog box this icon shows the **P** character in normal orientation. After pressing any of buttons with arrows, the **P** character rotates accordingly, thus showing how drawing will be rotated when the **OK** button is pressed.

The values of drawing parameters are saved in the drawing file, if the drawing format allows for it, and in an additional parameter file with the same name as drawing file name but with **TAF** extension. The additional file is located in the same disk directory as the drawing file. The additional parameter file is necessary, because not every parameter can be saved in the original drawing file. Some drawing file formats allow to store more parameters than other formats. Parameters saved in the original drawing file override parameters saved in its additional parameter file. Creation and reading of parameter files can be controlled using the **BRAOpenOptions** parameter in the **TSLTCDVIEW.INI** file.

The parameter values are read from the drawing file and possibly from its parameter file. All of them can be changed, except for Drawing Extents that are calculated from other parameters. When any parameter has been changed, the drawing is considered changed, and *TCDView* asks the user for saving changes in a file, when it is about to be closed.

Zoom menu commands



The *Zoom menu* commands are used for displaying selected fragments of documents and for magnifying or lessening the current view.

For each open document *TCDView* keeps a full view of this document. This feature allows to execute the *Zoom - Extents* command very fast. Full view cache is also used for other zooms, unless it decreases view quality too much. The Regenerate command forces the full resolution redraw without using the intermediate stored view. Storing and using of the full view cache can be disabled by setting the `UseFullViewCache` parameter in the `TSLTCDVIEW.INI` file.

Pan

The *Pan* command allows to move around the opened document.

Window

The *Window* command allows to define any rectangular view of a document. After defining a rectangle, the raster area inside it is redisplayed according to a new scale, such that the selected area fills up the whole current document window. View expansions in one direction, if necessary, are added automatically. The *Zoom-Window* command is the default action when the user selects a rectangle in a document window, so it is not necessary to invoke this command directly to execute it - selecting a rectangle to be viewed with the mouse is enough.

Previous

The *Previous* command displays the previously defined view of the current document (if such a view exists). The maximal number of remembered views is 15.

In

The *In* command magnifies the current view (approximately two times) relatively to its center point. The view will present a smaller document area but will contain more details.

Out

The `Out` command increases the area covered by the current view (approximately two times) relatively to its center point. The view will present a larger document area but will contain less details.

Extents

The `Extents` command is used to display the view of the whole current document (by magnifying or lessening its view), so that it fills up possibly largest part of its full window.

Scale 1:1

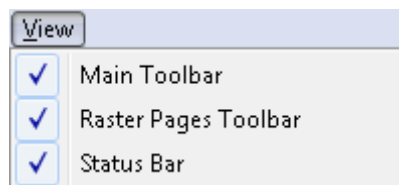
The `Scale 1:1` command is used to view a single drawing document on the screen in its original physical dimensions. When the current composite document contains more than one drawing, this command is not available.

In this command the vector or raster data is displayed on the screen in such a way, that one inch on the screen is equivalent to one inch on the paper document original (with maximal possible accuracy).

Adaptive Zoom

`Adaptive Zoom` option is by default ON

View menu commands



The `View` menu contains commands to activate and deactivate Toolbar and Status Bar.

Main Toolbar

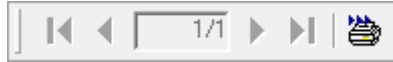
The `Main Toolbar` command toggles the display status (visible/invisible) of the main toolbar, which is on the top of the main *TCDView* window, just below the main menu bar.



If this option is switched on - what is indicated by the presence of a marker before the command name in the `View` menu - then the toolbar is displayed and through icons displayed on itself allows for fast access to the most frequently used *TCDView* commands. The verbal description of commands available through the toolbar is displayed on the status bar, when the left mouse button is press and held with the cursor over a toolbar icon. Switching the *Toolbar* option off by clicking on its name in the `View` menu results in disappearing of the toolbar. The next click on the option name switches the option and the toolbar on.

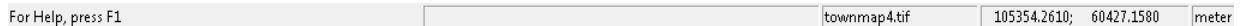
Raster Pages toolbar

This command toggles the display status (visible/invisible) of Raster Toolbar which is just next to *Main Toolbar*.



Status Bar

The `Status Bar` command toggles the display state (visible/invisible) of the status bar (see the `Windows and menus layout` section), which is located at the bottom of the main `TCDView` window.



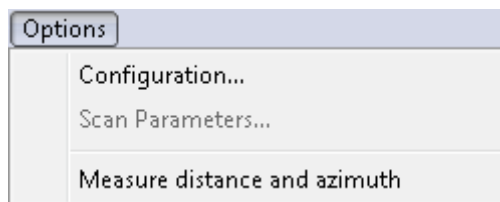
If this option is switched on - what is indicated by the presence of a marker before the command name in the `View` menu - then the status bar is displayed, presenting in its left part the verbal description of the command currently being selected from the application menu or from the toolbar. Library procedures also display its messages on the status bar - mostly with percentages of progress of their complex operations. The `Measure Distance` command from the `Options` menu displays its results on the left side of the status bar.

There are three information windows on the right side of the status bar. They are used to display (from left to right):

- the first window is filled only in selecting state - when one component drawing is selected, its name is displayed, when two or more drawings are selected, their number is displayed (e.g.: "Sel: 2 of 4");
- current coordinates of the mouse cursor in the world coordinate system of the composite document displayed in the current window;
- presentation units of the document displayed in the current window; mouse cursor coordinates are expressed in these units.

Switching the `Status Bar` option off by clicking on its name in the `View` menu results in disappearing of the status bar. The next click on the option name switches the option and the status bar on.

Options menu commands



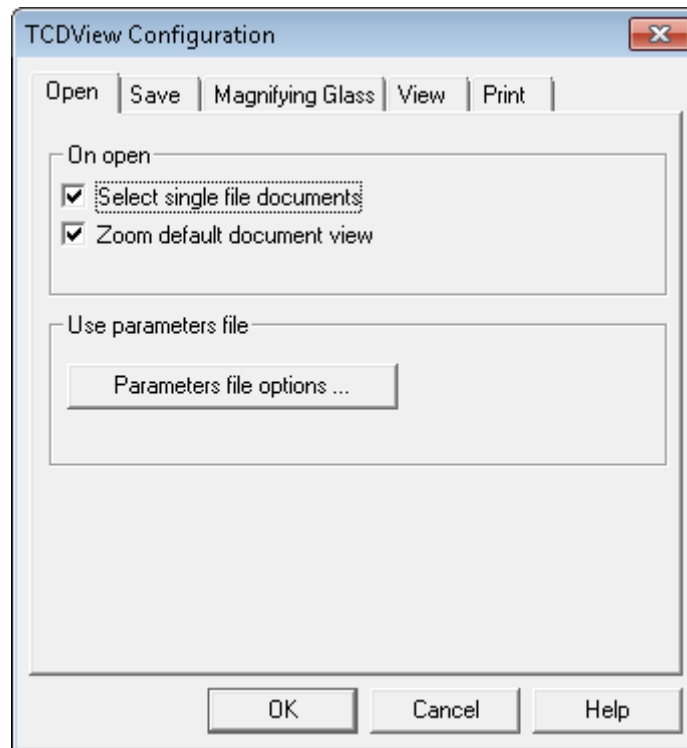
The `Options` menu commands can be used to set some parameters of the current scanner and to measure distance (in the real world units) between points of the current document.

Configuration

The `Configuration` command opens *TCDView Configuration* dialog where you can configure `TCDView` program. The dialog consists of 5 tabs:

Open, Save, Magnifying Glass, View, Print.

Open tab



The *Open* tab allows you to configure options that control opening *TCDView* files:

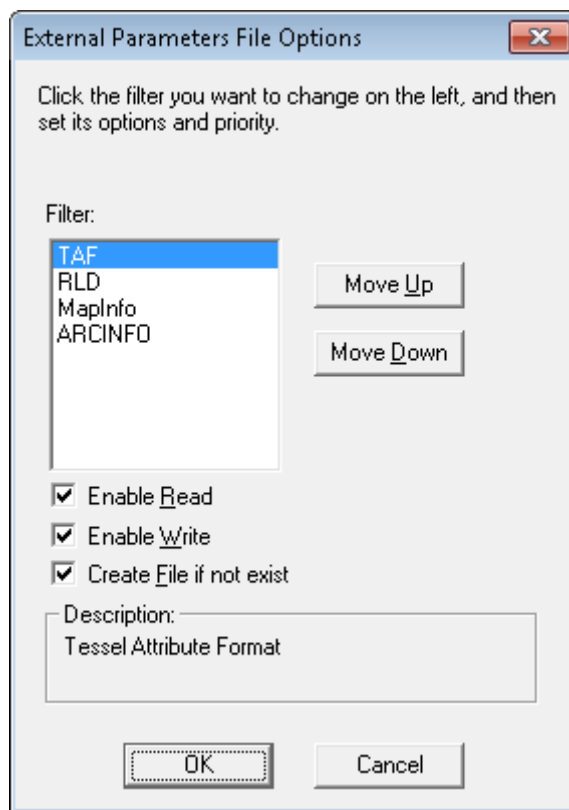
- **Select single file documents**

If this option is checked *TCDView* automatically selects a single image file, or a TCD file with only one subdocument, immediately after the open operation. This option corresponds to the *AutoSelectSingleFile* parameter from the [TSLRVC Library Settings] section in the *TSLTCDVIEW.INI* file.

- **Zoom default document view**

If this option is checked, immediately after opening a raster image or a composite document *TCDView* uses default view parameters.

The *Parameters file options...* button invokes the *External Parameters File Options* dialog that lets you set options and priority of particular file formats. The parameter values are read from the image file and possibly from its attribute file. All of them can be changed, except for the *Effective Image Extents* that are calculated from other parameters. When any parameter has been changed, the image is considered as changed, and *TCDView* asks the user for saving changes in a file, when it is about to be closed.



You can specify the following options for each parameter file format:

- **Enable to Read**

if selected *TCDView* tries to find parameters file corresponding to currently opened image and read missing parameters,

- **Enable to Write**

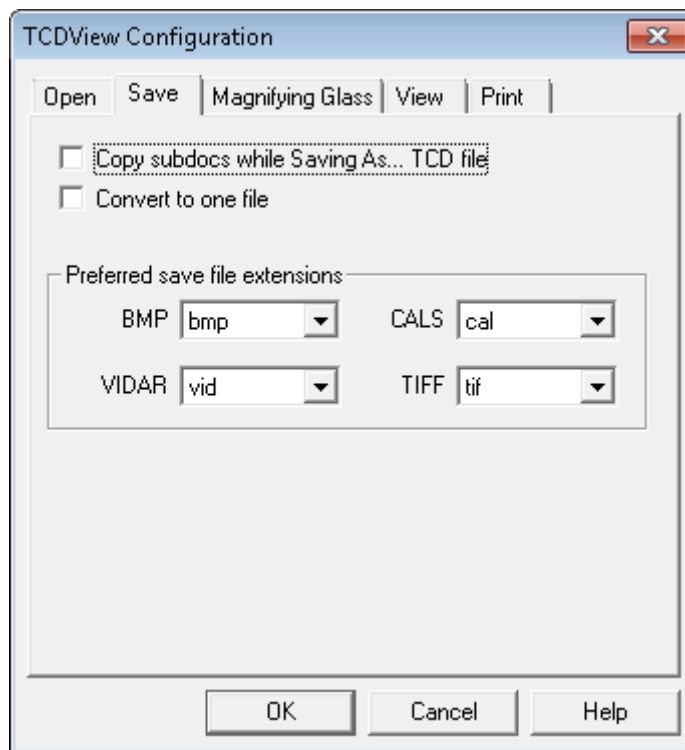
if selected *TCDView* tries to find parameters file corresponding to currently saved image and write new parameters values,

- **Create file if not exists**

Create file if not exists – Accessible only when Enable to write is selected. Controls whether a file in this format should be created if it does not exist.

Additionally you can define parameter file priority by sorting them in the list.

Save tab



The **Save** tab allows you to defining the following options:

- **Copy subdocs while Saving As... TCD file**

If this option is checked *TCDView* saves not only TCD file with links to raster images or vector drawings, but also copy all subdocuments to new files. This option corresponds to the `TCDSaveMode` parameter from the [TSLRVC Library Settings] section in the **TSLTCDVIEW.INI** file.

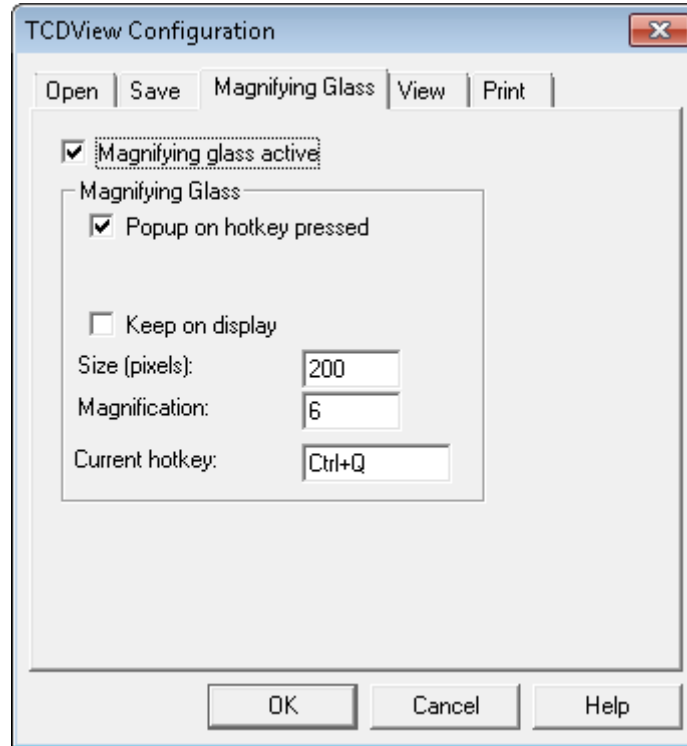
- **Convert to one file**

If option is selected *TCDView* creates the multi-page destination file while converting multiple input files.

Preferred save file extension

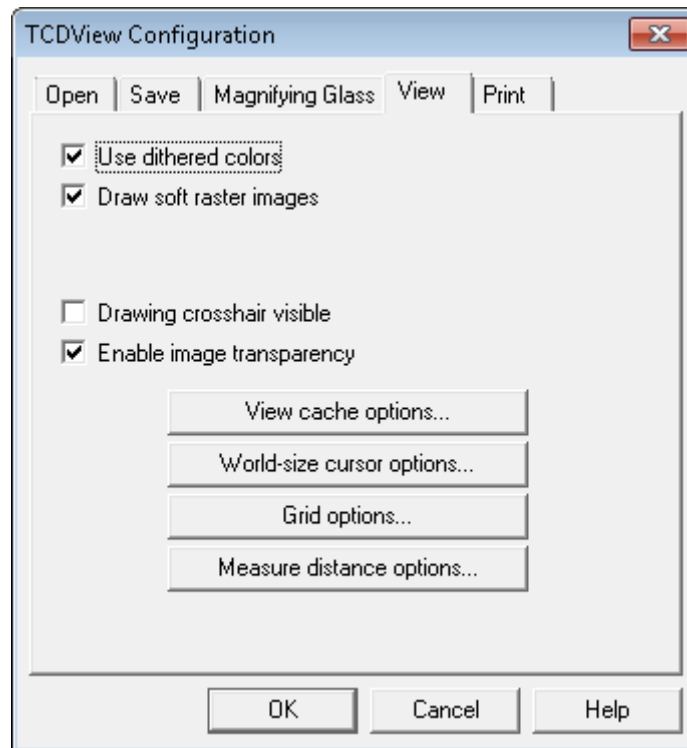
Some raster formats may be saved under different file extensions. These include Tiff, Vidar, CALS and Bitmap. You can define preferred extension for each format.

Magnifying Glass tab



The *Magnifying Glass* tab allows you to configure the *Magnifying Glass* tool. Checking *Magnifying Glass* active box activates the function. When the *Magnifying Glass* window is displayed, you see a zoomed raster area around the position of the mouse pointer (the *AutoCAD*'s cross-hair) at the moment of the *Magnifying Glass* activation. If raster snap was active and successful, its result will be indicated by a cross symbol. If the snap result is not satisfactory, you may pick a new point precisely. The **Keep on display** option controls the method of closing the *Magnifying Glass* window. If option is not selected the *Magnifying Glass* window is closed automatically if you move the mouse cursor outside the window or you pick a new point inside the window. Otherwise the *Magnifying Glass* window disappears after pressing the *Esc* key or right mouse click. The *Esc* key cancels the point in the *Magnifying Glass* window.

View tab



The *View* tab allows you to define view options:

- **Use dithered colors**

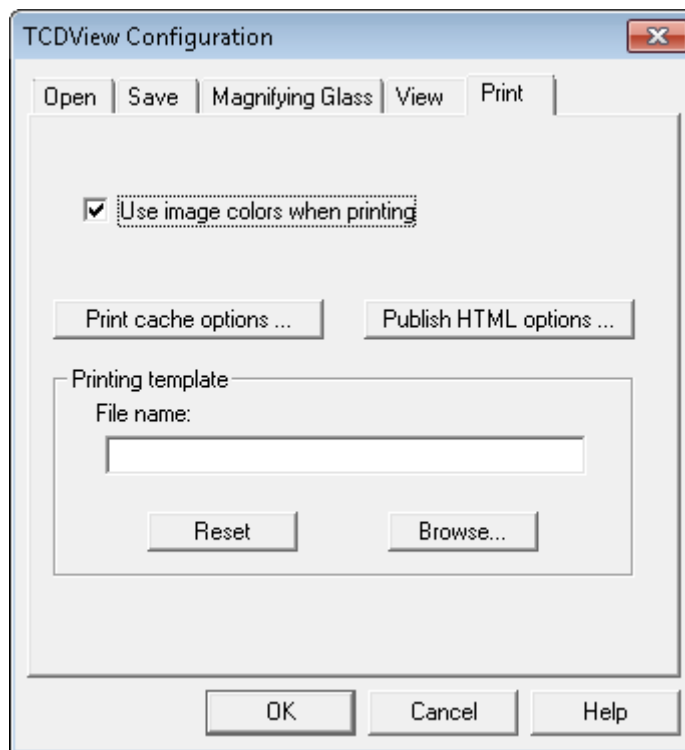
If this option is checked *TCDView* uses dithering to improve image colors mapping. The option is especially useful when displaying images with a lot of colors on display devices with only 16 or 256 physical colors. This option corresponds to the *DitherMode* parameter from the [TSLRVC Library Settings] section in the **TSLTCDVIEW.INI** file.

- **Enable image transparency**

This option is responsible for switching on or off the usage of transparency information defined in a raster image.

The *View* cache options or *Print* cache options buttons invoke configuration dialogs of *TCDView*'s integrated view and print cache. All modified parameters are stored in the **TSLTCDVIEW.INI** file. More information about modified property is specified in appendix.

Print tab



Scan Parameters...

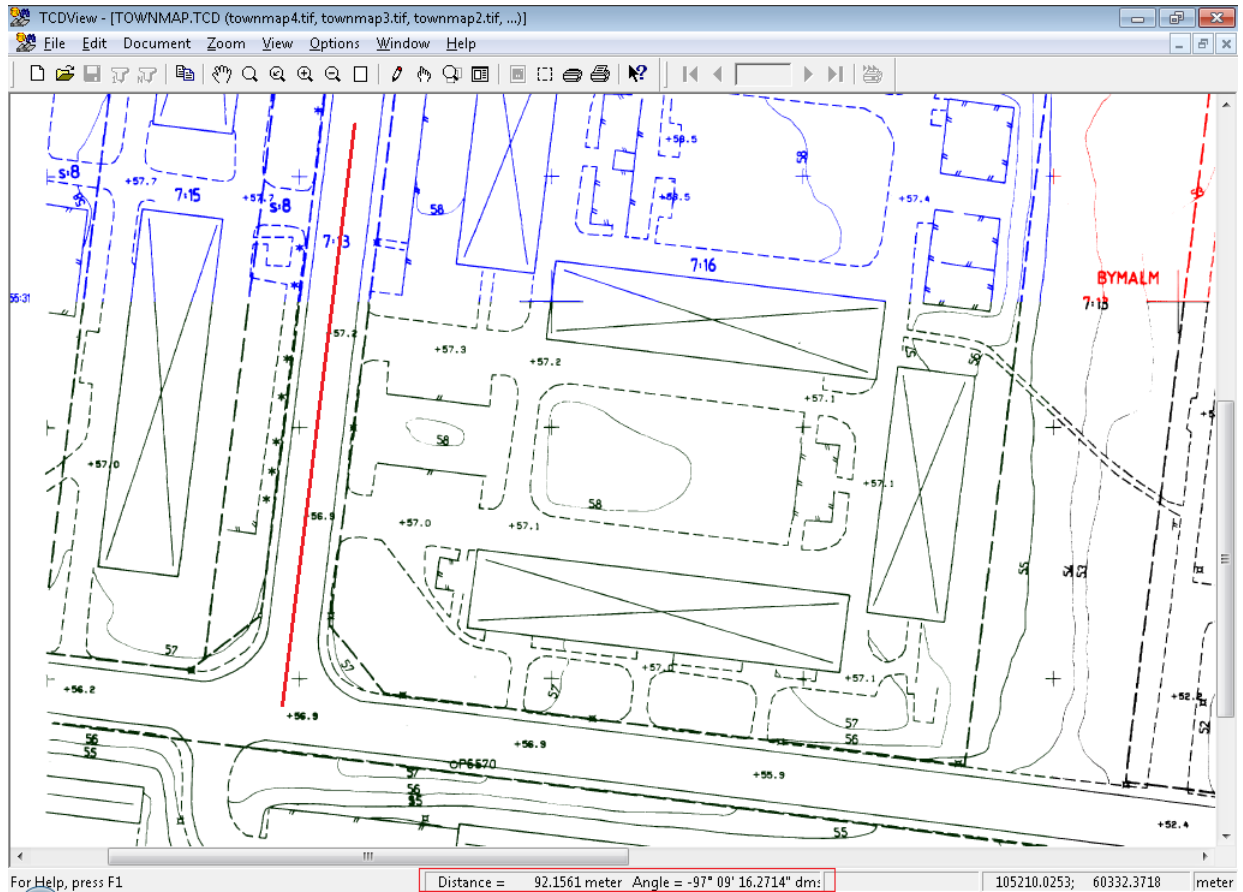
The `Scan Parameters...` command launches a dialog box which allows to set technical parameters of the scanning process. This dialog box depends on the current scanner type and is displayed and managed by its driver. The parameters are specific for the particular type of the scanner that is currently used. After setting parameter values one must initialize the scanning process.

Note

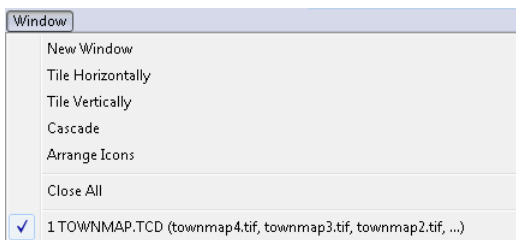
Saving the parameter values is done during scanning. That is why in order to save parameters, one must perform "dummy" scanning - it is not enough just to set parameters up.

Measure distance and azimuth

The `Measure and azimuth distance` command expects you to click the mouse left button at two points of the current document area. It then displays the real world (not paper document) distance between these points and angle of created line against the p on center of the status bar.



Window menu commands



The purpose of the Window menu commands is to change the layout of open document windows. The third part of this menu displays a list of open document names. These names are equivalent to document window names, which allows to select a new current (active) window. This is necessary, since the required window may be completely covered by other windows. The current window is marked in the menu with a check marker.

New Window

The New Window command opens a new window with the current document. The next ordinal number of the window (opened with the same composite document as the previous current window) is displayed on the title bar of this window to the right of the file name(s).

Tile Horizontally

When more than one document window is open, the `Tile Horizontally` command divides the whole *TCDView* main window between all equally sized document windows. When just one document is open, its window is expanded to fill the entire *TCDView* main window.

As a result of this command, open document windows are arranged in such a way, that each is visible and does not overlap with any of the other windows and the neighbouring windows have common horizontal borders.

Tile Vertically

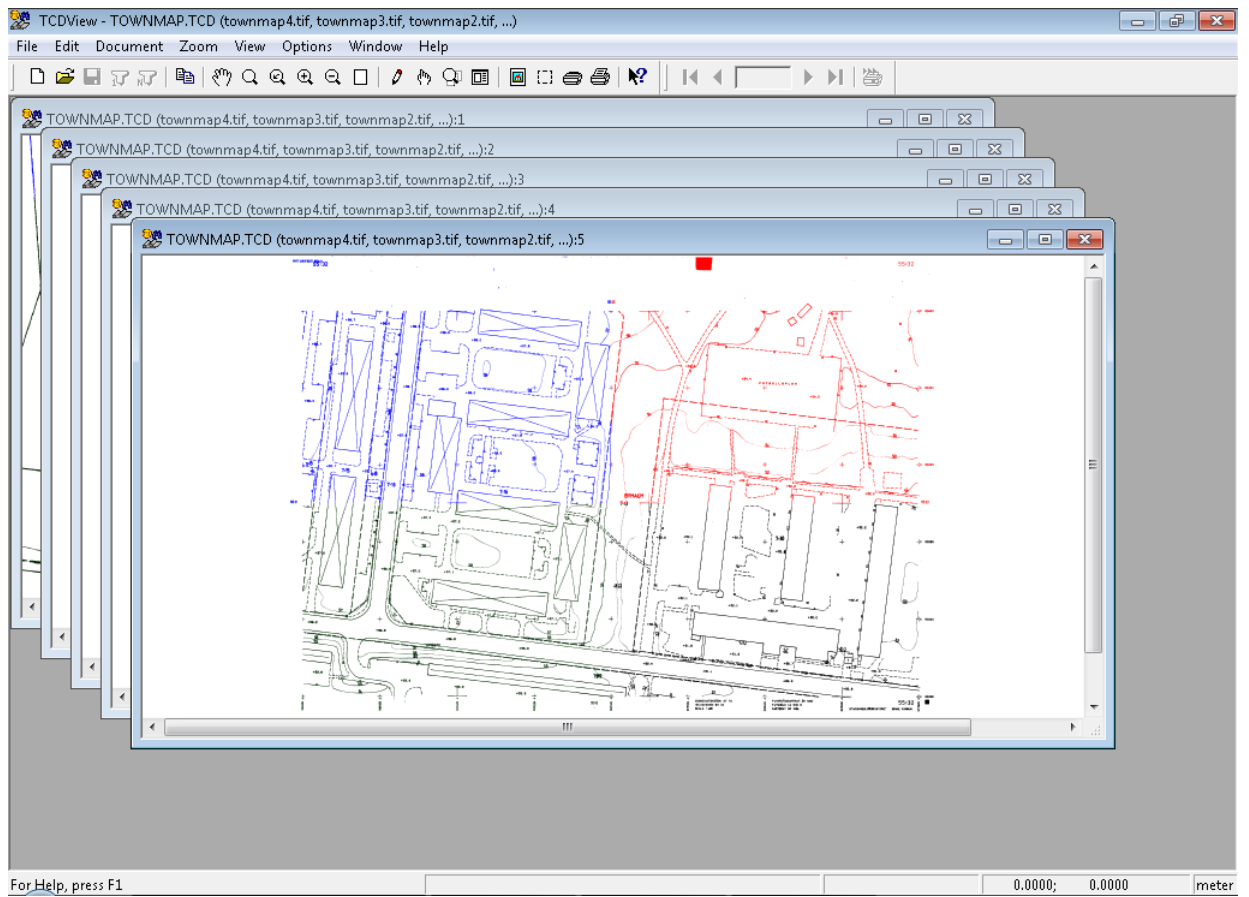
When more than one document window is open, the `Tile Vertically` command divides the whole *TCDView* main window between all equally sized document windows. When just one document is open, its window is expanded to fill the entire *TCDView* main window.

As a result of this command, open document windows are arranged in such a way, that each is visible and does not overlap with any of the other windows and the neighbouring windows have common vertical borders.

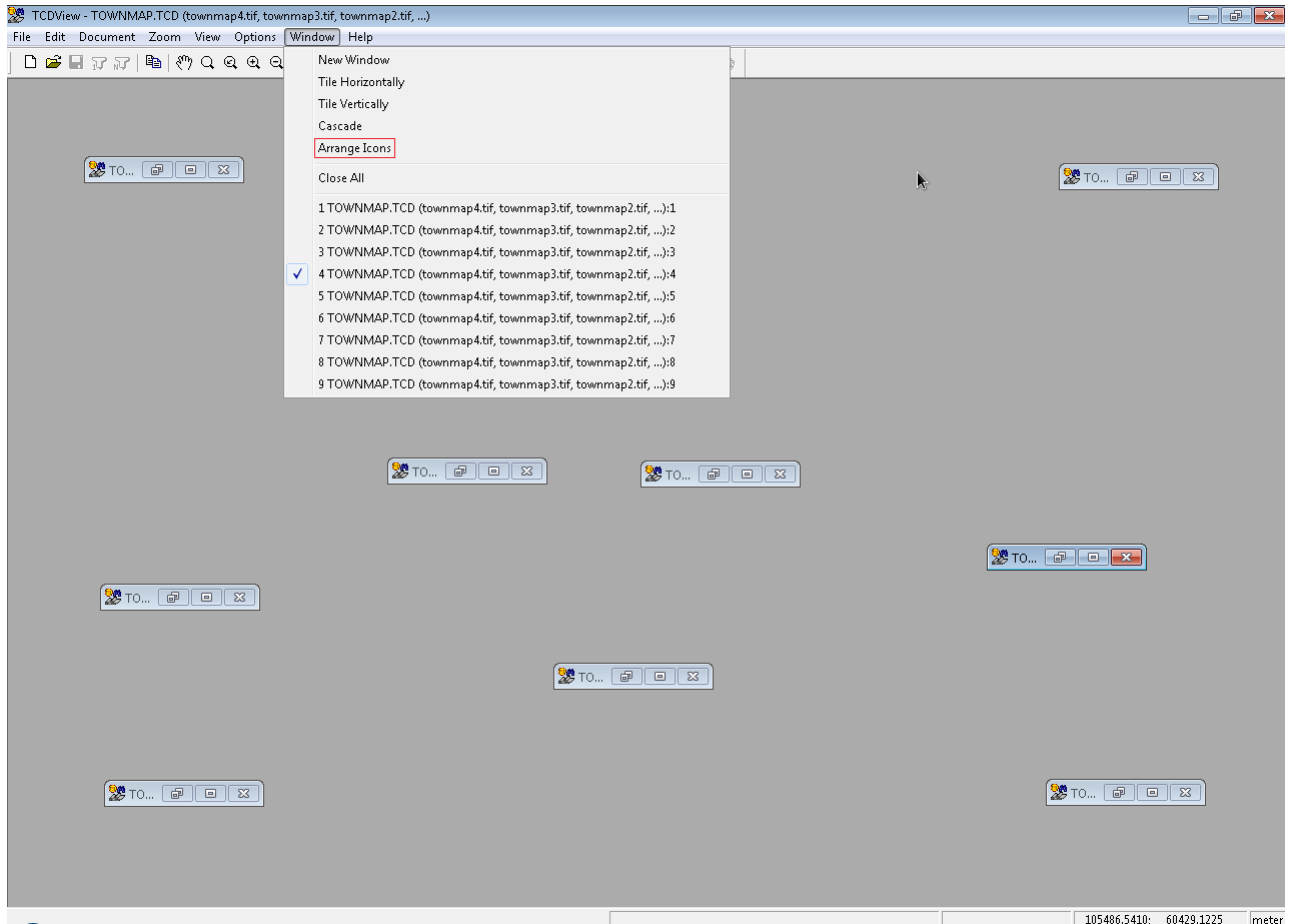
Cascade

When more than one document window is open, the `Cascade` command arranges open document windows on the main *TCDView* window in such a way, that they overlap and form a kind of stack but each is shifted a little, so that their title bars are visible. The current document window remains active and is put on the top of the stack of document windows.

When just one document is open, its window is expanded to fill the entire *TCDView* main window.



Arrange Icons



Every document window can be minimized to a form of a *TCDView* icon labelled with a document name. The names of minimized windows (documents) remain present on the list of open documents in the Window menu. These icons can be dragged with the mouse one by one to a new place. The *Arrange Icons* command changes the placement of this icons. It puts them in a row(s) at the bottom of the main *TCDView* window. When you double click with a mouse on a document icon or click on a document name on the list in the *Window* menu, the selected document window opens again at the previous place and size. The *Arrange Icons* command does not move open windows, so they may overlap the area, where document icons are placed. In such a situation you can uncover the icons by resizing the windows manually or with the *Cascade* command.

Close All

The *Close All* command closes all open document windows and is particularly useful when many documents are simultaneously open in one session.

Help menu commands

Contents

Manual command opens a CHM file containing *TCDView* manual.

About

The `About TCDView...` command displays the *TCDView* serial number and copyright information.

Chapter 2. Administration

Installation

Requirements

In order to use TCDView you should have:

- Microsoft Windows 8, 7 or Vista Operating System,
- at least 20 MB of free hard disk space,
- mouse or other pointing device supported by MS Windows,
- graphics card and monitor of at least VGA capabilities,
- RAM as recommended to run Operating System.

Program installation and running

Installation process

TCDView Setup provides a quick and easy way to install this program on a user computer or file server. Setup uses a standard Windows user interface style. It contains all features and functions that are appropriate for Windows applications.

After loading CD-ROM, Tessel Software Line *Setup* starts automatically and lets you choose a product and its language version. In order to restart Tessel Software Line *Setup*, e.g. to install more products, re-load CD-ROM or open it in *Windows Explorer* and double-click *TSLStartup.exe*.

During setup, you can accept or choose an installation directory for *TCDView*.

The default directory name is *C:\Program Files\Tessel Software Line\TCDView* (if selected directory does not exist, it will be created, even with its parent directories).

After this phase Setup starts copying selected files to the installation directory. During this, Setup displays its progress bar.

Setup copies all *TCDView* files to the chosen directory and creates the log of performed operations. Demo files are copied to the additional *DOC* subdirectory that may be deleted when no longer needed. The newly created program group *Tessel Software Line* contains the following items:

1. *TCDView* to launch the program
2. *Read Me* to show the technical notes in *Notepad*
3. *Help*.

The default *TCDView* INI file (*tsltcdv.ini* or *tsltcdv64.ini*) is copied to the hidden Window's directory: *C:\Users\<username>\AppData\Roaming\Tessel Systems*. It contains the option settings and the default attribute values for *TCDView* commands.

Some problems can occur under Windows when user without assigned administrator privileges invokes Setup. In addition Windows UAC (User Account Control) may interrupt installation. In

such situation please turn off UAC (Vista) or change its state to lowest position (Windows 8 and 7).

Important

When finished, *Setup* will ask if you want to launch *TCDView* after closing *Setup*.

Please **do not** use this option and launch *TCDView* manually afterwards.

Running TCDView

TCDView consists of the main program file `TSLTCDVIEW.EXE` and several auxiliary libraries.

After proper installation *TCDView* can be run by clicking on the *TCDView* icon in the Tessel Software Line window or from command line (`cmd.exe` program). While running *TCDView* from a command line you can supply a list of full path names of document files as parameters. For example, the command line can read as follows:

```
C:\Program Files\Tessel Software Line\TCDView\TSLTCDVIEW.EXE
C:\Program Files\Tessel Software Line\TCDView\DOC
\GOTEBORG.TCD  PHONE.PCX
```

where `C:\Program Files\Tessel Software Line\TCDView\` is the directory, in which *TCDView* has been installed, `C:\Program Files\Tessel Software Line\DOC\` is the directory containing document and document files, `GOTEBORG.TCD` is the file name of a composite document and `PHONE.PCX` is the file name of a picture, which are to be loaded at start-up. When the program starts, it will open each composite document file in a separate document window. The `CmdLineParsMode` parameter in the *TCDView* Settings section in the `TSLTCDVIEW.INI` file allows you to control how *TCDView* opens simple document files in raster or vector format supplied on the command line list (). By default (`CmdLineParsMode=0`) *TCDView* opens simple document files in a separate document windows. If you set `CmdLineParsMode` parameter to 1 than all simple document files are opened in a single document window.

Removing TCDView program

Setup includes an integrated uninstallation program that allows users to uninstall *TCDView* components cleanly and effectively and recover system resources such as disk space used by files and registry entries.

If, for some reason, you must uninstall *TCDView*, run the *Uninstall* program icon or start *Control Panel's Programs and Features*, select *TCDView* and click the *Uninstall* button. Uninstall will remove most of the *TCDView* program files and delete changes made to your Windows files. However, some files that are used by *Windows* or other programs may not be removed automatically, so it may be necessary to delete them manually.

TSLTCDV.INI file

The **tsltcdv.ini** text file is copied to the Window's hidden directory: `C:\Users\<username>\AppData\Roaming\Tessel Systems\` directory during the installation. It is used to store various TCDView control parameters. Some of them may be changed by TCDView commands, others can be changed only by editing the file.

File line syntax: `<Parameter_name>=<value>`

Comment line syntax: `[<comment>]`

Binary values of some parameters are coded as 0 or 1, which means switched off or on respectively.

The list of parameters in the **tsltcdv.ini** file are listed below:

[External Parameters Filters] section

Definitions of four attribute file type extensions and their support:

- 1=TAF, 7
- 2=RLD, 3
- 3=MapInfo, 2
- 4=ARCINFO, 6

Meaning of numerical attributes:

- 1 – read, do not save, do not create if not exists
- 2 – do not read, save, do not create if not exists
- 3 - read, save, do not create if not exists
- 4 – do not read, do not save, create if not exists
- 5 – read, do not save, create if not exists
- 6 – do not read, save, create if not exists
- 7- read, save, create if not exists

Priority

Defines priority of attribute files.

Example:

`Priority=1 2 3 4`

[Geographical Mappings] section

AutoLoad

Load geographical mapping defined in TAF file when opening document. Possible values are:

- 0 - option is off
- 1 - option is on

Example:

```
AutoLoad=1
```

Mapping

Mapping up to four lines, where $i = 1..4$, defining names of up to four geographical mapping systems recently used. The mapping name consists of system dependent texts and numbers but always starts with generic geographical system mapping name (see *Geographical Mapping* dialog).

Example:

```
Mapping1=P42 21 6
```

MappingActive

Make last used geographical mapping active when application is started.

Example:

```
MappingActive=1
```

[Licensing] section

```
FLEXLicenseFile=C:\Program Files\Tessel Software Line\HyperDoc\Program  
\license.dat
```

This section is sometimes needed when *LMTOOLS* was installed before by other application and when Windows environment variable "*LM_LICENSE_FILE*" points to other Licence.dat file than *Products*'s licence file.

Important

This parameter refers only to old licensing system based on **.dat** files. New **.xml** licences does not have their *section/parameter* and are needed to be in *Program* main folder.

[Raster Image Params] section

Color

Default value of color number in the drawing palette (for monochrome raster images only). Used when raster image has not corresponding TAF file.

Comment

Default value of image's description or a remark text. Used when raster image has not corresponding TAF file.

Length

Default value of number of pixels in a single raster line. Used when raster image has not corresponding TAF file.

Orientation

Default value of image's orientation. Defined in raster terms (lines and columns of pixels) but maintaining analogous meaning also for vector drawings. The Orientation can have one of the following values:

- 1 - first line at the top, first column at the left side
- 2 - first line at the top, first column at the right side
- 3 - first line at the bottom, first column at the right side
- 4 - first line at the bottom, first column at the left side
- 5 - first line at the left side, first column at the top
- 6 - first line at the right side, first column at the top
- 7 - first line at the right side, first column at the bottom
- 8 - first line at the left side, first column at the bottom

Used when raster image has not corresponding TAF file.

Units

Default value of code number of units used to define the insertion point of the image; one of the following values:

- 1 - inch
- 2 - foot
- 3 - yard
- 4 - mile
- 5 - millimeter
- 6 - centimeter
- 7 - meter
- 8 - kilometer

Width

Default value of number of raster lines. Used when raster image has not corresponding TAF file.

XinsertionPoint

Default value of X coordinate of the lower left corner of the image. Used when raster image has not corresponding TAF file.

Xresolution

Default value of image's horizontal resolution. Used when raster image has not corresponding TAF file.

Xscale

Default value of horizontal scale of the image. Used when raster image has not corresponding TAF file.

YinsertionPoint

Default value of Y coordinate of the lower left corner of the image. Used when raster image has not corresponding TAF file.

Yresolution

Default value of image's vertical resolution. Used when raster image has not corresponding TAF file.

Yscale

Default value of vertical scale of the image. Used when raster image has not corresponding TAF file.

[Raster Magnify Glass Options] section

HotKey

Defines hotkey, that popup raster magnifying glass.

Examples:

HotKey=32 ; Space key

HotKey=196608 ; CTRL + Shift

KeepPopup

If set to 1, magnifying glass window is keeping opened until you press Esc key. If set to 0, magnifying glass is closed on mouse move.

Magnification

Defines magnifying glass magnification parameter. Possible values are integer numbers between 2 and 10.

Example:

Magnification=10

MagnifyGlassActive

If set to 1, raster magnifying glass is active.

Example:

MagnifyGlassActive=1

MagnifyGlassSize

Defines magnifying glass window size in pixels. Possible values are integer numbers between 50 and 250.

Example:

```
MagnifyGlassSize=200
```

PopupOnHotKey

If set to 1, raster magnifying glass is popup after hotkey pressing. If set to 0, you can't use magnifying glass on pop-up key.

Example:

```
PopupOnHotKey=1
```

[Raster Snap Options] section

CurvePar

Integer value; specifies curvature parameter for tracing lines.

Pickbox

Decimal value; specifies the size of snap pickbox (in pixels).

SegmentPar

Integer value; specifies minimal segment length (in raster pixels) for tracing lines.

SnapActive

Binary value; specifies whether snap to raster is active.

SnapMode

Specifies snap mode value. Use the *Snap* tab on Configuration dialog to change it.

TraceWidth

Decimal value; specifies user-defined width to be used while tracing lines.

UseTraceWidths

Binary value; specifies whether to use detected raster line widths while tracing lines.

[Recent File List] section

The entries in this section specify the names of 4 documents most recently opened by *TCDView*.

[TCDView Settings] section

CmdLineParsMode

binary value; this parameter controls how TCDView opens simple document files (in raster or vector format) supplied on the command line list:

0 - each simple document file is opened in separate document window (TCDView default);

1 - all simple document files from command line are opened in single document window;

[TSLCDC Cache Settings] section

Enable

Binary value; default 1, setting it to 0 disables use of the view cache.

FullViewHeight

Height of the full view bitmap in pixels; when set to 0 SuperEdit calculates full view size according to your display resolution.

FullViewWidth

Width of the full view bitmap in pixels; when set to 0 SuperEdit calculates full view size according to your display resolution.

MinimalRegenKeepTime

Specifies limits for view kept in cache. Only document with greater regeneration time than specified will be stored in cache. Value in milliseconds, default is 250 ms.

MinimalRegenSaveTime

Specifies limits for cached view to be stored in TCD file. Only document with greater regeneration time than specified will be written to TCD document.

SaveFullView

Binary value; default 1; setting it to 0 disables saving of the full view cache.

ZoomQuality

Decimal value in range 5 to 100, default is 75. Determines when cached views may be used instead of regeneration. Lower value means weaker image precision requirements, greater - requires more quality, but also causes more regenerations.

[TSL Diagnostics] section

AddTimeStr

Defines if time stamps are present in diagnostic log. Possible values are 0 or 1. If is set to 0, time stamps are not logged.

Example:

```
AddTimeStr=1
```

FlushLog

Defines if diagnostic log is flushed before writing new data. Possible values are 0 or 1. If is set to 1, the buffer is flushed with every log entry writing.

Example:

```
FlushLog=1
```

LogBasic

Defines if diagnostic log should contain basic log data. Possible values are 0 or 1. If is set to 1, all performed actions are logged.

Example:

```
LogBasic=1
```

LogLDAP

Defines if diagnostic log should contain LDAP data. Possible values are 0 or 1. If is set to 1 and LDAP login mode is enabled, diagnostics informations are logged.

Example:

```
LogLDAP=1
```

LogName

Full path to log file.

Example:

```
LogName=C:\Program Files\Tessel Software Line\HyperDoc\DemoDB  
\Netman.log
```

TraceErrors

Defines if diagnostic log should contain error messages. Possible values are 0 or 1. If is set to 1, occurred errors are logged.

Example:

```
TraceErrors=1
```

[TSLPPL Library Settings] section

For internal use only. Parameters for library TSLPPL (print cache options).

BufferSize

The size (in kilobytes) of the internal SuperEdit cache buffer used for printing of color documents (except for 24-bits-per-pixel color documents).

BufferSize24

The size (in kilobytes) of the internal SuperEdit cache buffer used for printing of 24-bits-per-pixel color documents.

FitToPage

Binary value; causes such calculation of the print scale, that the document covers maximal area of the paper page.

MetricUnits

Binary value; when set to 1, the print margins and origin are expressed in millimeters, otherwise in inches.

PrintColors

Binary value; enables color printing.

PrintingScale

Real number representing the printing scale.

Selection

Binary value; when set to 1, the whole document is printed, otherwise its current view only.

SmallBitmaps

Binary value used to correct errors in some printer drivers. When set to 1, the SuperEdit send data to printer driver in portions smaller than 64 Kbytes. When set to 0 may speed printing operation.

XOffset

Horizontal distance between the upper left corner of the document area on the paper and the upper left corner of the page margins; if negative, then a part of the document is placed within the left margin area and is not printed.

YOffset

Vertical distance between the upper left corner of the document area on the paper and the upper left corner of the page margins; if negative, then a part of the document is placed within the upper margin area and is not printed.

[TSLRDE Library Settings] section

BitsPerColor

Integer value from 4 to 7; a number of bits per each basic color that is used when the image palette is converted to true-color format for processing and converting result back while storing.

ConversionLimit

Integer value; the code number of color format of image that colors filtering is applied (see *FilterType* parameter):

- 0 – do not use filtering at all;
- 1,2 – enables filtering when transforming color and gray-scaled images;
- 4,16– enables filtering for color and gray-scaled 256-palette images as well as for true-color images;
- 256 – enables filtering only for true-color images;

FilterType

Integer value from 2 to 6; the code number of filter type used while calculating color of each pixel in image resizing, rotating and calibrating:

- 2 – linear;

- 3 – cubic;
- 4 – Lanczos;
- 5 – Hamming;
- 6 – Blackman;

[TSLRVC Library Settings] section

For internal use only. Parameters for library TSLRVC.

AutoSelectingSingleFile

Binary value; when set to 1, the single image file is automatically selected for editing immediately after opening.

BRAOpenOptions

Decimal (without prefix) or hexadecimal (prefixed with 0x) number. Used for control of document attribute files. Zero or sum of some of the following values:

- 0x0200 - read document attributes from its RLD file (can be used for backward compatibility);
- 0x0800 - read document attributes from TAF file;
- 0x1000 - do not save document attributes to RLD file;
- 0x2000 - do not save document attributes to TAF file;

For example, setting this parameter to 0x1A00 (which is a sum of 0x1000, 0x0800 and 0x0200) means: “read and write TAF file; read RLD file”. This is the default SuperEdit behavior.

ClipboardCopyHeight

Height of the document copy in inches for the Copy command.

ClipboardCopySpecHeight

Height of the document copy in inches for the *Copy Special* and *Copy Special To...* commands.

ClipboardCopySpecWidth

Width of the document copy in inches for the *Copy Special* and *Copy Special To...* commands.

ClipboardCopySpecXRes

Horizontal resolution of the document copy for the *Copy Special* and *Copy Special To...* commands.

ClipboardCopySpecYRes

Vertical resolution of the document copy for the *Copy Special* and *Copy Special To...* commands.

ClipboardCopyWidth

Width of the document copy in inches for the Copy command.

ClipboardCopyXRes

Horizontal resolution of the document copy for the Copy command.

ClipboardCopyYRes

Vertical resolution of the document copy for the Copy command.

ConvertToOneFile

Binary value; setting it to 0 disables creation of the multi-page destination file while converting multiple input files.

CopyBitmap

Copying data in the Device Dependent Bitmap format to the Clipboard.

CopyDIBitmap

Copying data in the Device Independent Bitmap format to the Clipboard.

CopyEmbedded

Binary value; copying data in the embedded object format to the Clipboard.

CopyLink

Copying data in the link to a linked object format to the Clipboard.

CopyMetafile

Copying data in the MS Windows system metafile format to the Clipboard.

CrosshairVisible

Binary value; setting it to 1 causes SuperEdit to display crosshair at the current cursor position.

DecPrecision

The option sets the floating-point numbers precision to be used in SuperEdit dialogs.

DefaultVportsOverlapMode

Possible values:

- 0 - overlapping parts of viewports will be painted and printed with white solid brush,
- 1 - overlapping parts are defined by most top defined viewport and only this viewport should be visible.

DefBmpExt

Bitmap format may have DIB or BMP extension. When the user converts a raster file to the format, the default extension is chosen.

DefCalsExt

CALS format may have GP4, CG4 or MIL extension. When the user converts a raster file to the format, the default extension is chosen.

DefRasterUnits

Decimal value; defines default units for new raster drawings.

DefTCDUnits

Decimal value; defines default units for new TCD documents.

DefVectorUnits

Decimal value; defines default units for new vector drawings.

DefVidarExt

Vidar format may have VID or VIM extension. When the user converts a raster file to the format, the default extension is chosen.

DefXRes

Default raster image horizontal resolution.

DefYRes

Default raster image vertical resolution.

DelayedClipboardRendering

Binary value; immediate or delayed data rendering for data transfer through the Clipboard.

DitherMode

If this option is checked, SuperEdit uses dithering to improve image colors mapping.

LastSaveDir

Path name to the disk directory of the most recently open file.

LastSaveFilter

File format code number of the most recently open file (this parameter must not be changed).

LastSaveSubFormat

File compression mode code number of the most recently open file (this parameter must not be changed).

MaximizeApplication

Binary value; setting it to 1 causes SuperEdit to cover the full screen when opened.

MaximizeView

Binary value; setting it to 1 causes the open document window to cover the whole SuperEdit main window when opened.

MaxUndoSteps

Decimal value; defines how many undo steps are allowed.

PrintBitmapHeight

This parameters controls maximum height of "tile" used to create printouts.

If the resulting printout will exceed given value in pixels, hole image it will be divided into smaller tiles.

Value "1024" is suggested for use to ensure proper displaying images on Mobile devices.

`PrintBitmapHeight=1024`

PrintBitmapWidth

This parameters controls maximum width of "tile" used to create printouts.

If the resulting printout will exceed given value in pixels, hole image it will be divided into smaller tiles.

Value "1024" is suggested for use to ensure proper displaying images on Mobile devices.

`PrintBitmapWidth=1024`

PrintToFileWithMargins

This parameter is responsible for printing with or without margin in *Print-outs to files* (like PDF or PNG).

Possible values:

- 0 - prints without margins,
- 1 - prints with margins.

Default value is 1 and it's recommended value, especially for printouts from *HyperDoc Online*.

ShowTwainInterface

Binary value; activates a scanner interface.

TCDSaveMode

Binary value; defines how the *SaveAs* command works:

- 0 - only the TCD file is saved;
- 1 - subdocuments are copied while saving the TCD file.

TempDir

Path name to the disk directory where temporary files will be created.

ViewBitmapHeight

View bitmap height in pixels.

ViewBitmapWidth

View bitmap width in pixels.

[TSLTVL Library Settings] section

For internal use only. Parameters for library TSLTVL (cache options).

[Vector Drawing Params] section

Units

Default value of code number of units of vector drawing; one of the following values:

- 1 - inch
- 2 - foot
- 3 - yard
- 4 - mile
- 5 - millimeter
- 6 - centimeter
- 7 - meter
- 8 - kilometer

[Vector Snap Options] section

Pickbox

Size of the pick box, using for snap actions.

SnapActive

If set to 1, vector snap is active.

SnapMode

Needed mode of snap action. Possible values:

- 1 - nearest point
- 2 - end point
- 4 - mid point
- 8 - center point
- 16 - insertion point
- 32 - crossing point

Appendices

Supported file formats

TesselSoftwareLine Products supports viewing, converting and printing of composite documents that may contain subdocuments in any of the formats listed below. Editing is supported for monochrome raster images only.

Format	Format description	Supported compression modes	Extensions	Color	Multiple pages
<i>RLC</i>	Run Length Code	-	RLC	-	-
<i>TIFF</i>	Tagged Image File Format	Uncompressed	TIF	✓	✓
		PackBits		✓	✓
		LZW		✓	✓
		CCITT Group 3 Standard			✓
		CCITT Group 3 Modified			✓
		CCITT Group 4			✓
<i>GIF</i>	UNISYS	-	GIF	✓	-
<i>PCX</i>	Paintbrush format	-	-	✓	-
<i>BMP</i>	Windows bitmap	Uncompressed, RLE4, RLE8	BMP	✓	-
<i>RLE</i>			DIB	✓	
<i>DMI</i>	-	-	DMI	-	-
<i>ITI</i>	-	-	ITI	-	-
<i>CALS</i>	-	-	GP4	-	-
			GC4		
			CAL		
			MIL		
<i>VIDAR</i>	-	Uncompressed CCITT Group 3 Standard CCITT Group 3 Modified CCITT Group 4 Vidar RLE	VIM,VID	-	-
<i>DCX</i>	Fax format	-	DCX	-	✓

<i>CIT</i>	Intergraph G4	-	CIT	-	-
<i>RLE</i>	Intergraph RLE	-	RLE	-	-
<i>IG4</i>	CAD-Overlay	Group 4	IG4	-	-
<i>DWG*</i>	Autodesk	-	DWG	✓	-
<i>DXF*</i>	Standard vector format	-	DXF	✓	-

* - available only when TCD-View application was installed in the system.

Attribute files

CADRaster reads attribute files to obtain information about size, orientation and location of raster file in world coordinate system. There are four formats of attribute files *CADRaster* can read and write:

RLD – *CADRaster* for DOS attribute file

TAF – Tessel Attribute File

TAB – MapInfo project file.

TFW – ARC/INFO parameter file. File extension may be different depending on raster format.

Raster file format	Parameter file extension
*.BMP	*.BPW
*.GIF	*.GFW
*.PCX	*.PXW
*.IG4	*.I4W
*.TIF	*.TFW
*.CAL	*.CLW
*.JPG	*.JGW
*.PNG	*.PGW

TAF attribute file

Each drawing file can have an attribute file associated with it, where the drawing's technical parameters are stored. It is especially useful to store the parameters that can not be stored in the drawing file itself due to its format limitations. Some image file formats allow storing more parameters than others do. The values of image parameters are saved in the image file, if the image format allows for it, and in an additional parameter file with the same name as the image file name but with TAF (*Tessel Attribute File*) extension. The TAF file is located in the same disk directory as the image file.

Parameters saved in the image file override parameters saved in the additional parameter file (TAF).

Creating and using of attribute files can be disabled using the `BRAOpenOptions` parameter in corresponding program `.ini` file (see).

A TAF file is a text file formatted in sections (like `INI` files). If the image file is a multipage raster file, each section describes a separate page. The first page is described by the `[RasterImageParams]` section, the second page is described by the `[RasterImageParams.1]` section and so on. Parameters of a drawing file in one of vector formats (DWG or DXF) are specified in the `[VectorDrawingParams]` section. Thus it is possible to have two drawing files with the same file name and different file name extensions in one disk directory: one in raster format and one in vector format and to use a common TAF file for them. Their parameters are located in different sections of the same TAF file. Vector drawings use only two parameters: `Units` and `Orientation`.

Section name line syntax: `[<section_name>]`

Parameter line syntax: `<Parameter_name>=<Parameter_value>`

Parameters description:

Units - the code number of units used to define the insertion point of the image; one of the following values:

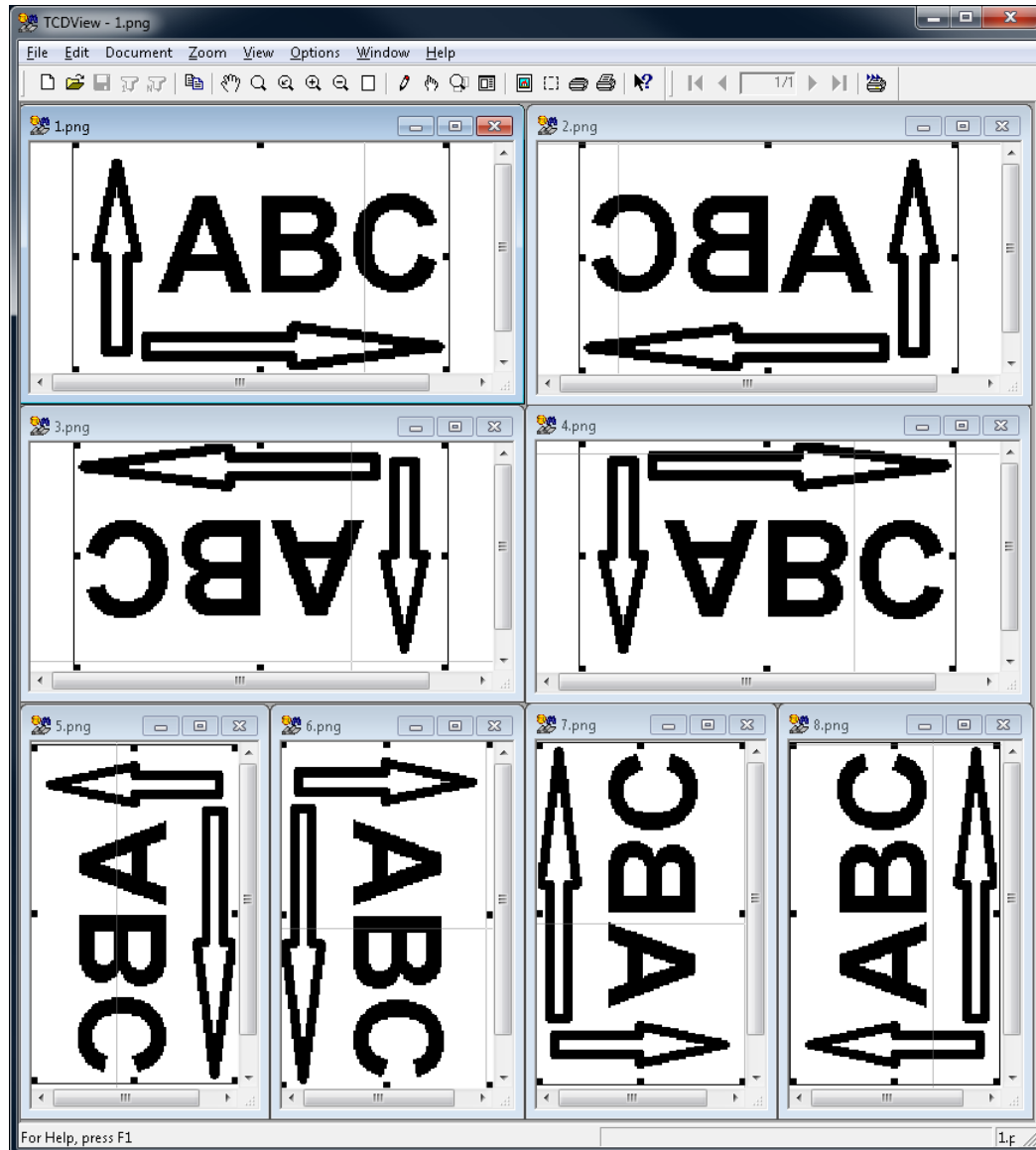
1	inch
2	foot
3	yard
4	mile
5	millimeter
6	centimeter
7	meter
8	kilometer

Color - the color number from the *AutoCAD* palette (for monochrome raster images only)

Orientation - the image's orientation. Defined in raster terms (lines and columns of pixels) but maintaining analogical meaning also for vector drawings. The Orientation can have one of the following values:

1	first line at the top, first column at the left side
2	first line at the top, first column at the right side
3	first line at the bottom, first column at the right side
4	first line at the bottom, first column at the left side
5	first line at the left side, first column at the top
6	first line at the right side, first column at the top
7	first line at the right side, first column at the bottom
8	first line at the left side, first column at the bottom

See also the picture below for the reference to coresponding above numbers.



XInsertionPoint - X coordinate of the lower left corner of the image;

YInsertionPoint - Y coordinate of the lower left corner of the image;

XScale - the horizontal scale of the image;

YScale - the vertical scale of the image;

XResolution - image's horizontal resolution;

YResolution - image's vertical resolution;

Length - the number of pixels in a single raster line;

Width - the number of raster lines;

Comment - image's description or a remark text.

Support for raster drawings in JPEG format

CADRaster recognizes and supports raster drawings stored in popular JPEG format (extensions JPG, JPEG).

Various parameters that influence compression level, precision of drawing details and processing time during saving or converting to JPEG format, may be controlled from "*JPEG Format Save Options*" dialog called from "Save" tab on "*Configuration*" dialog.

DCT method

Selects the algorithm used for the DCT step. Choices are:

SLOW: slow but accurate integer algorithm

FAST: faster, less accurate integer method (DEFAULT)

FLOAT: floating-point method

Restart

To emit restart markers in the JPEG file, set one of these nonzero. Set restart interval in blocks to specify the exact interval in MCU blocks. Set restart interval in rows to specify the interval in MCU rows. Defaults are zero (no restarts). One restart marker per MCU row is often a good choice.

Smooth

Smooth If non-zero, the input image is smoothed; the value should be 1 for minimal smoothing to 100 for maximum smoothing. The default is zero.

Quality

Baseline

Constructs JPEG quantization tables appropriate for the indicated quality setting. The quality value is expressed on the 0..100 scale recommended by IJG. If the baseline parameter is TRUE, then the quantization table entries are constrained to the range 1..255 for full JPEG baseline compatibility. In the current implementation, this only makes a difference for quality settings below 25, and it effectively prevents very small/low quality files from being generated.

To learn more about how to use JPEG, see <http://www.faqs.org/faqs/jpeg-faq/>.

Due to the compression nature used in raster drawings stored in JPEG format, applying some raster editing operations, like clearing areas or cutting and pasting, may result in some artifacts inside edited areas, depending on compression parameters used in original drawing.

TSL Color Codes

*The image below shows colors available in TSL products. Their numbers are representative to those present in **AutoCAD**.*

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

250	251	252	253	254	255
-----	-----	-----	-----	-----	-----

18	28	38	48	58	68	78	88	98	108	118	128	138	148	158	168	178	188	198	208	218	228	238	248
16	26	36	46	56	66	76	86	96	106	116	126	136	146	156	166	176	186	196	206	216	226	236	246
14	24	34	44	54	64	74	84	94	104	114	124	134	144	154	164	174	184	194	204	214	224	234	244
12	22	32	42	52	62	72	82	92	102	112	122	132	142	152	162	172	182	192	202	212	222	232	242
10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
11	21	31	41	51	61	71	81	91	101	111	121	131	141	151	161	171	181	191	201	211	221	231	241
13	23	33	43	53	63	73	83	93	103	113	123	133	143	153	163	173	183	193	203	213	223	233	243
15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165	175	185	195	205	215	225	235	245
17	27	37	47	57	67	77	87	97	107	117	127	137	147	157	167	177	187	197	207	217	227	237	247
19	29	39	49	59	69	79	89	99	109	119	129	139	149	159	169	179	189	199	209	219	229	239	249

Note

Please use *CHM* or *webhelp* version of documentation to see the table below. It's not present in PDF due to it's large size.

The table below contains hexadecimal and decimal RGB and BRG codes for the 256 colors in the Tessel Software Line Programs(numbers 0-255).