# SurvCADD XML

# Reference Manual

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# Table of Contents

# Introduction

SurvCADD is application software for civil engineering, surveying, GIS and mine engineering which runs with AutoCAD. AutoCAD serves as the graphics engine and drawing editor for SurvCADD. Essentially, SurvCADD is an extension of AutoCAD that customizes AutoCAD for your specific discipline with additional commands and enhancements.

SurvCADD consists of the following modules: COGO-Design, DTM-Contour, Section-Profile, Hydrology, GIS, Tsunami, Mining and Advanced Mining. These modules work inside AutoCAD and use AutoCAD's user-interface, menus, and dialog boxes.

# SurvCADD Setup

## SurvCADD Directory Structure

The figure below shows the default directory structure for SurvCADD. The EXEC, LSP, and SUP sub-directories have files that are accessed by SurvCADD. You should never need to access these files directly yourself. The DATA and WORK sub-directories are the user's directories.

```
ROOT
 └─ \SCADXML
         ├─ \EXEC
         │         Executables
         │         - Programs (.EXE, .DTA)
         │
         ├─ \SUP
         │         Support
         │         - Drawing blocks (.DWG)
         │         - Menus (.MNU, .MNX)
         │
         ├─ \LSP
         │         Lisp & ARX
         │         - Programs (.LSP, .DLL, .ARX, .DCL)
         │
         ├─ \DATA
         │         User data files
         │         - Survey files (.RW5, .CRD, etc)
         │
         ├─ \WORK
         │         Startup directory, user drawings
         │         - Drawings (.DWG)
         │
         └─ \USER
                   User setup files
                   - Settings files (.INI)
```
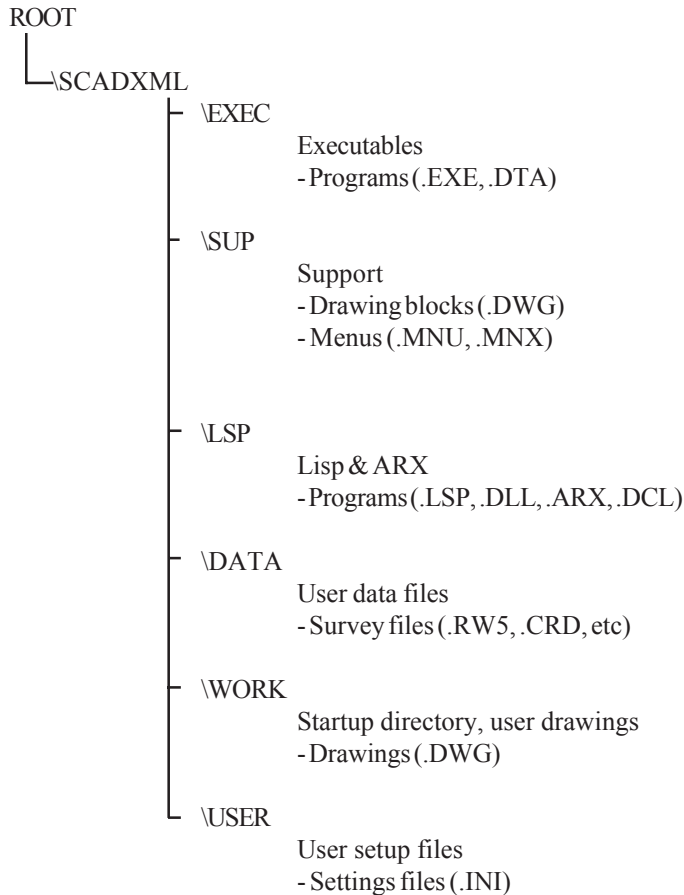
# System Requirements

SurvCADD's system requirements are no greater than that of the AutoCAD version you are running. See your AutoCAD installation guide for minimum system configuration. It is always recommended that you use the highest performance PC possible. *Note: SurvCADD does require a minimum screen resolution of 800x600.*

SurvCADD XML will operate with the following versions of AutoCAD:

• AutoCAD 14

• AutoCAD 2000/2000i/2002

• AutoCAD Map R2/R3/R4/R4.5/R5

• Land Development Desktop R2/R3

# Installing SurvCADD

Please refer to the installation guide included in the SurvCADD package for the latest installation instructions.

To complete the SurvCADD installation, start SurvCADD and complete the registration process as explained in the following sections.

# Starting AutoCAD with SurvCADD

To start SurvCADD, use that icon which was created on your desktop and in SurvCADD submenu under Start->Programs. When you do so, AutoCAD is started with customized profile, which contains all the setting changes necessary to run SurvCADD and prevents harmful conflicts between SurvCADD and other AutoCAD based products. The changes in menus, toolbars and preferences will be saved in that profile for further use.

# SurvCADD Registration

Each SurvCADD is licensed for use on **one** workstation which must be registered. The registration records your company name and AutoCAD serial number. To register your copy of SurvCADD, start SurvCADD and choose "Register Now". The following dialog will appear.

*Note that Carlson Software will no longer issue change keys over the telephone.* There are four registration options.

---
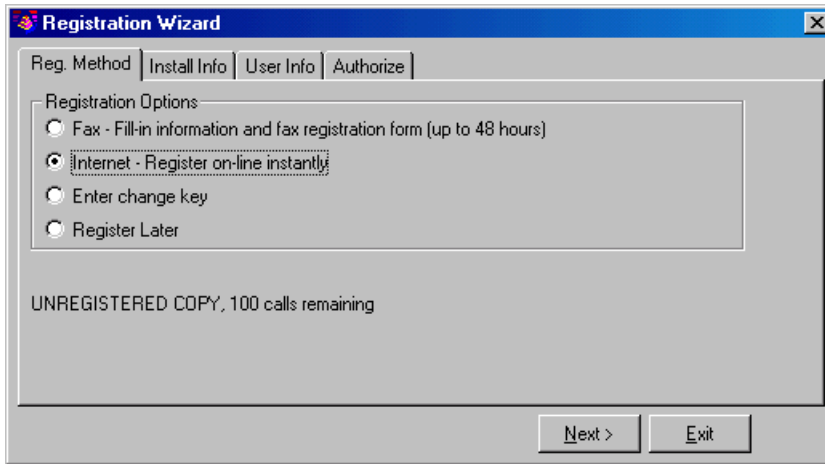
**Fax:** This method allows you to print out the required information which you then fax to Carlson Software. The fax number is printed on the form. The change key will be faxed back to you within 72 hours.

**Internet:** Register automatically over the Internet. Your information is sent to a Carlson Software server, validated and returned in just a few seconds. If you are using a dial-up connection, please establish this connection before attempting to register.

**Enter pre-authorized change key:** If you originally chose the Fax method above, you will need to choose this method now to enter the change key that is faxed back to you.

**Register Later:** If you wish, you may defer registration up to 30 days. After this time, SurvCADD will enter demo mode which displays a message each time a SurvCADD command is run.

After you select the registration method, choose Next and review the copyright information, choose Next again and select the type of installation you are performing, choose Next again and fill out the required information. At this point if you are using the Fax method, press the Print Fax Sheet button. If you are registering using the Internet method, press Next and the process will start.

If you have any problems with Internet registration, please repeat this process and use the Fax method.

> Tip: If SurvCADD is running, you may access the registration dialog by choosing *About SurvCADD* from the Help menu, then pick the Change Registration button.

# SurvCADD Configuration

To set SurvCADD start up defaults, choose the Configure SurvCADD command from the *File* pull-down menu after starting SurvCADD. Configure SurvCADD allows you to set the variables as shown below. These values are stored the files SURVCADD.INI, COGO.INI, DTM.INI, MINE.INI, HYDRO.INI, and SCTPRO.INI in the SurvCADD USER directory

**SURVCADD.INI**
lspdir$=C:\SC14\LSP\
exedir$=C:\SC14\EXEC\
tmpdir$=C:\SC14\DATA\
psname=C:\SC14\SUP\
sc_pdev=out.fil
sc_pon=0
bearoraz=B
pntnoon=Y
autoon=Y
pnl=SRVPNO1
prpel=Y
realz=Y
eorm$=E
prpds=Y
ihrhon=N
verton=0
ptemp=4
autosyb=Y
tpntno=1
usetw=Y
ignore0=1
do_bezier=1
reduce_offset=0.5
do_reduce=1
bezier_num=5
sv:sm=50.0
sv:vs=50.0
sv:ts=0.1
sv:ps=0.1

**SCTPRO.INI**
offset_horiz=1
tick=n
min_slope=0.010
max_len=400.000
mh_drop=0.000
axis_txt_size=0.100
to_sheet=0
pvi_v=0
mh_top=2.000
mh_bottom=4.000
pipe_nm=PVC
do_kval=0
do_sdist=0
do_grades=1
do_vert=0
do_below=0
eyeht=3.500
tob=0.500
vcres=10

**COGO.INI**
bothmf=0
dsuf='
dsuf2=m
boff=1.500
stripsp=N
radch=1.050
angnum=1
ldr_scale=0.500
ltype_scale=0.500

ltype_text=0.100
draw_leaders=0
angon=0
arlab=2
squnit=1
squni2=1

**MINE.INI**
rotate_hatch=0
hpattern=mudst
draw_hatch=1
flayer=FENCE
do_layer=1
geo_width=50.00
geo_layer=GEOCOL
core_text=CORETEXT
core_name=1
core_desc=1
core_surf=1
core_strata_nm=1
core_val_nm=0
sdpsdir=c:/sdps/

**DTM.INI**
max_tmesh=10000.00
tmesh_layer=TMESH
ctr_layer=CTR

**HYDRO.INI**
hecdir=c:/hec/
sedcaddir=c:/sedcad/

SurvCADD Default Configuration

# Tablet Template

If you have a digitizer you will probably want to plot a copy of the SurvCADD tablet menu. After installing SurvCADD, start AutoCAD and plot a copy of the drawing file TABLET.DWG located in the SurvCADD support directory (ie: \SCADXML\SUP\TABLET.DWG), at a scale of 1=1. You may want to review the drawing in the drawing editor to determine layer names and colors to set up a color version of the template. You can also modify this drawing to add your own symbols and details to the tablet menu. After plotting, secure the SurvCADD template drawing to your digitizer. The proper scale is 1=1 for a 12" x 12" tablet. It can also be plotted at a smaller or larger scale to suit other tablet sizes.

Once you have a hardcopy of the tablet, AutoCAD needs to be configured for the tablet. Type TABLET at the AutoCAD command prompt. Refer to the AutoCAD Reference Manual for details on the menu area points and number of columns and rows. The tablet template is in the standard AutoCAD template format which means if you are using any of Autodesk's other templates you can easily switch between different control menus.

# Troubleshooting Setup

To install SurvCADD XML on Windows NT4.0, Windows 2000, or Windows XP, you must have Administrator permissions to write to the system registry during the install.

Successful install of SurvCADD consists of four key items:
1. Windows registry settings
2. SurvCADD icon on desktop and in the Start menu
3. SurvCADD XML profile created in AutoCAD.
4. SurvCADD.ini configuration file in USER sub-directory of SurvCADD.

If you have trouble starting or running SurvCADD XML after installation, choose *SurvCADD Setup Wizard* from the SurvCADD portion of your start menu. If you cannot find this shortcut, run the program named SCWIZ15.EXE (or SCWIZ14.EXE for AutoCAD R14) found in the SurvCADD \EXEC folder.

If this does not fix the problem, please re-install the software making note of any possible error messages before contacting Technical Support.

## Desktop and Menu icons for SurvCADD XML

A SurvCADD specific profile is used in order to configure SurvCADD correctly and start SurvCADD menu when AutoCAD starts. Profiles are used by AutoCAD to separate different product environments.

The profile to use with AutoCAD is supplied by the SurvCADD startup program. To verify that your SurvCADD icon is set up correctly, do the following:

• Right-Click on the SurvCADD icon and select Properties. Click on the Shortcut tab.

• Target field should contain the following executable **SCJSTART.EXE** (located in the SurvCADD\USER directory)

• Work directory defaults to the same directory where drawings are stored.

• Make changes as needed and click OK.



SurvCADD XML for
Autodesk Map 5
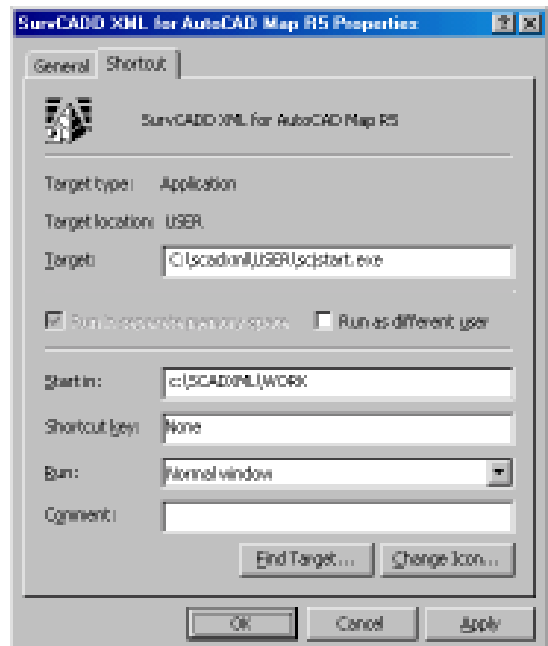
### Checking SURVCADD.INI configuration file.

The last step in troubleshooting the installation is to verify the SURVCADD.INI file in the SurvCADD USER directory. Open that file using Notepad (Click Start, Programs, Accessories, Notepad) or any other editor. Then verify and/or modify the top few lines to match your setup. Save it and restart SurvCADD.

If the procedures outlined above did not help or you have trouble following them, please feel free to contact Carlson Software Tech Support.

# Obtaining Technical Support

## via Discussion Groups:
• Carlson Software operates user discussion groups located at news://news.carlsonsw.com. You can participate in user-to-user discussion on tips, tricks and problems. Our staff monitors these groups to ensure that all the issues are addressed. Visit our website at http://www.carlsonsw.com for information on how to access these groups.

## via Electronic Mail
• The Technical Support e-mail address is support@carlsonsw.com

## via Phone/Fax
Please contact Technical Support at following numbers:
• Phone: (606) 564-5028
• Fax: (606) 564-6422

## via Web Site:
Check the Carlson Software Web Site at http://www.carlsonsw.com for
• Technical support documents
• Frequently asked questions
• Software updates. Feel free to register for automatic update notification of updates when you come to that area.

# Command Entry

Commands may be issued by selecting a pull-down menu, screen menu, digitizer tablet item, or by typing a command at the AutoCAD command prompt. Pressing Enter at the command prompt repeats that last command. Pull-down menus have a row of header names across the top of the screen. Selecting one of these header names displays the possible commands under that name. Screen menu items are shown in the screen menu (typically on the right side of the screen). The screen menu can be toggled off and on inside of the AutoCAD Preferences dialog. The Pull-down menus are the primary method for SurvCADD command selection. Each section of this manual shows the pull-down menu which contains the commands that are explained in that section. Pull-down menus are sometimes also referred to as drop-down menus.

Command availability depends on which menu is loaded. SurvCADD menus have a mixture of both SurvCADD and AutoCAD commands. This allows you to execute the commonly used AutoCAD commands from the menus while running SurvCADD.

Quick Keys are user-defined short-cut names that can be typed in to start commands. To review the current set of Quick Keys, run the Quick Keys command in the Misc pull-down menu.

# Loading SurvCADD Modules

Loading SurvCADD or a SurvCADD module is equivalent to loading the corresponding menu in AutoCAD. The SurvCADD menus are SC15BASE.MNU, P-COGO15.MNU, P-DTM15.MNU, P-SCT15.MNU, P-MAP15.MNU, P-MINS15.MNU, P-HYD15.MNU, P-ADV15.MNU, P-STAR15.MNU and AC15BASE.MNU. SC15BASE.MNU is the startup menu, and AC15BASE.MNU is the same as the regular AutoCAD menu except that under the *File* pull-down there are items for loading SurvCADD modules. The other menus define the SurvCADD modules Cogo-Design, DTM-Contour, Section-Profile, GIS, Mining, Hydrology, Advanced Mining, and Tsunami respectively. These menus may be loaded by selecting the module name under the *Misc* pull-down menu. You may also load these menus explicitly by issuing the AutoCAD MENU command and selecting the desired MNU file from the SurvCADD support directory (eg. C:\SCADXML\SUP).

Provided that the SurvCADD defaults have been set, SurvCADD commands may be executed once a SurvCADD menu is loaded. The SurvCADD defaults are set by loading the SCAD.LSP file in the SurvCADD LSP directory.

# What is new in SurvCADD XML?

For a complete listing of the new features and additions in SurvCADD XML, visit our website at http://www.carlsonsw.com

# Setting Up a Project in SurvCADD

Over 200 SurvCADD settings can be specified in the Configure SurvCADD command under the File menu. These values are used to initialize SurvCADD options when opening a new or existing drawing. Among these settings is the coordinate point number format, file and printer output options and settings for each module.

To set the AutoCAD drawing defaults, edit the template drawing (.DWT file). This drawing is loaded when new drawings are created. In the template drawing you can set the layers and AutoCAD variables. For example you could create your standard layers and set variables as you like such as BLIPMODE off. For SurvCADD, the drawing template should be set to 15SCDRAW from the SurvCADD sup directory (ie. C:\SCADXML\SUP\15SCDRAW.DWT). To customize the template, run the AutoCAD *OPEN* command and choose the drawing template. In the Select File dialog, set the type of file to Drawing Template (DWT) instead of regular drawings (DWG). Then make your changes and *SAVE* the drawing as 15SCDRAW.DWT. *Note: For SurvCADD in AutoCAD R14, the default template drawing is 14SCDRAW*.

When starting a new drawing, one of the first steps is to run Drawing Setup under the Inq-Set menu. Drawing Setup sets the drawing scale, the unit mode as either English or metric, and the text, symbol and linetype size scalers. The initial values for these Drawing Setup variables are set in Configure SurvCADD. When a drawing is saved, the Drawing Setup variables are saved with the drawing.

In SurvCADD, the AutoCAD text style height should be set to zero. SurvCADD will set the text height according to the drawing scale and text size scaler set in Drawing Setup. For example, if the horizontal scale is set to 50 and the text size scaler is 0.1, SurvCADD will draw the text with a height of 5 (50 * 0.1). Then when the drawing is plotted at 1"=50', the text will be 0.1 inches. Use the AutoCAD *STYLE* command to set the text style height to zero.

The Set Data Directory command in the File menu can be used to specify the directory for the project data files. By default the drawing is stored in the SurvCADD WORK directory and the data files are stored in the DATA directory. The drawing file is the AutoCAD (.DWG) file. The data files are the coordinate (.CRD) file, profile (.PRO) file, grid (.GRD) file and other SurvCADD data files. In Configure SurvCADD|General Settings, there is an option to store all data files in the directory of the drawing. With this option active all the files for the drawing C:\SCADXML\WORK\JOB500\JOB500.DWG would be stored in C:\SCADXML\WORK\JOB500.

Another level of file management is the automatic project file recall. Every drawing remembers the data files that are being used for the drawing. When the drawing (.DWG) file is saved with the SAVE, SAVEAS, or QSAVE command, SurvCADD writes a settings file that contains all the active data file names. Then when the drawing is reopened, the data files default to their previous settings. For example, you won't have to choose which coordinate file to use unless you want to change it. The settings file is stored in the same directory as the drawing file and has the same name as the drawing with a .INI extension. For example, a drawing survey.dwg would have a settings file called survey.ini. You can turn off the INI files with the Save Drawing INI Files option in Configure SurvCADD under General Settings.

# Startup Wizard

For creating a new drawing in SurvCADD, the Startup Wizard can guide you through starting and setting up the drawing. This wizard is optional and can be turned on or off in the Configure SurvCADD->General Settings command. You can also exit out of the Startup Wizard at any time.

When the *New* drawing command is executed, you first get the standard AutoCAD choice of "Start from Scratch", "Use a Template" or "Use a Wizard". Typically, you want to the "Use a Template" option and choose the SurvCADD drawing template (SCDRAW14 or SCDRAW15). The drawing template will set of some basic drawing parameters such as default layer names. After selecting the AutoCAD new drawing option, the SurvCADD *New Drawing Wizard* dialog box opens.

The Startup Wizard begins with a dialog to set the drawing name and scale. The first step to do is set the drawing (.dwg) name by picking the *Set* button. This brings up the file selection dialog. Change to the directory/ folder ("*Save in*" field) where you want to store the drawing. You can either select an existing folder or create a new folder. To select an existing folder, pull

down the *Save in* field to select a folder or drive, click the Move Up icon next to the *Save in* field and/or the pick the folder name from the list. To create a new folder, pick the Create New Folder icon to the right of the Save in field. Then type in the drawing name in the *File name* field and click the *Save* button.

After setting the drawing name, you can set the drawing horizontal scale, symbol size, text size and unit mode (English or Metric). Then click the Next button.

The next startup dialog sets the Data Path and CRD File. The Data Path is the folder where SurvCADD will store the data files
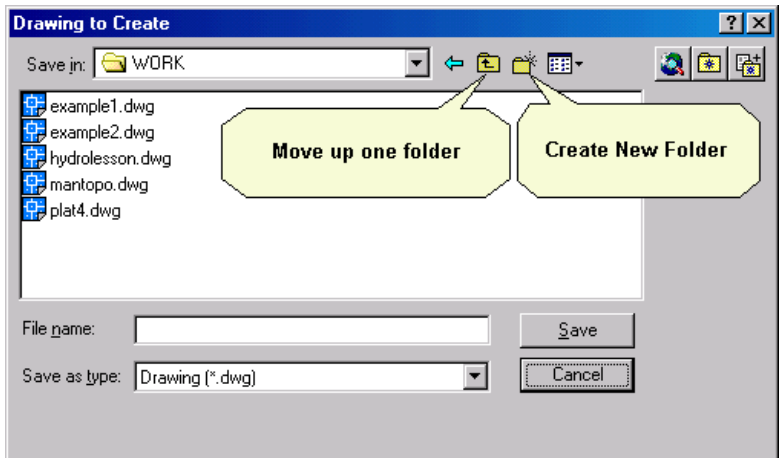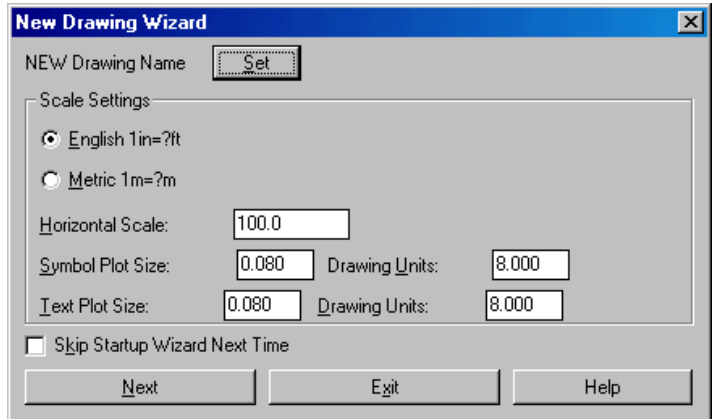
such as raw (.RW5) files and profile (.PRO) files. The *Set* button for the Data Path allows you to select an existing folder or create a new folder. See the Set Data Directory command for more information. The coordinate (.CRD) File is the coordinate file for storing the point data. There is an option to create a new or existing coordinate (.CRD) file. The new option will erase any point data that is found in the specified CRD file. The existing option will retain any point data in the specified coordinate (.CRD) file. If the specified coordinate (.CRD) file does not exist, the wizard will create a new file.

The next wizard step depends on the Import Points option. The Data Collector option will start the data collection routines to download data from a collector. The Text/ASCII option will import point data from a text/ASCII file. See the Data Collection and Import Text/ASCII File commands for more information on running these routines. If the None option is set, then the Startup Wizard is finished.

Once point data has been imported from the data collector or text/ASCII file, the wizard guides you through drawing the points. There are options to run Draw/Locate Points, Field To Finish or None. If None is selected, then the Startup Wizard is finished. Draw/Locate Points will import the points into the drawing using the same symbol and layer for all the points. From the Draw/Locate Points dialog, set the symbol, layer and point attributes to draw (description, elevation) and then pick the Draw All button. The Field To Finish command will import the points into the drawing using different layers and symbols depending on the point descriptions that refer to the code table defined in Field to Finish. Also Field to Finish can draw linework. See the Draw/Locate Point and Field To Finish commands for more information on running these routines. After drawing the points, the wizard will zoom the display around the points. Then the wizard is finished.
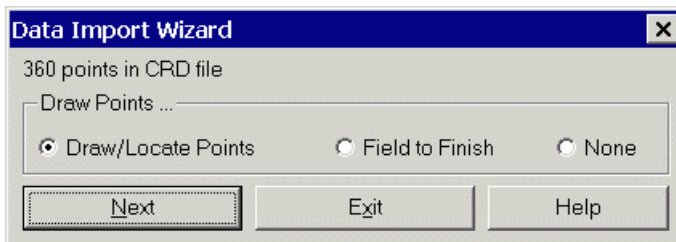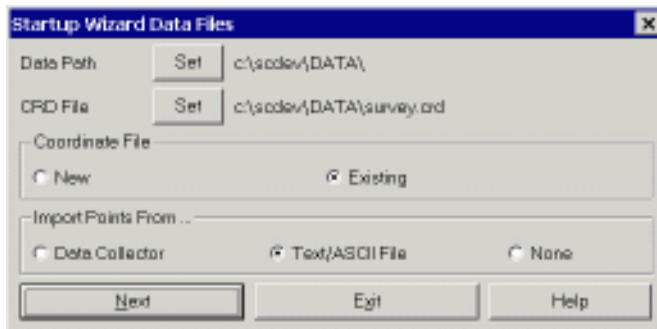
# Layer and Style Defaults

Many SurvCADD commands have default layers such as AREATXT for area labels and BRGTXT for bearing and distance annotations. These layers can be specified in dialogs for the corresponding commands and several can be set in Configure SurvCADD. Sometimes you may want to use the current layer and it can be an extra step to have to open the dialog to set the layer. In this case, instead of using the default layer that set in the dialog, the default layer can be set as "CLAYER" which will use the current layer. For example, if the annotation layer is set to CLAYER then annotation will be drawn in the current layer instead of BRGTXT or whatever the annotation layer used to be.

This same concept applies for text styles. Several commands have specific text styles and if you want to use the current style instead of the command style, use the name "CSTYLE" for the style name.

| Annotate Defaults | |
|---|---|
| Horizontal Scale: | 100.00 |
| Annotation Layer: | CLAYER |
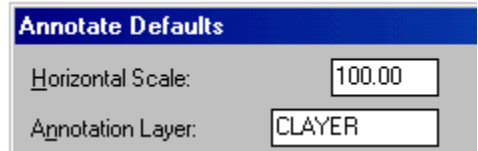
# SurvCADD File Types

| | |
|---|---|
| .ATR | Strata attribute definitions |
| .CAL | Mining equipment calendar |
| .CAP | Capacity file for hydrology (stage-storage) |
| .CDT | Mining custom date table |
| .CH | Corehole definition |
| .CL | Centerline file |
| .CQT | Mining custom quantity table |
| .CRD | Coordinate file (point#, northing, easting, elevation, description) in binary form |
| .DCL | SurvCADD dialogs |
| .DEQ | Drillhole equations |
| .DES | Lot report for Lot Description command in COGO-Design |
| .DLL | SurvCADD programs files |
| .DWG | AutoCAD drawings |
| .EQO | Mining equipment options |
| .EQU | Mining equipment definitions |
| .EXE | SurvCADD programs |
| .FLD | Field to Finish code definitions |
| .FLT | Triangulation mesh |
| .FRM | Ferm Codes |
| .GEO | Settings for Draw Geologic |
| .GFU | Grid File Utilities macro command recorder file |
| .GIS | GIS prompting definitions for note files |
| .GRD | Grid file - a DTM surface model |
| .GSQ | Grid sequence history file for mining |
| .INI | Program user preferences settings |
| .HYD | Watershed settings |
| .HZN | Horizon code definitions |
| .LOT | Lot file for COGO-Design |
| .LSP | SurvCADD Lisp programs |
| .LSQ | Least-squares input data |

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| | |
|---|---|
| .MNC | Compiled menus |
| .MNL | SurvCADD Lisp programs for corresponding menu startup |
| .MNR | Compiled menus |
| .MNS | Compiled menus |
| .MNU | SurvCADD source menus |
| .MNX | Compiled menus |
| .MPJ | Mining project definitions |
| .MXS | Cross section alignment |
| .NOT | Note file - additional descriptions for points in corresponding .CRD file |
| .PAR | Parameters for mining qualitiy compliance |
| .PLN | Plan view polyline file for Dozer 2000 |
| .PNA | Mining panal attributes |
| .PRE | Pre-calculated grids for strata model |
| .PRJ | Project settings file |
| .PRO | Profile (station, elevation, descriptions) |
| .PTA | Mining pit attributes |
| .RUN | Auto-Run Strata Grids definition file |
| .RW5 | Raw file of traverse data |
| .SCR | COGO script file |
| .SCT | Cross section data (station, offset, elevation, descriptions) |
| .SEQ | Dragline sequence file |
| .SEW | Sewer network file for hydrology |
| .SLB | Slide library |
| .SLD | Slide image |
| .STG | Stage-discharge data for hydrology |
| .SUP | Superelevation file |
| .TPC | Template point centerline definition |
| .TPL | Template file for Section-Profile |
| .TPP | Template point profile definition |
| .TPT | Template transition file for Section-Profile |
| .VOL | Auto-Run Strata Quantities definition file |

# Standard Report Viewer

Many SurvCADD routines display output in the Standard Report Viewer as shown below. The report can be edited directly in the report viewer. Report Viewer commands are described below.

**Open:** This allows you to open an ASCII file and display the contents in the report viewer.

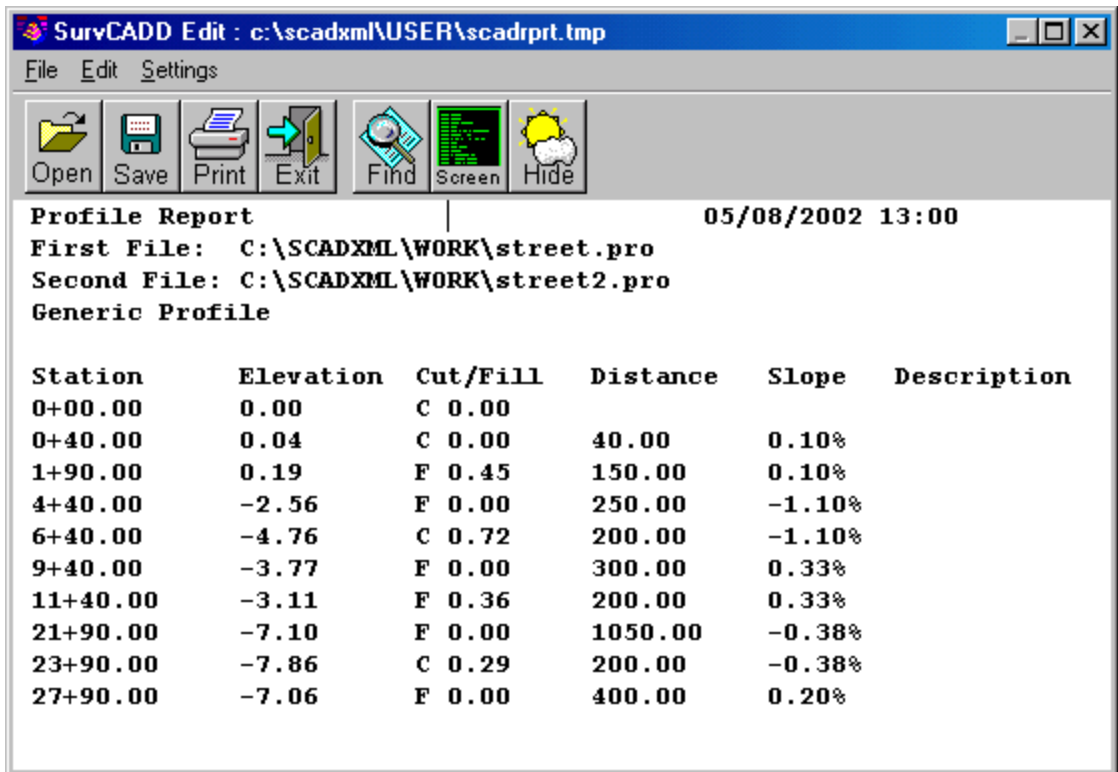**Save:** Save the contents of the report viewer to a text file.

**SaveAs:** This allows you to save the contents of the report viewer to a file.

**Append To:** This allows you to append the contents of the report viewer to another file.

**Print:** Print the contents of the report viewer. This will open the standard windows Print dialog where you can choose the printer and modify any of the printer settings before you actually print.

**Screen:** Draws the report in the current drawing. The program will prompt you for a starting point, text height, rotation and layer.

**Undo:** Reverses the effect of your last action. If you mistakenly deleted some text, stop and choose the Undo command to restore it. The key combination Ctrl-Z also performs this action.

```
SurvCADD Edit : c:\scadxml\USER\scadrprt.tmp                    _□×

File  Edit  Settings

 ┌──┐ ┌──┐ ┌──┐ ┌──┐  ┌──┐ ┌──┐ ┌──┐
 │📂│ │💾│ │🖨│ │🚪│  │🔍│ │▦│ │☁│
 └──┘ └──┘ └──┘ └──┘  └──┘ └──┘ └──┘
 Open Save Print Exit  Find Screen Hide

Profile Report                          05/08/2002 13:00
First File:  C:\SCADXML\WORK\street.pro
Second File: C:\SCADXML\WORK\street2.pro
Generic Profile


Station       Elevation   Cut/Fill   Distance    Slope    Description
0+00.00       0.00        C 0.00
0+40.00       0.04        C 0.00     40.00       0.10%
1+90.00       0.19        F 0.45     150.00      0.10%
4+40.00       -2.56       F 0.00     250.00      -1.10%
6+40.00       -4.76       C 0.72     200.00      -1.10%
9+40.00       -3.77       F 0.00     300.00      0.33%
11+40.00      -3.11       F 0.36     200.00      0.33%
21+90.00      -7.10       F 0.00     1050.00     -0.38%
23+90.00      -7.86       C 0.29     200.00      -0.38%
27+90.00      -7.06       F 0.00     400.00      0.20%
```

**Select All:** Selects all the text in the report viewer.

**Cut:** Deletes the selected text and places it on the Windows® clipboard.

**Copy:** Copies the selected text to the Windows® clipboard.

**Paste:** Inserts ASCII text from the Windows® Clipboard into the report viewer at the cursor.

**Search:** Opens the Find Text dialog. Allows you to search for text in the report viewer.

```
Report Viewer Options                            ×
☑ Use print settings        ☑ Use degree symbols
☑ Use page numbers
Lines/Page        55
Left margin        5
Top margin         2
Bottom margin      3
Printer Font: Courier New 12pt        [Select Font]
Editor Font: Courier New 10pt         [Select Font]
        OK            Exit
```

**Replace:** Opens the Find and Replace Text dialog. Allows you to search for text and replace it.

**Options:** Opens the Report Viewer Options dialog. In this dialog, you can specify print settings, such as lines per page and margins. You can also specify the font used in the report viewer. This font is used for both the display and for printing.

**Hide:** This button allows you to minimize the report viewer window and give focus back to AutoCAD. This allows you to return to working in AutoCAD without closing the report. You can re-activate the report by picking on the minimized report viewer icon.
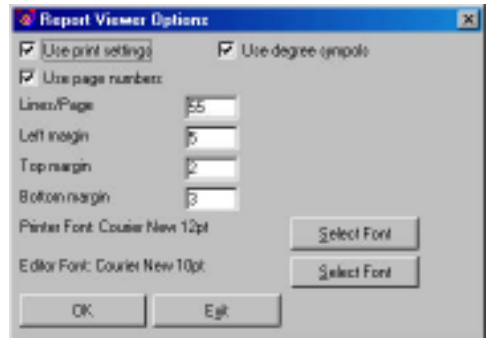
# Report Formatter Dialog

A number of SurvCADD routines use a Report Formatter Tool to allow you to specify how and which results of calculations should be presented in the report. This report routine lets you select a set of data to report and the format of the selected data. The report can be displayed in either the standard viewer described in the previous section, Microsoft® Excel or Microsoft® Access.

The data set in the Report Formatter may be thought of as a spreadsheet, where columns are various fields related to a single item such as time period, drillhole, area and etc. Each new row represents a new item. Descriptions of these field names are displayed in the Available list of the Report Formatter. To include a data field in the report, highlight the field name in the Available list on the left and pick the Add button. This moves the field name to the Used list on the right. The order of items in the right list defines the order in which they will be displayed. In addition the items may be sorted as specified by user in the right column. Items are first sorted by the first column, then items with the same value in first column are sorted as specified for the second column and so on.

These subsequent sortings do not modify sortings of previous columns. If you specify no sorting for some column (even the first one) then no sorting will happen in subsequent columns either. For example you may want to sort production by mining panel name, but not by month.

To generate the report after selecting columns and other preferences, click on Display button. It will bring up a standard built-in viewer with the report. Upon exiting the viewer you come back into the Report Formatter for further data manipulation if needed. The other data output options include saving the specified data into comma-delimited text file and direct export to Microsoft® Excel.

You may define new columns as equations based on existing columns. Click on the Edit User Attributes button to add a new field name. A list of the existing attributes is available for reference.

User attributes may have one of the several summation options just like program-generated ones (except that for them these options are set by program).  The summation level is defined by the "Total" pop-up list in the middle of the dialog. By default only grand total will be displayed at the bottom of the list. By picking the next item in that box, you will get subtotals added each time the value in first column is changed. It makes most sense to use this kind to summation if the corresponding column is sorted. For example is first column is "Area Name" and it is sorted, and "Total" is set to "Grand, Area Name" the report will have a sub-total for each distinct Area Name. This feature makes the Report Formatter a very flexible tool for results exploration, even before or without using a spreadsheet.

Various forms of reports may be saved and recalled using controls in the top line of the dialog. To save a new version of the format, type in a new name (or use default to overwrite old one) and
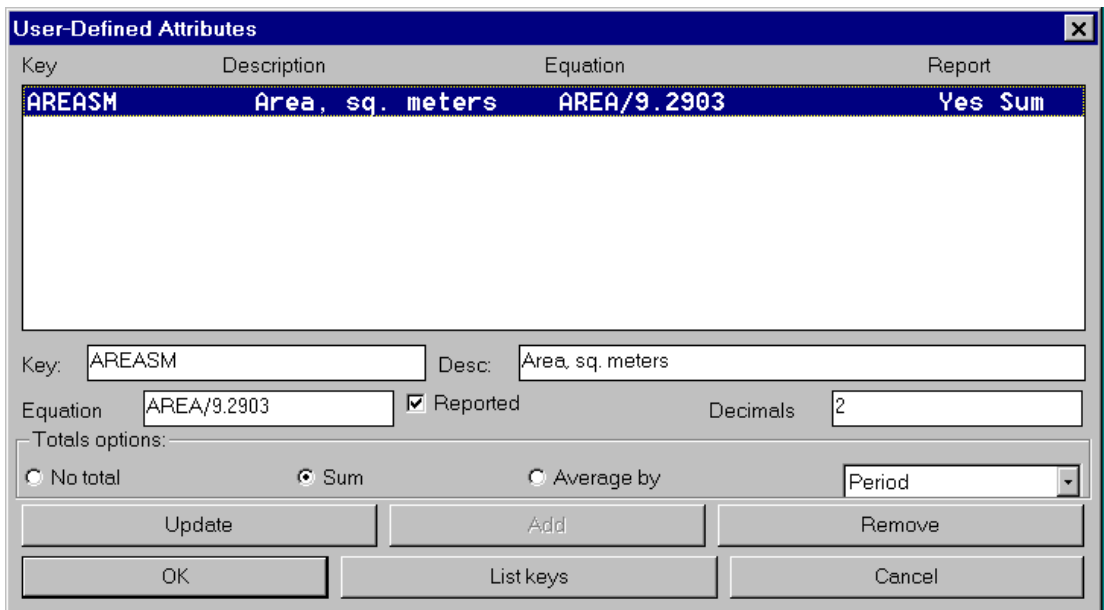
click on the Save button. The next time that you come to the Report Formatter from the same SurvCADD routine it will recall this last format. To pick another format just pull down on list of formats in the left top corner and pick which format to use. To Delete an unwanted format, pick it from the list first and then click on Delete button.

There are several Microsoft® Excel export options provided. You may specify a spreadsheet file to load before export, as well as a left upper cell to start with and sheet number to use. Totals which are reported when using built-in viewer may be skipped when using Microsoft® Excel export.

# Instruction Manual and Program Conventions

*\SRVM\SRVMENU*         Italic text in this font represent responses by the user that should be typed in and followed by the [ENTER] key.

[Esc]      Text in brackets represent a key that should pressed for a prompt or command option.

[end on]  Lower case text enclosed in brackets in Command prompts denotes an *OSNAP* mode that is turned on by the command.

**<90.0000>**         Values enclosed in corner brackets represent default values obtained by pressing [Enter] with a blank response to AutoCAD or SurvCADD commands.

**Number/<Pick point>:** Text in this font represents prompts or questions that the computer program will ask the user.

*(pick point)*         Italic text in parentheses denotes a user response to a prompt such as picking a point or a set of objects.

*MENU*     Text in this italic font represents AutoCAD or SurvCADD commands.

{SETUP}  Text enclosed in braces represents screen menu selections.

*Display*  Text enclosed in astericks represent pull-down menu selections.