DraftSight

Configuration & Basic Customization

™

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Configuration

Setting User Preferences and System Options

1. DraftSight Customization

Setting up the options of an applications order to fit personal preferences, the environment or workflows, is usually one of the first tasks that users set out to. This document provides information on how to customize the DraftSight User Interface and program environment.

In DraftSight, most of these preferences / options are accessible under **Options.**

The **Options** command lets you configure program operating parameters, customize settings, set shortcuts for commands, and set other preferences. All these are grouped in six major groups:

- ▶ File Locations
- ▶ System Options
- ▶ User Preferences
- ▶ Drawing Settings
- ▶ Drafting Styles
- ▶ Profiles

To access the Options dialog box:

Type in Command Line: Options

or

Menu: Tools > Options (Classic Interface)

or

Manage > Options (Drafting and Annotation Interface)

To search for specific options in the Options dialog box:

1. In **Find**, type a term or system variable to search for related options.
2. In the drop-down list, select an option. In the **Options** dialog box, the option displays.

2. Customizing the User Interface

The **Customize** command lets you customize user interface elements such as menus, toolbars, ribbon tabs and panels, quick access toolbar, and working spaces.

In this topic, you can find information on

- ▶ Managing Customization Files
- ▶ Managing Commands
- ▶ Managing the Interface
- ▶ Setting Mouse Actions
- ▶ Managing Keyboard Shortcuts
- ▶ Managing User Interface Profiles

2.1. Managing Customization Files

You can manage the customization files you use. Customization files store the elements that comprise the user interface.

2.1.1. To manage customization files:

1. Click **Tools > Customize Interface** (or type **Customize**).
2. In the **Customize** dialog box, in **Source**, select one of the following:
   - **All Customization Files** to become the base for adding or modifying interface elements.
   - A specific customization file (.xml format) on which to work.

3. Click **Load customization file** to load a customization file located outside the default folder for customization files.

4. Click Create customization file to create a new customization file. In the Create Customization File dialog box, for:
   - **Name**, type the name for the new customization file.
   - **Path**, accept the location for the new file or browse to a location.

2.2. Managing Commands

Use the **Commands** page of the **Customize** dialog box to manage commands and command sequences for use in user interface elements.

2.2.1. To manage commands for use in User Interface elements:

1. Click **Tools > Customize Interface** (or type **Customize**).
2. In the **Customize** dialog box, click **Commands** .
3. To add a command to the list of commands, click **Add Command** .
   An empty command entry is added to the commands list, labeled "Command" as placeholder for a new command.
   See below for a description to edit command entries.
4. To remove a command from the commands list, click **Remove Command** .
5. To expand the **Icon Explorer**, click **Show icon explorer** . In **Filter**, select whether to show **All Icons**, **Small Icons**, or **Large Icons** in the **Icon Explorer**.
6. Click OK.

2.2.2. To edit command entries

1. In the **Customize** dialog box, in the commands list, select a command entry.
2. In the **Name** field, label the command entry.
3. For **Command string**, type a command, command sequence, or command option.

   Start the expression with ^C^C to ensure a running command is cancelled when invoking the command or command sequence.

   Example: ^C^C_circle \4;circle \2

4. To expand the **Icon Explorer**, click **Show icon explorer** .
5. From the **Icon Explorer** drag a small icon and a large icon to the corresponding **Small** and **Large** fields of the new command entry. These icons are used for menus and toolbars.

   The location and file name of the icons displays in **Small icon location** and **Large icon location**.

6. For **Description**, type a description to display in the status line when you move the pointer over the corresponding command in a menu or toolbar.

3. Managing the User Interface

This section discusses:

- ▶ Quick Access Toolbar
- ▶ Ribbon Tabs and Panels
- ▶ Menus and Toolbars

3.1. Managing the User Interface: Menus and Toolbars

Use the **Interface** page of the **Customize** dialog box to create and modify quick access toolbars, ribbon tabs and panels, menus, and toolbars.

You can rearrange existing items, add new items, and modify entries and command sequences associated with them.

To remove a UI item, select it and click **Remove** .

3.2.   Quick Access Toolbar

The Quick Access Toolbar is a small toolbar that lets you access frequently used commands.

3.2.1. To manage quick access toolbars

1. Click **Tools > Customize Interface** (or type **Customize**).

2. In the **Customize** dialog box, click **Interface** .
3. Expand **Quick Access Toolbars**.
4. In **Quick Access Toolbar**, select whether to display **All Quick Access Toolbars** of the current customization source or a specific quick access toolbar.
5. Expand the quick access toolbar you want to edit.

   The command entries of the toolbar and their icons display.

6. Click **Show command explorer** to expand the **Command Explorer**.
7. In **Command Explorer**, select a command entry and drag it to the quick access toolbar.
8. Use the **Find** box to type a search string to reduce the entries in the **Command Explorer**.

3.2.2. To create a new quick access toolbar

1. In the **Customize** dialog box, expand **Quick Access Toolbars**.
2. In the list of quick access toolbars, right-click and click **New Quick Access Toolbar**.

   A new quick access toolbar is added to the list.

3. Right-click the quick access toolbar and click **Rename** to edit the name.
4. Add command items to the quick access toolbar.

3.2.3. To add commands to a quick access toolbar:

1. In the **Customize** dialog box, expand a quick access toolbar.
2. Navigate to the location in the quick access toolbar where you want to place the new item.
3. Click **Show command explorer** to expand the **Command Explorer**.
4. In **Command Explorer**, select a command entry and drag it to the quick access toolbar.

3.2.4. To rename an entry in a quick access toolbar:

1. In the **Customize** dialog box, expand a quick access toolbar.
2. Right-click the entry to rename and click **Rename**.
3. Type new text for the quick access toolbar entry.

   Note: The command sequence behind the entry does not change.

3.2.5. To delete an entry from a quick access toolbar:

1. In the **Customize** dialog box, expand a quick access toolbar.
2. Right-click the entry to delete and click **Delete**.

3.2.6. Tool Matrix

The Tool Matrix is a collection of toolbars. When you open the Tool Matrix the first time, it is an empty panel. You need to drag toolbars onto the Tool Matrix

The Tool Matrix is a user interface element that behaves like other palettes, such as the Properties palette or References palette.

▶ To display the Tool Matrix

Right-click the menu bar or a docked toolbar and select **Tool Matrix** (or type **ToolMatrix**).

The Tool Matrix opens as floating or docked palette.

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▶ To hide the Tool Matrix

Right-click the menu bar or a docked toolbar and clear **Tool Matrix** (or type **HideToolMatrix**).

- or -

Click Close .

▶ To place a toolbar on the Tool Matrix:

Click the handle on the left of a toolbar and drag the toolbar onto the Tool Matrix.

▶ To remove a toolbar from the Tool Matrix:

Click the title of the toolbar, and drag the toolbar onto the graphics area (to float it) or to a margin of the program's desktop (to dock it).

▶ To rearrange toolbars on the Tool Matrix:

Click the toolbar title and drag the toolbar onto the Tool Matrix.

▶ To collapse a toolbar on the Tool Matrix:

Click Collapse ▲ on the toolbar. The icons of the corresponding toolbar are hidden. The toolbar is still part of the Tool Matrix.

▶ To expand a toolbar on the Tool Matrix:

Click Expand ▼ on the toolbar.

This shows the corresponding toolbar and makes the icons available. This shows the corresponding toolbar and makes the icons available.

▶ To minimize the floating Tool Matrix:

Click Minimize ◀◀◀◀◀ on the Tool Matrix. The Tool Matrix minimizes to a two column panel. The toolbars are arranged as drop-down icon menus.

▶ To set the floating Tool Matrix to its default width:

Click Enroll ▶▶▶▶▶ on the Tool Matrix.

3.3. Ribbon Tabs and Panels

Ribbons provide tabs that organize application feature categories, such as drafting and modification (on the Home tab), inserting, and viewing.

Each ribbon tab is composed of panels, which are a set of closely related commands needed to complete a task.

3.3.1. To Manage Ribbon Tabs

1. Click **Tools > Customize Interface** (or type **Customize**) ..
2. In the **Customize** dialog box, click **Interface**
3. Expand **Ribbon**, then **Tabs**.
4. In **Tabs**, select whether to display **All Tabs** of the current customization source or a specific tab.
5. Expand the tab to view or edit.

   The tab panels display.

6. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
7. Click a panel in the **Tabs** tree view to view a panel in the **Panel Preview**.

3.3.2. To Create New Ribbon Tabs

1. On the **Interface** page of the **Customize** dialog box, expand **Ribbon**, then **Tabs**.
2. In the **Tabs** tree view, right-click and click **New Tab**.

   A new tab is added to the list.

3. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
4. In **Appearance**, edit the tab name in **Display text**.
5. Add panels to the tab.

3.3.3. To add panels to ribbon tabs:

1. On the **Interface** page of the **Customize** dialog box, expand **Ribbon**, then **Tabs**.
2. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
3. Select an entry in **Ribbon Panel Explorer** and drag it into a tab.

   Note: You can drag a panel to another position in the **Tabs** tree view list at any time.

   Note: In the Tabs tree view, right-click to create, rename, duplicate, or delete tabs.

3.3.4. To Manage Ribbon Panels

1. Click **Tools > Customize Interface** (or type **Customize**) .
2. In the **Customize** dialog box, click **Interface** .
3. Expand **Ribbon**, then **Panels**.
4. In **Panels**, select whether to display **All Panels** of the current customization source or a specific panel.
5. Expand the panel to view or edit.

   The panel items display.

6. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
7. Click a panel in the **Panels** tree view to view a panel in the **Panel Preview**.
8. Click a command in the **Panels** tree view to highlight a command button in the **Panel Preview**.

3.3.5. To create new ribbon panels

1. On the **Interface** page of the **Customize** dialog box, expand **Ribbon**, then **Panels**.
2. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
3. In the **Panels** tree view, right-click and click **New Panel**.

A new panel is added to the list.

4. In **Appearance**, edit the panel name in **Display text**.
5. Add panel items to the panel as described next.

3.3.6. To add new items to a new ribbon panel

1. On the **Interface** page of the **Customize** dialog box, expand **Ribbon**, then **Panels**.
2. Click **Show ribbon explorer** to expand the **Ribbon Explorer**.
3. In the **Panels** tree view, right-click and click **New Row**.

A new row is added to the list.

4. From the **Command Explorer**, drag a command entry onto the new row.
5. Click In **Appearance**, specify the **Button style**.
6. Add more panel elements (see **Ribbon Panel Elements**).

3.4. Ribbon Panel Elements

A panel can contain the following elements:

Type	Description
Row	Contains sub-panels, drop-down menus, and command buttons.
Sub-panel	Creates an area with rows within a panel. They cannot contain drop-down menus or command buttons.
Drop-down menu	Contains command buttons. In **Appearance**, specify the drop-down behavior, split button list style, and button style for the commands.
Command button	Executes commands from a ribbon. Command buttons usually have icons associated with them. In **Appearance**, specify the button style of the command button.
Separator	Separates groups of similar commands in drop-down menus.

3.5.   Placing Panel Elements

To create a new row, sub-panel, or drop-down menu, right-click in the **Panels** tree view.

To place a command button or a control element in a panel, drag it from the **Command Explorer** into a panel row or panel drop-down menu.

3.6.   Setting the Appearance of Drop-down Menu Buttons and Command Buttons

The **Appearance** area of the **Ribbon Explorer** lets you specify the display mode of drop-down menu buttons (split buttons) and command buttons.

3.6.1. Drop-down Behavior

You can define the display mode of split buttons that display drop-down menus in panels:

Type	Description
Split with recent	Displays the icon and text of the recently selected drop-down menu item.
Split with recent (Static)	Displays the icon of the recently selected drop-down menu item, but the text is static (the text you defined as the drop-down menu title in the panel tree view).
Split	Uses a fixed icon. The drop-down menu displays text items. If the icon is not specified, **Split** behaves like **Split with recent**.
Drop-down menu with recent	Same as **Split with recent**.
Drop-down menu	Same as **Split**.

3.6.2. Split Button List Styles

You can define the display of drop-down menu list buttons. The default is **Icons and Text**, but you can specify **Icons and Bold Text** or **Icons only**.

3.6.3. Button Styles

You can define the button style for drop-down menu buttons and command buttons: **Large buttons with text**, **Large buttons without text**, or **Small buttons without text**. Do not use small buttons on stacked rows on panels.

Tip: In the **Panels** tree view, right-click to create, rename, duplicate, or delete panels. Right-click panel items to add command buttons, drop-down lists, rows, sub-panels, and separators.

3.7. Menus and Toolbars

3.7.1. To Manage Menus and Toolbars

1. Click **Tools > Customize Interface** (or Type **Customize**).

2. In the **Customize** dialog box, click **Interface** .

3. Expand **Menus**.

4. In **Menu**, select whether to display **All Menus** of the current customization source or a specific menu (such as **File**, **Edit**, or **View**).

5. Expand the menu you want to edit.
   The command entries of the menu and their icons or sub menus display.

6. Expand **Toolbars**.

7. In **Toolbar**, select whether to display **All Toolbars** of the current customization source or a specific toolbar (such as Standard, Layers, or Properties).

8. Expand the toolbar you want to edit.
   The command entries of the toolbar and their icons display.

9. To remove a selected command from a menu or toolbar, click **Remove** .

10. To expand the **Command Explorer**, click **Show command explorer** .

11. To insert a command or option in a menu or toolbar, select an entry in **Command Explorer** and drag it to a menu or toolbar.

12. Use the **Find** box to type a search string to reduce the entries in the **Command Explorer**.

Note: Use the **Commands** section of the **Customize** dialog box to add and edit commands. You cannot edit the command or command sequence behind a menu or toolbar entry in the **Interface** section.

3.7.2. To Create a New Menu or New Toolbar

1. In the **Customize** dialog box, expand **Menus** or **Toolbars**.
2. In the list of menus or toolbars, right-click and click **New menu** or **New toolbar**.
   A new menu or toolbar is added to the list.
3. Right-click the menu or toolbar and click **Rename** to edit the name.
4. Add command items to the menu or toolbar as described next.

3.7.3. To Insert an Entry into a Menu or Toolbar

1. In the **Customize** dialog box, expand a menu or toolbar.
2. Navigate to the location in the menu or toolbar where you want to place the new item.
3. Click **Show command explorer** . to expand the **Command Explorer**.
4. In **Command Explorer**, select a command entry and drag it to the menu or toolbar.
5. Right-click a menu or toolbar and click **New separator** to insert a separator.
6. Right-click a menu and click **New sub menu** to insert a sub menu.

3.7.4. To Rename an Entry in a Menu or Toolbar

1. In the **Customize** dialog box, expand a menu or toolbar.
2. Right-click the entry to rename and click **Rename**.
3. Type new text for the menu or toolbar item.

Note: The command sequence behind the item does not change.

3.7.5. To Delete an Entry in a Menu or Toolbar

1. In the **Customize** dialog box, expand a menu or toolbar.
2. Right-click the entry to delete and click **Delete**.

4. Setting Mouse Actions

Use the **Mouse Actions** page of the **Customize** dialog box to define what happens when you right-click or double-click the mouse. You can also define common and contextual shortcut menus.

4.1. To Define Actions for Right-Clicks

1. Click **Tools > Customize Interface** (or type **Customize**).

2. In the **Customize** dialog box, click **Mouse Actions** .

3. Expand **Right Clicks**.

4. For **Right Click**, **Shift+Right Click**, **Ctrl+Right Click**, and **Ctrl+Shift+Right Click** select a menu, command, command sequence, or option to issue.

4.2. To Define Actions for Double-Clicks

1. In the **Customize** dialog box, expand **Double Clicks**.
2. In **Entity**, select an entity type.
3. In **Command Name**, select a command to execute when you double-click the specified entity.
4. To add an entity type to the list, click **Add** .
5. To expand the **Command Explorer** to drag a command name to an entity type in the list, click **Show command explorer** .
6. To remove an entity type from the list, click **Remove** .

4.3. To Manage Shortcut Menus

1. Click **Tools > Customize Interface** (or type **Customize**).
2. In the **Customize** dialog box, click **Mouse Actions** .
3. Expand **Shortcut Menus > Common** or **Contextual**.
4. In **Menu**, or in the list of shortcut menus, select a shortcut menu. You can edit common shortcut menus:
    - The **Default Menu** displays if you right-click when no command is active.
    - The **Edit Menu** displays if you right-click when drawing entities are selected.
    - The **Command Menu** displays if you right-click when a command is active and no shortcut menu is defined for that command.
    - The contextual menus display if you right-click when a specific command is active.
5. To insert a command or option in a shortcut menu:
    a) Click **Show command explorer** **.**
    b) Under **Command Explorer**, select an item and drag it to a menu or toolbar.
6. To replace a command or option, select an item in a shortcut menu, then select another command or option in **Command**.
7. To remove a command from a shortcut menu, select an item in a shortcut menu and click **Remove** (the option is available for contextual shortcut menus only).

4.4.   Mouse Gestures

You can use a mouse gesture as a shortcut to execute a command, similar to a keyboard shortcut. Once you learn command mappings, you can use mouse gesture to invoke mapped commands quickly.

To activate a mouse gesture, from the graphics area, right-drag in one of four directions: up, down, left or right. When you right-drag, a guide appears, showing the command mappings for the gesture directions. The guide highlights the command you are about to select.

To cancel a mouse gesture, release the mouse within the mouse gesture guide.

▶   To use a mouse gesture to invoke a pre-assigned command

1. Click **Tools > Mouse Gestures** (or Type **Gesture**). In a Drafting &Annotation UI, Go to **Manage> Mouse Gestures.**

2. To display eight commands in the mouse gestures guide, click 8 Gestures and click OK.

3. From the graphics area, right-drag in the gesture direction that corresponds to the command.

The mouse gesture guide appears, highlighting the icon for the command mapped to the direction of your gesture.

For example, with a drawing open, right-drag the mouse to the right, dragging toward the highlighted command.

4. Continue to right-drag through the command icon, releasing after you pass through the command region of the mouse gesture guide.

The command is invoked.

▶ To disable mouse gestures:

1. Click **Tools > Mouse Gestures**.

2. Clear Enable mouse gestures.

▶ Reassigning mouse gestures:

There are 8 pre-assigned commands mapped to mouse gestures, one command for each of eight mouse gesture directions.

By default, 4 of the pre-assigned commands are available in the mouse gesture guide.

You can customize the commands assigned to mouse gestures.

1. Click Tools > Mouse Gestures.

2. Set Category to All Commands.

3. Click the Select column to view the current mouse gesture commands.

4. Decide which command to add, selecting from available commands.

5. Choose one of the mouse gesture directions to reassign, and in the row for the new command, select the mouse gesture direction from the list..

By default, four directions are available. Select 8 Gestures to assign commands for eight gesture directions:

5. Managing Keyboard Shortcuts

5.1.   Default Shortcuts

Keyboard Shortcuts are divided in two categories: **Function Keys**, and **Keyboard Shortcuts**. Below, tables with the default settings (on install):

Function Keys

Function Key	Description	Related Commands
Esc	Cancels current command	-
F1	Displays online Help	Help
F2	Shows and hides the command history in a separate Command Window	CommandHistory, HideCommandHistory
F3	Turns EntitySnaps on and off	EntitySnap, -EntitySnap
F4	-	-
F5	Switches the isometric grid to next isoplane	IsometricGrid
F6	-	-
F7	Turns the grid display on and off	Grid
F8	Turns ortho mode on and off	Ortho
F9	Turns snap mode on and off	Snap
F10	Turns Polar Guides on and off	-
F11	Turns Entity Tracking on and off	-
F12	-	-
Ctrl + F4	Exits the drawing but not the program	Close
Alt + F4	Exits the Program	Exit

Keyboard Shortcuts

Keyboard Shortcut	Description	Related Commands
Ctrl + 0	Maximizes the drawing area or returns to generic display mode	FullScreen, HideFullscreen
Ctrl + 1	Turns the Properties Palette on and off	Properties, HideProperties
Ctrl + 9	Turns the Command Window on and off	CommandWindow, HideCommandWindow
Ctrl + A	Selects all non-frozen entities in the current Viewport	SelectAll
Ctrl + B	Toggles snap mode during command execution	Snap
Ctrl + C	Copies entities to the clipboard	ClipboardCopy
Ctrl + Shift + C	Copies entities with a specified reference point to the clipboard	Copy@
Ctrl + F	Finds and replaces Text in Notes, Annotations, and Dimension Text	Find
Ctrl + G	Toggles grid display during command execution	Grid
Ctrl + K	Attaches a hyperlink to entities or modifies an existing hyperlink	Hyperlink
Ctrl + L	Toggles ortho mode during command execution	Ortho
Ctrl + N	Creates a new drawing file	New
Ctrl + O	Opens an existing drawing file	Open
Ctrl + P	Plots the drawing to a plotter, printer, or file	Print
Ctrl + Q	Exits the software	Exit
Ctrl + R	Cycles through Tiled Views without clicking	-
Ctrl + S	Saves the drawing under the current file name or a specified name	Save
Ctrl + Shift + S	Saves an unnamed drawing with a file name or renames the current drawing	SaveAs
Ctrl + V	Inserts data from the clipboard	Paste
Ctrl + Shift + V	Inserts entities from the clipboard as a Block	PasteAsBlock
Ctrl + X	Copies entities to the clipboard and deletes the entities	Cut
Ctrl + Y	Reverses the effects of the previous U or UndoN command	Redo
Ctrl + Z	Reverses the most recent command (Undo)	U
Del	Removes highlighted entities from a drawing	Delete
Shift	Enforces Ortho Mode	Ortho

5.2.   Managing Keyboard Shortcuts

You can customize keyboard shortcuts and temporarily override the shortcuts through the **Customize** command's **Keyboard** tab.

5.2.1. To Manage Keyboard Shortcuts
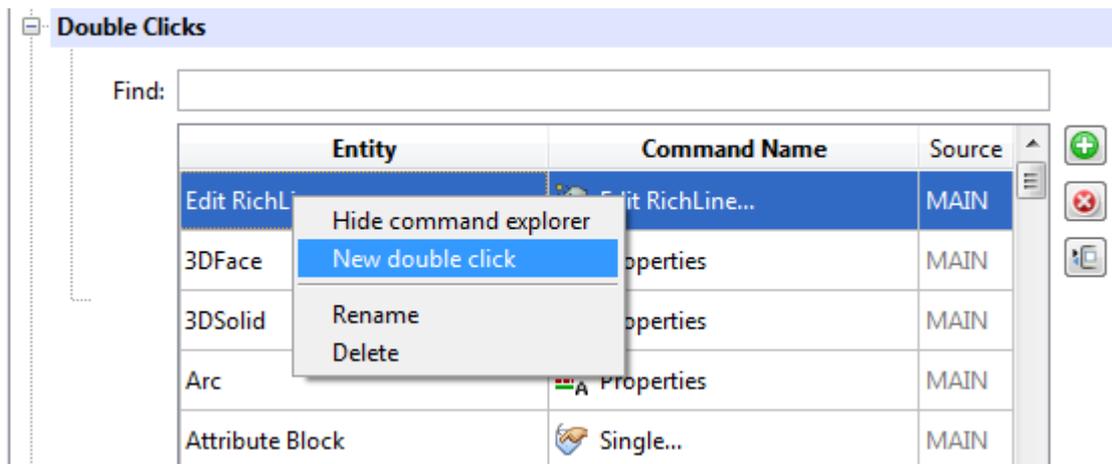
1. Click **Tools > Customize Interface** (or type **Customize**).

2. In the **Customize** dialog box, click **Keyboard** .

3. Expand **Keyboard Shortcuts > Shortcut Keys and Keyboard Shortcuts > Override Keys**.

4. To add new shortcuts to the lists, click **Add** , and in the **Key** column of the new row that appears in the list, hold a special key like **Ctrl**, **Alt**, or **Shift** and press another key on the keyboard for the shortcut.

5. To associate an existing command sequence to a shortcut, click **Show command explorer** . to expand the **Command Explorer**, then drag the command sequences to a new or existing keyboard shortcut in the list.
   For override keys, type a **Function** description and create a **Macro**.

6. To remove a keyboard shortcut from the list, click **Remove** .

6. Managing User Interface Profiles

Use the **UI Profile** page of the **Customize** dialog box to manage user interface elements such as quick access toolbars, ribbon tabs, menus, toolbars, and other elements in individual UI profiles (also referred to as workspaces).

Customization files store the UI profiles (workspaces) that comprise the user interface.

6.1.   To Manage User Interface Profiles

1. Click **Tools > Customize Interface** (or type **Customize**).

2. In the **Customize** dialog box, click **UI Profiles** . You can also use the **UIProfile** command to open the UI Profiles page of the **Customize** dialog box.

3. In **Show**, select one of the following:

   - **All UI Profiles** to become the base for adding or modifying user interface profiles.
   - A specific user interface profile.

4. Expand **UI Profiles**.

5. In the list, select a user interface profile (workspace).

6. Do one of the following:

   - Double-click the **Active** column to make a workspace the current workspace.
   - Click **New** to create a new workspace.
   - Click **Delete** to remove the selected workspace. The **Delete** option is irrevocable after you click **OK** or **Apply**.
   - Right-click and click **Rename** to rename a workspace.
   - Double-click a **Description** cell to add or edit a workspace description.

7. Click **Apply**.

6.2.   To Assign a Quick Access Toolbar to a Workspace

1. In the **Customize** dialog box, under **UI Profiles**, expand **UI Profiles > Quick Access Toolbar**.

2. In the list, click the **Quick Access Toolbar** cell of a workspace entry and select a quick access toolbar name.

3. Click **Apply**.

6.3.   To Assign a Ribbon Tab to a Workspace

1. In the **Customize** dialog box, under **UI Profiles**, expand **UI Profiles > Ribbon Tabs**.

2. Click **Show ribbon tab explorer** . to expand the **Ribbon Tab Explorer**.

3. In **Ribbon Tab Explorer**, select a ribbon tab name and drag it to the **Ribbon Tabs** cell of a workspace.

4. You can :

   - Drag a ribbon tab entry to another position in the ribbon.
   - Right-click a ribbon tab entry and click **Remove entry** to delete the entry.

5. Click **Apply**.

Note: Do not assign ribbon tabs to workspaces that are designed to work with menus.

6.4. To Assign Menus to a Workspace

1. In the **Customize** dialog box, under **UI Profiles**, expand **UI Profiles > Menu Bar**.
2. Click **Show menu explorer** [icon]. to expand the **Menu Explorer**.
3. In **Menu Explorer**, select a menu name and drag it to the **Menu Bar** cell of a workspace.
4. You can:
    - Drag a menu entry to another position in the menu bar.
    - Right-click a menu entry and click Remove entry to delete the entry.
5. Click Apply.

Note: Do not assign menus to workspaces that are designed to work with ribbons.

6.5. To Assign Toolbars to Display to a Workspace

1. In the **Customize** dialog box, on the **UI Profiles** section, expand **UI Profiles > Toolbars**.
2. Click **Show toolbar explorer** [icon] to expand the **Toolbar Explorer**.
3. In **Toolbar Explorer**, select a toolbar name and drag it to the **Toolbars Displayed** cell of a workspace. The order of the toolbar entries does not matter.
4. To delete an entry from the list of toolbars, right-click the entry and click **Remove entry**.
5. Click **Apply**.

Note: For workspaces that are designed to work with ribbons, the list of toolbars to display typically remains empty.

6.6. To Set the UI Elements to Display When the Workspace Changes

1. In the **Customize** dialog box, under **UI Profiles**, expand **UI Profiles > Elements**.
2. Double-click cells in the table to select or clear the UI elements to display when the workspace changes:
    - status bar
    - command prompt
    - tool matrix
    - **Options** toolbar
    - **Properties** palette
    - **References** palette
    - **Lighting** palette
3. Click **Apply**.

6.7. Displaying and Hiding Toolbars

You can display and hide toolbars. You can drag and drop toolbars to convenient locations in the application window. You can also dock them below the menu bar or at the left and right margins of the application window.

6.7.1. To Display or Hide Toolbars

1. Type **Toolbars** at the command prompt.
2. In the **Specify Toolbars** dialog box, select or clear the toolbars to display or hide.
3. For **Name**, type text to search for toolbars.
4. Click **Customize** to open the Customize dialog box which lets you add or modify toolbars.
5. Click **Delete** to permanently delete the selected toolbar.

7. Setting User Preferences and System Options

The **Options** command lets you configure program operating parameters, customize settings and shortcuts for commands, and set other preferences.

The following sections are available in the Options dialog box:

- ▶ File Locations
- ▶ System Options
- ▶ User Preferences
- ▶ Drawing Settings
- ▶ Drafting Styles
- ▶ Profiles

To search for specific options in the Options dialog box:

1. In **Find**, type a term or command variable to search for related options.
2. In the drop-down list, select an option.
   In the **Options** dialog box, the option displays.

7.1. Setting File Location Options

The File Locations page of the Options dialog box lets you view, set, and edit default paths and/or file names.

The system uses these locations to search for files or write files, such as drawing or temporary file locations, font files and folder(s), and customization file(s) and folder(s).

▶ To view, add, or modify file locations:
1. Click **Tools > Options** (or type **Options**).

   In the Options dialog box, click **File Locations** .
   - Or-
   Type **FileLocations.**
2. Expand a node to view or set a specification.
3. Select a path or file and click Browse (or double-click a folder or file location) to navigate to a new item.
4. Click **OK**

7.1.1. Drawing Support

▶ **Drawing Support:**
- **Alternate Font File:** Sets the font to use when the current font is not available. The standard and user-defined TextStyles in drawings are based on font files.
- **Drawing Files Location:** Specifies the search location for drawings. The location is used when you use **Open, Save, SaveAs,** or other file commands.
- **Drawing Template File Location:** Specifies the drawing template file location.
- **External References Files Location:** Specifies the search location for external References. The location is used when you use the **AttachDrawing** command.
- **Font Mapping File:** Sets the file that defines font file mappings to use when a font file referenced in a TextStyle is not available.

- **Library Files Location:** Specifies the search location for Blocks for the **InsertBlock** command.
- **LineStyle File:** Specifies the search location for LineStyle files.
- **Print Settings Location:** Specifies the default location for Print Configuration files.
- **RichLine Style File:** Specifies the search location for RichLineStyle files.

7.1.2. Interface

▶ **Interface**
- **Alias File Location:** Specifies the search location for the Alias Commands file.
- **Custom Icon Location:** Specifies the search location for custom icon files for use with the **Customize** command to add icons to toolbars and menus.
- **Customization File:** Specifies the search location for the main customization file supplied as base for the **Customize** command.
- **Menu Files:** Specifies the search location for Menu customization files.

7.1.3. System

- ▶ **System**
  - • **Dictionary Files:**
    Custom Dictionary File: Specifies the location for the custom spelling dictionary for use with the **SpellCheck** command.
    Main Dictionary Files: Specifies the dictionaries to use with the SpellCheck command. Select a language and click **Activate** to set the active language dictionary.
  - • **Font File Search Path:** Specifies the search location for font files. The standard and user-defined TextStyles in drawings are based on font files.
  - • **Help File:** Specifies the folder and name of the help file used by the **Help** command.
  - • **Log File Location:** Specifies the location where the log file of document history is saved.
  - • **Support Files Search Path:** Specifies the search location for add-in applications, area Hatch patterns, customization files, drawing files, fonts, and LineStyle files.
  - • **Temporary File Location:** Specifies the location for temporary drawing files that have not been saved.

7.2.   System Options

The System Options page of the Options is where you can define general operating options.

▶ To Set general options:

1. Click **Tools > Options** (or type **Options**).

In the Options dialog box, click **System Options** .

- Or -

Type **SystemOptions**.

7.2.1. General

▶ Expand **General** to set:

- **Merge Zoom and Pan for Undo:** Groups consecutive Zoom and Pan commands as a single action for **Undo** and **Redo** commands.
- **Show Print Configuration Manager on creation of new Sheets:** Lets you set up a **Print Configuration** when you activate a new Sheet.
- **Maximum command history output lines:** Specifies the maximum number of lines displayed on the Command History Window before you are prompted to press **Enter** to continue. Applies to commands that display long lists.
- **Show notification for missing external references:** Displays a pop-up alert when you open a drawing and one or more externally referenced files are missing or cannot be loaded because they are corrupted.
- **Single document interface mode:** Specifies that one instance of the application can open only one drawing at a time.
- **File thumbnail size:** Specifies the size of file thumbnail preview images which display when you select a drawing in the operating system's file manager or in the **Open** dialog box. The setting applies to drawing files when you save them. The thumbnail size influences the drawing file size. You can set a value from 0 (very small thumbnails) to 8 (very large thumbnails).
- **Help make DraftSight product better by automatically sending your log files to DS SolidWorks Corporation.** When checked, if the application fails unexpecteddly and generates a performance Log (Crash Report), it automatically sends the Log to our Development Team for further analysis.

▶ Expand **License** to set Timeout setting (DraftSight Enterprise Only):

- Use **Return license if idle for more than « X « minutes** in order to set the idle time until the application returns the License to the License Manager application, so that it can be available to other users (Timeout Setting).

▶ Expand **Coordinate input override** to set:

- **Use ESnaps:** EntitySnaps input overrides coordinate input.
- **Coordinate input overrides ESnaps:** Keyboard input overrides EntitySnaps coordinate input.
- **Coordinate input when running scripts (keyboard):** Keyboard input overrides EntitySnaps coordinate input except in scripts.

> ▶ Expand **Proxy server settings** to set specifications if your system is part of a network using a proxy server:
> - **Type:** Sets the type of the proxy server (Socks5, HTTP, HTTP Caching, or FTP Caching).
> - **Host:** Sets the IP address of the host to which you are connected.
> - **Port:** Sets the port for the proxy server.
> - **User:** Sets the user name to identify you in the network environment.
> - **Password:** Sets your login password.

Note: Changes to the Proxy Login credentials will not be reflected automatically to DraftSight : If changes are made, you will need to manually update the information here.

> ▶ Expand **Application language** to set the Language used by the application in the User Interface, Command entry, and Help files. The language can also be set by using the command _LANGUAGE.

7.2.2. Display Options

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▶ Expand **Display**.

▶ Expand **Screen options** to set:
- **Show scroll bars**: Turns on and off the display of scroll bars in the drawing window.
- **Use large icons:** Uses large buttons for toolbars.

▶ Expand **Command window text** to set:
- **Font:** Sets the font for the command window prompt and messages.
- **Size:** Sets the text size for the command window.
- **Command line text :** Sets the text to display as the prompt in the command line.

▶ Expand **AutoCompletion** to set options for auto-completion of command entries (Professional & Enterprise versions only). You can use the following options:

- **Auto selection of closest suggestion:** Automatically selects the command or variable name that is closest to what you entered when you press Enter. Otherwise you need to enter the complete name or select an entry from the suggestion list.
- **Display suggestion list :** Specifies whether a suggestion list displays as you type a command name. If you display the suggestion list, you can set:
  - **Suggestion list delay time.** Sets a delay time (in milliseconds) before the command names suggestion list displays.
  - **Include aliases in list.** Includes alias command names in the suggestion list.
  - **Display commands with aliases.** Displays the command name in brackets after the alias name in the suggestion list.
  - **Include command variables.** Includes command variable names in the suggestion list.
  - **Include mid-string search.** Browses command names for occurences of the string you type not only for initial characters, but also among whole command names.

Note : When you enter a command and the suggestion list displays, right-click the list to set options described above.

▶ Expand **Element Colors** to set display colors of user interface elements such as the Model and Sheet background, cursors, and crosshairs. You can use the following options:
- **Color:** Applies the selected color to the selected display element.

- **Reset All:** Sets all user interface elements to the default colors.
- **Reset Selected Item:** Sets the selected display element to its default color.

▶ Expand **Drawing tabs to** set the following:
  - **Show drawing tabs :** Controls drawing tab display at the top of the drawing windows area.

  - **Display settings.** Select one of the following:

    o **List View :** Displays non-graphical lists of workspaces.

    o **Panel preview.** Displays thumbnails for each drawing workspace (model and layout sheets) below tabs (default).

7.2.3. Graphics Area Options

▶ Expand **Graphics Area** to set:
  - **Display cursor as crosshair:** Displays the pointer in form of crosshairs, even if no command is active.
  - **Display ESnap tooltips**: Determines whether tooltips are displayed whe the pointer passes over a point where an entity snap mode can be applied.
  - **Show background:** Determines whether to display colors in the background of user-defined Views.
  - **Show hyperlink pointers, tooltips, and shortcut menus**: Determines whether to show hyperlinks, tooltips, and shortcut menus whenever the pointer passes over an entity.
  - **Pointer size**: Specifies the size of the crosshairs that act as the pointer. Set a value between 1 and 100. If you type 100, the crosshairs pass over the full screen.
  - **Display entity transparency:** Determines whether to display the transparency of entities. The option does not affect print output transparency.
  - **Locked layer fading:** Determines whether to fade entities on locked layers to contrast them with entities on unlocked layers and reduce the display complexity of the drawing. Set a value between 0 and 90% where 0% means no fading.

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7.2.4. Open and Save As Options

▸ Expand **Open / Save As** to set :
- **Open documents of type**: Sets the default file type (.dwg, .dxf, .dwt) used when you open or insert drawings, or attach Referenced drawings.
- **Save documents as type:** Sets the default file type (.dwg or .dxf) and version when you save drawings.
- **Preserve original file format :** Saves the file in the .dwg or .dxf version used on the last save operation/file creation.

▸ Expand **Template file name for SmartNew** to set the path and name of a drawing template file (.dwt). Click Browse to browse for the template file.

▸ Expand **Open with encoding** to specify how to open drawings if the drawing's codepage differs from the computer's operating system codepage. Codepages determine character encoding. Select an option:
- **Open file as usual**: Maintains the drawing's codepage.
- **Open file with system codepage**: Switches to the computer's operating system codepage.
- **Check file codepage and prompt**: Lets you specify the codepage to use when you open a drawing with a codepage that differs from the OS codepage.

7.2.5. Printing Options

▸ Expand **Printing** to set :
- **Print log files**:
  - **Location** : Sets the path for the print and publish log files. Click Browse to browse/set the log file folder.
  - **Save Print logs** : Creates print job log files which are saved in the comma separated value format (.csv).
  - **Log style** : (available if you selected Save print logs): One log per print stores information about all print jobs in a single log file. When cleared, information is stored about each print job in separate log files

▸ Expand **Print style file location** to set :
- **Print style file location:** Sets the path for PrintStyle definition files. Click Browse to browse for the PrintStyle file folder.

▸ Expand **Default settings** to set :
- **Default type :** (determines the behavior for new drawings, not for the current drawing):

- o **Use named print styles :** Uses user-defined PrintStyles.
  - o **Use color-dependent print styles:** Uses color-dependent PrintStyles.
- **Default PrintStyle:** Sets the default PrintStyle file.
  - o **Override print style for entities** (available if you selected **Use named print styles**): Overrides the **Default PrintStyle** table for entities. The settings available depend on the **Default PrintStyle** setting.
- **Override print style for layer 0** (available if you selected **Use named print styles**): Overrides the **Default PrintStyle** table for entities or Layer 0. The settings available depend on the **Default PrintStyle** setting.

▶ Expand **General Options** to set :
- **Keep paper size when changing printer:** When you change the printer in the Print dialog box, the paper size is maintained if it is supported by the specified printer. When cleared, the default format displays for paper size.
- **Display paper background :** On Sheet tabs, the Sheet extends are visualized by a gray background.
- **Display printable area :** On Sheets tabs, a dashed rectangle visualizes the printable area and the non-printable margins of the selected printer associated with the Sheet..

7.2.6. Auto-save & Backup Options

▶ Expand **Auto-save & Backup** to set :

- **Automatic save file location**: Sets the folder for automatically generated saved files. Click Browse to browse for the folder.
- **Auto-save/backups:**
  - o **Enable auto-save:** Automatically saves the drawing. You can specify the interval for auto-save in minutes.
  - o **Save backup at each save:** Sets whether you want to create a backup copy each time the document is saved.
  - o **Use original format:** Specifies whether the backup file is saved in its original drawing file version or in the current file version.

7.2.7. Drawing File Defaults

► Expand **Drawing File Defaults** to set :

- **Block insertion units** sets preferences to determine the default scale when you insert Blocks or drawings into a drawing:

  o **Units for inserting entities:** Sets the source contents units. If you select Unitless, the entity is not scaled when inserted.

  o **Active drawing units:** Sets the target drawing units.

7.2.8. Customizing the Default Scale List

Lists of scales are available when you print, manage Print Configurations, or scale Viewports on layout Sheets.

The Default Scale List determines the Drawing Scale List for new drawings, which are created without template drawings.

To change the scale list in an existing drawing template file, open the drawing template file (*.dwt), and customize the Drawing Scale List of the template file.

► To Customize the Default Scale List:

5. Do one of the following:
   - Click Tools > Options (or type Options).

     In the Options dialog box, click **System Options**
   - Type **SystemOptions.**
6. Expand **Default Scale List.**
7. In File, the path and name of the scale list file, an .xml file, is displayed. If necessary, change the file setting. Click Browse to navigate to the scale list file.
8. Click **Metric** or **Imperial** to display to the corresponding scale list.
9. Click **Add** to add a new scale to the list:
   - In the Scale Name column of the new list item, type a name for the new scale.
   - In Paper Units, type a number. The ratio between between paper units and drawing units determines the scale applied when selecting the scale name in a scale list.

▷ Click **Move up** to move the selected item up in the list.
▷ Click **Move down** to move the selected item down in the list.
▷ Click **Delete** to remove the selected item from the list.
▷ Click **Reset** to replace the settings of the custom Default Scale List with the default software settings.
▷ Click **Export** to save the scale list file with a different name.
▷ Click **Apply** to save the scale list customization.

Note: You can redefine existing scale specifications in the **Default Scale List**. You can also reset the custom Drawing Scale List to the Default Scale List settings.

7.2.9. Macro Recording

You can record a series of commands in a script (also known as a macro) for automated execution. The parameters for macro recording are

- ▶ Expand **Location,** in order to set the destination folder/locatino of the files generated by the recording.
- ▶ Expand **Level of Detail** to set level of detail of the Macro (Low/High).
- ▶ Expand **Language** to set the language on which the recording will be made (C#, Native C++, JavaScript, VB.Net, C++ COM, VBA).

7.3.   User Preferences

The User Preferences page of the Options dialog box lets you define:

- ▶ Drafting Options
- ▶ Mouse Options
- ▶ Alias Commands

7.3.1. Drafting Options

You can use the **DraftingOptions** command to configure the drawing environment including EntitySnaps, snaps, grid display, EntityGrips, and entity selection.

► To set up drafting tools and preferences:

1. Type **DraftingOptions** at the command prompt.

In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **Pointer Control**, **Display**, **Entity Selection**, **Dimension Palette**, **Heads-up Display**, or other tree view items to set up drafting tools and preferences.

7.3.2. Pointer Control

► To set up EntitySnaps:

1. Type **DraftingOptions** at the command prompt.

In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **Pointer Control > EntitySnaps**.
3. Select **Enable EntitySnaps (ESnaps)** to enable or disable the use of entity snaps.
4. Select **Geometry ESnaps** and **Reference ESnaps** so you do not need to invoke them as you draw. (Should you need more information about ESnaps, see the topic «Understanding EntitySnap Modes» in the DraftSight Help files).

► To set up snap options :

1. Type **DraftingOptions** at the command prompt.

In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **Pointer Control > Snap Settings**.
3. Select **Enable Snap** to enable or disable snaps.
4. Under **Type**, set:
   - **Standard (snaps to grid):** Causes the pointer to snap to points at specified horizontal and vertical spacings.
   - **Radial (RSnap):** Causes the pointer to snap to points along a radial vector. Polar guides must be on for this functionality to work.
5. Under **Spacing**, set:
   - **Match Grid spacing:** Forces the pointer to snap along vertical or horizontal grid points when specifying points.
   - **Horizontal Snap spacing:** Sets the horizontal spacing of the snap grid.
   - **Vertical Snap spacing:** Sets the vertical spacing of the snap grid.
   - **Match horizontal spacing:** Transfers the value for horizontal spacing to the value for vertical spacing, so that grid display is evenly spaced in the X and Y directions.
   - **RSnap spacing:** Specifies the spacing when using the RadialSnap type.

Note: You can customize snap and grid settings for each ViewTile.

7.3.3. Display

▶ To set up EntityTrack guides :

1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Display > ETrack** and set :
   - **Enable EntityTracking (ETrack)**: Displays orthogonal (horizontal and vertical) tracking guides when the pointer moves over EntitySnap points. (EntitySnap guides must be enabled).
   - **Display ETrack guides across screen:** Displays tracking guides. (EntitySnap guides must be enabled). When cleared, tracking paths display between the EntitySnap location and the pointer position.
   - **Enable Shift to acquire reference points**: Displays tracking guides when you hold down **Shift** and move the pointer over an EntitySnap point

▶ To set up polar guides:

1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Display > Polar guides**.
3. To enable polar guides, select **Enable Polar guides (Polar)**. This option applies polar guide settings to EntitySnap pointers. The guides display along polar alignment angles from EntitySnap points (if **ETrack** is on).
4. To display polar guides, select **Display Polar guides**. This option displays alignment paths.
5. In **Incremental angles for Polar guide display**, select the angle increment to display and apply polar guides.
6. Optionally, select or clear **Display Polar guides at specific angle(s)**, and click:
   - **Add** to specify individual values of angle increments for the use of polar guides.
   - **Delete** to remove specified individual values from the list.

Note: (Should you need more information about the concept, see the topic «Using Polar Guides» in the DraftSight Help files).

▶ To set up grid settings

1. Type **DraftingOptions** at the command prompt.
   In the Options dialog box, the User Preferences page opens and Drafting Options expands.
2. Expand **Display > Grid Settings**:
3. Select **Enable Grid** to enable or disable the display of a pattern of evenly spaced dots that serve as a visual distance reference.
4. Under **Orientation**, set:
   - **Rectangular**: Orients the snap grid and grid display rectangularly.
   - **Isometric:** Orients the snap grid and grid display at a 60° angle.
5. Under **Spacing**, set:
   - **Match Snap spacing**: Sets the grid spacing so that it matches the Snap settings .
   - **Horizontal display spacing**: Sets the horizontal spacing of the grid.
   - **Vertical display spacing:** Sets the vertical spacing of the grid.

- **Match horizontal spacing:** Transfers the value for horizontal spacing to the value for vertical spacing, so that grid display is evenly spaced in the X and Y directions.

▶ To set up Pointer Cues

1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Display > Pointer Cues** and set:
   - **Display ESnap cues:** Displays ESnap markers when the pointer encounters ESnap points. The highlighting shows the **ESnap** mode you can apply. You can also set the cue color.
   - **ESnap cue size:** Sets the display size of ESnap markers.

▶ To set up Gravity Box

1. Type **DraftingOptions** at the command prompt.
2. In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
3. Expand **Display > Gravity Box** and set:
   - **Enable ESnap gravity:** Pulls the pointer to an EntitySnap point when the pointer moves near the point.
   - **Display GravityBox:** Displays a box inside the crosshairs when you snap to

     an entity. When snap points come within this box, they become candidates for ESnaps. Adjust the **GravityBox size**.

7.3.4. Entity Selection
▶ To set entity selection methods:

1. Type **DraftingOptions** at the command prompt.
   In the Options dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Entity Selection > Selection Settings** and set:
   - **Automatic window/cross selection.** Creates a selection window when you specify a point outside an entity.
   - **Enable entity selection before commands.** Lets you select entities first, then issue modifying commands on the selection set. If entities are not yet selected, you are prompted for entities. To clear the current selection set, press Esc. Pre-selection has no effect on **Split, Trim, Extend, Chamfer**, and **Fillet** commands.
   - **Enable hatch/boundary relations.** Selects Hatch entities and boundary entities when you select a related Hatch.
   - **Enable EntityGroup selection sets.** Selects all entities in an EntityGroup when you select one entity in that EntityGroup.
   - **EntityGroup display mode.** Controls which EntityGrips are displayed for an EntityGroup selection.

- o **All entities.** Displays all EntityGrips on all entities of the specified EntityGroup. You can modify each entity using its EntityGrips.
- o **Bounding box.** Displays only one central EntityGrip for the entire EntityGroup, and a bounding box.
- o **Egroup.** Displays only one central EntityGrip for the entire EntityGroup.

o **SelectionBox size.** Defines the display size of the SelectionBox (the pointer used to select entities).

► To set entity selection highlighting
1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Entity Selection > Pre-selected highlighting** and set:
   - **When prompted to specify entities or points.** Previews selections when a command is active and prompts you to specify entities.
   - **Between commands.** Previews selections when no commands are active.

► To set preview filter
1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Entity Selection > Pre-selected highlighting** and set:
   - **When prompted to specify entities or points**. Previews selections when a command is active and prompts you to specify entities.
   - **Between commands**. Previews selections when no commands are active.
► To set preview filter
1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Entity Selection > Preview filter**.
3. In **Exclude**, select the entity type to exclude from selection previews:
   - **Entities on locked layers**. Excludes entities on locked layers.
   - **Notes**. Excludes Notes.
   - **References**. Excludes entities in externally referenced drawings (References).
   - **Hatches**. Excludes Hatches and Gradients.
   - **Tables**. Excludes Tables.
   - **Groups**. Excludes entities in EntityGroups.

▶ To set EntityGrips (EGrips) Options
1. Type DraftingOptions at the command prompt.
   In the **Options** dialog box, the User Preferences page opens and **Drafting Options** expands.
2. Expand **Entity Selection > EGrips Options**.
3. In **EGrips Options**, set
   - **Enable EntityGrips (EGrips).** Displays EGrips for entities in the graphics area.
   - **Enable EGrips in Blocks**. Displays EGrips for each entity in a Block.
   - **Enable EGrip tips**. Displays tooltips at EGrips.
   - Set the **EGrip display limit**. Specifies a maximum number of entities displayed with EGrips at one time. If the number of specified entities exceeds the maximum (32,767), EntityGrips are disabled.

▶ To set EntityGrips (EGrips) Colors
1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **Entity Selection > EGrips Colors**.

3. In **EGrips Colors**, set

   - **Active EGrips**: Sets the color of EGrips when you click on an EGrip.
   - **Inactive EGrips**: Sets the color of EGrips when you add an entity to a selection set with EGrips enabled.
   - **Mouseover EGrips**: Sets the color of EGrips when the pointer moves over an EGrip.

▶ To set EntityGrips (EGrips) Size
Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Entity Selection > EGrips Size**.

3. In **EGrips Size**, set the display size of EntityGrips.

7.3.5. Dimension Palette (DraftSight Professional & Enterprise versions only)
To set Dimension palette preferences:

1. Type **DraftingOptions** at the command prompt.
   In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.
2. Expand **Dimension Palette**.
3. Click **Enable Dimension palette** to turn on or off the **Dimension** palette.
4. In **Favorites library path**, set the path for Dimension text favorites files (*.dimfvt files). Click **Browse** to browse for the Dimension text favorites file folder.

7.3.6. Heads-Up Display (DraftSight Professional & Enterprise versions only)

▶ To show or hide the Heads-up Display toolbar:

1. Type **DraftingOptions** at the command prompt.

In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **Heads-Up Display**.

3. Select or clear **Enable Heads-up toolbar**. When selected, the toolbar displays when you select entities.

7.3.7. OLE Editor

▶ To set OLE Editor options:

1. Type **DraftingOptions** at the command prompt.

In the **Options** dialog box, the **User Preferences** page opens and **Drafting Options** expands.

2. Expand **OLE Editor**.

3. Select or clear **Use in-place editor** to specify whether to edit Object Linking and Embedding (OLE) objects inside or outside the drawing.

7.3.8. Mouse Options

▶ To set Mouse Options:

1. Do one of the following :
   - Click **Tools > Options** (or type **Options**).

     In the **Options** dialog box, click **User Preferences** .

   - Type **UserPreferences**.
2. Expand **Mouse Options**.
3. Expand **Options** to set:
   - **Reverse the zoom wheel direction**. Changes the zoom direction of the mouse wheel.
   - **Enable Click and drag**. Lets you draw selection windows or use the Crossing method by clicking a point (and holding down the mouse button) and dragging the pointer to a second point. When cleared, you can draw selection windows or use the **Crossing** method by clicking two separate points.
   - **Edit by double-clicking**. Enables double-click editing behavior in the graphics area.
   - **Display shortcut menus by right-clicking**. Displays the context-sensitive shortcut menu when you right-click in the graphics area.

7.3.9. Fast Enter Behavior

Expand **Fast Enter behavior** to set **Enable Enter on fast right-click**. This executes Enter when you click in the time set for **Fast click time**. Click longer to display a context-sensitive shortcut menu.

7.3.10. Currently processing other command

Expand **Currently processing other command** to set right-click behavior when running commands:

- **Displays the shortcut menu**
- **Displays the shortcut menu only if command options are available**
- **Is the same as pressing Enter** (for example, to accept a command's option or to terminate a command)

7.3.11. Selected entities

Expand **Selected Entities** to set right-click behavior when entities are selected and no command is active:

- Displays the shortcut menu
- Repeats the last command

7.3.12. Unselected entities

Expand **Unselected Entities** to set right-click behavior when no entities are selected and no command is active:

- **Displays the shortcut menu**
- **Repeats the last command**

7.3.13. Aliases

▶ To create and manage Aliases

1. Do one of the following :
   - Click **Tools > Options** (or type **Options**).
     In the **Options** dialog box, click **User Preferences.**
   - Type **UserPreferences**.
2. Expand Aliases to manage keyboard shortcuts.
   Examples for alias commands include L for Line, C for Circle, or A for Arc.
3. Use the following options:
   - **New**. Creates a new keyboard shortcut in the alias list. An entry is added to the list where you can type the command representing the keyboard shortcut and the alias name.
   - **Delete**. Removes the selected keyboard shortcut from the alias list.
   - **Import**. Imports an alias file (.xml, .ica, or .pgp files).
   - **Export**. Writes an .xml file to save the alias settings.

7.4. Drawing Settings

The **Drawing Settings** page of the **Options** dialog box lets you set the behavior of certain drawing commands, the appearance of certain drawing entities, the unit system of the current drawing, manage Custom Coordinate Systems (CCSs), customize the Drawing Scale List, and set up drawing standards verification.

▶ To set the behavior of certain drawing commands and set line scale options:

1. Do one of the following :
   - Click **Tools > Options** (or type **Options**).
     In the Options dialog box, click **Drawing Settings**
   - Type **DrawingSettings.**

7.4.1. Behavior

Expand **Behavior** and select or clear **Enable relative dimensions**. This specifies that dimensions you create are associated to the measured entities.

7.4.2. LineStyle Parameters

Expand **LineStyle Parameters** and set:

- **Global line scale.** Sets a scale factor for displaying LineStyles. (This is helpful when zooming in and out).
- **Line scale for new entities**. Sets the entity line scale for new entities. All entity line scales are displayed based on multiplying the **Global line scale** by the entity line scale.
- **Scale based on sheet's units**. Multiplies the Viewport's custom scale by the evaluated value for Line scale for new entities.

7.4.3. Drawing Boundary

Expand Drawing Boundary and set:

- **Enable drawing boundary**. Restricts you to drawing entities within the boundary set in Position.
- **Position.** Sets the drawing boundary borders. Specify the coordinates or click **Select in graphics area** to set the boundaries in the graphics area.

7.4.4. Entity frame control

Expand **Entity Frame Control**. This allows you to set the frame visibility for Images, OLE objects, PDF and DGN Underlay.

- **Do not display and print frame**. Hides the frame at the borders of entity in the graphics area and on printouts.
- **Display but do not print frame.** Shows the frame at the borders of entity in the graphics area, but hides it on printouts.
- **Display and print frame.** Shows the frame at the borders of entity in the graphics area and on printouts.

7.4.5. Display options

▶ To set Display Options
   1. Do one of the following :
      - Click **Tools > Options** (or type **Options**).
        In the **Options** dialog box, click **Drawing Settings**
      - Type **DrawingSettings.**
   2. Expand **Display** and set:
      - **Show Model and Sheet tabs**: Turns on and off the display of the **Model** and **Sheet** tabs.
      - **Show block attributes**:
        - o **Normal**. Uses the setting defined in the BlockAttribute.
        - o **On**. Shows BlockAttributes regardless of the setting defined in the BlockAttribute and regardless if they are hidden.
        - o **Off**. Hides BlockAttributes.

7.4.6. Coordinate System Icon
► Expand **Coordinate System Icon** and set:
- **Display icons**. Displays coordinate system icons in the **Model** and **Sheet** tabs.
- **Display icons at origin**. Always displays coordinate system icons at the origin location in the graphics area.
- **Apply changes to all actively displayed views**. Applies the settings for **Display icons** and **Display icons at origin** to all views.

7.4.7. Thumbnail
► Expand **Thumbnail** and specify when thumbnail previews are updated:
- **Model space views.** Updates thumbnail previews for Model views.
- **Sheet views.** Updates thumbnail previews for layout Sheet views.
- **Sheets**. Updates thumbnail previews for layout Sheets.
- **Sheets or views created, modified or restored.** Updates thumbnail previews when layout Sheets or views are created, modified, or restored.
- **When drawing is saved.** Updates thumbnail previews when the drawing is saved.

If you clear all options, thumbnail previews are not updated.

7.4.8. Points – Point format
You can set the display format and size of points. Although mathematically points have no size, you can specify the display size.

When you use the Point command the appearance of the points depends on the settings for the point format.

► To set the point format:
1. Click **Format > Point Style** (or type **PointFormat**).
   In the **Options** dialog box, the **Drawings Settings** page opens and **Points** expands.
2. In **Type**, select the display format.
3. For **Size**, type a value.
4. Select a size option :
   - **Absolute units**. Point size is set in a value of drawing units.
   - **% Relative to display**. Point size is a percentage of the visible drawing plane.

7.4.9. Unit System

The UnitSystem command lets you set:

- Formats for linear and angular units
- Accuracy levels by specifying the number of decimal places
- The reference unit of measurement for Blocks and drawings in the drawing

You can set the linear and angular unit formats and precision independently.

The unit settings are saved with each drawing, and so they can be different for each drawing.

▶ To specify units and precision :

1. Click **Format > Unit System** (or type **UnitSystem**).
   In the **Options** dialog box, the **Drawing Settings** page opens and **Unit System** expands.
2. Under **Base angle** :
   - Set the base angle that specifies a direction for 0°. For example, surveyors normally set 0° as "up" on the page. This setting ensures the correct display of angle and distance for drawing lines; the display on the status bar updates according to the angle zero direction and the orientation.
   - Select **Clockwise** to increase angles in a clockwise direction.
   - Set the rotation angle, or click **Select in graphics area** to set the rotation angle and second point in the graphics area.

3. Under **Length**, set the:
   - **Type** of linear units.
   - **Precision** from 0 to 8 decimal places.

The selected units are displayed in the Preview area.

Examples of linear units:

Unit Type	Example 1	Example 2
Architectural (Feet and Inches)	0'-1 1/2"	125'-0"
Decimal	1.5000	1500.0000
Engineering (Feet and Inches)	0'-1.5000"	125'-0.0000"
Fractional	1 1/2	1500
Scientific (Scientific exponential notation)	1.5000E+00	1.5000E+03

4. Under **Angle**, set the:
   - **Type** of angular units.
   - **Precision** from 0 to 8 decimal places.

   The selected units are displayed in the **Preview** area.

   Examples of angular units:

Unit Type	Example 1	Example 2
Decimal Degrees (Metric Units)	12.500	180
Degrees / Minutes / Seconds	12d30'0"	180d0'0"
Grads (400 grads equal to 360°)	13.889g	200.000g
Radians (2 pi radians equal to 360°)	0.218r	3.142r
Surveyor's Unit System (Compass bearings; N,S,E,W with deflection from North and South)	N 77d30'0" E	W

5. Under **Units scale**, in **Block units format**, select the reference unit of measurement for Blocks and drawings in the drawing. Select **Unitless** to prevent scaling of entities. If the units of a Block (or drawing) to be inserted differ from the units in **Block units format**, the Block is scaled. This insertion scale determines the ratio between the units in the source and the units in the target drawing.

7.4.10.   Coordinate System

Use the **CSStyle** command to manage coordinate systems. You can:

- Manage coordinate systems by viewing, activating, renaming, or deleting them
- Select an orthographic coordinate system
- Adjust coordinate system settings

To create a named Custom Coordinate Systems, use the **CCS** command.

▶ To view saved coordinate systems:

1. Click **Tools > CCS Manager** (or type **CSStyle**).
In the **Options** dialog box, the **Drawing Settings** page opens and **Coordinate System** expands.
2. Expand **Named**.
3. Hover the pointer over a coordinate system to view the origin and X, Y, and Z coordinates.

▶ To activate a coordinate system:

1. Click **Tools > CCS Manager** (or type **CSStyle**).
In the **Options** dialog box, the **Drawing Settings** page opens and **Coordinate System** expands.
2. Expand **Named**.
3. Select a coordinate system and click **Activate**.
A ➡ displays beside the active coordinate system.

▶ To delete or rename a coordinate system:

1. Click **Tools > CCS Manager** (or type **CSStyle**).
In the **Options** dialog box, the **Drawing Settings** page opens and **Coordinate System** expands.
2. Expand **Named**.
3. Select a coordinate system and click **Delete** or **Rename**.
You can use **Rename** to name an unnamed coordinate system. You cannot delete or rename the World Coordinate System (WCS).

▶ To set a temporary orthographic coordinate system on a face of a cube:

1. Click **Tools > CCS Manager** (or type **CSStyle**).
In the **Options** dialog box, the **Drawing Settings** page opens and **Coordinate System** expands.
2. Expand **Defaults**.
3. Select a face (**Top, Bottom, Front, Back, Left,** or **Right**) and click **Activate**.
4. In **Relative to**, select the coordinate system to which the temporary coordinate system should be relative.

▶ To set up coordinate systems:

1. Click **Tools > CCS Manager** (or type **CSStyle**).
In the **Options** dialog box, the **Drawing Settings** page opens and **Coordinate System** expands.
2. Expand **Options**.
3. Set options:
   - **Update view when coordinate system changes**: Automatically displays the plan view to the coordinate system in the active ViewTile when the coordinate system changes.
   - **Save coordinate system with view configurations:** Forces all ViewTiles to reflect its active coordinate system. Otherwise, the coordinate systems of other ViewTiles remain unchanged.

▶ To set up the coordinate system icon:
1. Click **Tools > Options** (or type **Options**).

2. In the **Options** dialog box, click **Drawing Settings** .
3. Expand **Display > Coordinate System Icon**.
4. Set options:
   - **Display icons**: Displays the coordinate system icon.
   - **Display icons at origin**: Displays the coordinate system icon at the origin (0,0,0) of the active coordinate system. If the origin is off the display, the coordinate system icon displays in the lower left of the view.
   - **Apply changes to all actively displayed views**: Determines whether the coordinate system icon settings apply to all active views or only the active one.

7.4.11. Drawing Scale List:

Use the EditScaleList command to customize the list of scales for printing, managing Print Configurations, scaling Viewports on layout Sheets, and assigning scales to annotative entities.

This scale list is stored and valid for the current drawing. It is named Drawing Scale List.

You can also customize the Default Scale List, which determines the Drawing Scale List for new drawings, which are created without template drawings.

▶ To Customize the Drawing Scale List:
1. Click **Tools > Options** (or type **Options**).
   In the **Options** dialog box, click **Drawing Settings** .
   or
   Type **EditScaleList** at the command prompt.
2. Expand **Drawing Scale List**.
3. Click **Add** to add a new scale to the list:
   a. In the **Scale Name** column of the new list item, type a descriptive name for the new scale, typically the ratio from paper units to drawing units.
   b. In **Paper Units**, type a number.
   c. In **Drawing Units**, type a number.
      The ratio between between paper units and drawing units determines the scale applied when selecting the scale name in the scale list.
3. Click **Move up** to move the selected item up in the list.
4. Click **Move down** to move the selected item down in the list.
5. Click Delete to remove the selected item from the list. You cannot delete named scales that are used in the drawing.
6. Click **Reset** to replace the settings of the custom Drawing Scale List with the settings of the **Default Scale List.**
7. Click **Apply** to save the scale list customization.

Note : You can also redefine existing scale specifications in the Drawing Scale List. You cannot delete or modify scales that are referenced by entities in the drawing or that are referenced by References.

7.4.12.   Standards configuration

Use the DrawingStandards command to:

- Associate drawing standards to the current drawing
- Determine the drawing categories to check
- Set notification and audit options

▶ To associate drawing standards to the current drawing:

1. Click **Tools > Standards > Drawing Standards** (or type **DrawingStandards**).
2. In the dialog box, expand **Standards**.
3. Click **New**.
4. In the file dialog box, specify the name for the drawing standard file (*.dws) to associate to the current drawing.
5. Click **Open.**
6. Optionally, repeat steps 2 and 3 to add more standards files to the list.
   Click **Delete** to remove a standard from the list.
   Standards from multiple standards files are checked in the order specified in the list.
   To change the priority, select an item, then click **Move up** or **Move down**.
   Under **Settings**, read information about the selected standard including drawing file name, drawing format (release version), last modification date, and who did the last change.
7. Click **Verify Standards** to verify the associated standards immediately. This option runs the **VerifyStandards** command.
8. Click **Apply**.

▶ To determine the drawing categories to check:

1. Click **Tools > Standards > Drawing Standards** (or type **DrawingStandards**).
2. In the dialog box, expand **Drawing Categories**.
3. Activate the drawing categories to include for verification with the **VerifyStandards** command:
   - Layers
   - LineStyles
   - DimensionStyles
   - TextStyles
   Note : Check at least one category to enable drawing standards checks.
4. Click **Apply**.

▶ To set notification and audit options:

1. Click **Tools > Standards > Drawing Standards** (or type **DrawingStandards**).
2. In the dialog box, expand **Options**.
3. In **Notification**, select an option:
   - **Disable alert message:** Turns off standards violation notifications.
   - **Pop-up alert over standards violation**: Displays a pop-up alert when standards violations are detected in the current drawing (default).
4. In **Verify standards**, specify options:

IF WE ask the right questions we can change the world.

- **Automatically fix nonstandard properties**: Specifies whether to automatically fix nonstandard objects when you run the VerifyStandards command (cleared by default).
- **Show ignored standard violations:** Specifies whether to display standards violations that are flagged as ignored in the Verify Standards dialog box (selected by default).
- **Preferred standard file:** Sets a drawing standards file (*.dws) or None.

5. Click Apply.

Note : As many users are not familiar with the **VerifyStandards** command, below you'll find more information about the command/functionality available.

Verifying Drawing Standards

Use the **VerifyStandards** command to check that the current drawing conforms to industry, corporate, and custom standards.

The command checks whether names and properties of Layers, LineStyles, DimensionStyles, and TextStyles in the current drawing match those in associated standards files.

You can replace nonstandard items to be compliant, flag them to be ignored, or leave them as they are.

It is recommended to run the **Clean** command to purge unused objects before you run the **VerifyStandards** command.

▶ To verify drawing standards

1. Click **Tools > Standards > Verify Standards** (or type **VerifyStandards**).
   In the dialog box, the category and name of an item that violates drawing standards are shown (for example DimensionStyle as category and the name of a DimensionStyle).
2. In **Replace with**, select a drawing standard.
   The list may contain more than one standard because the drawing standards file may contain more than one object per category, or the list of drawing standards files defined for the current drawing contains more than one file.
   In **Preview of changes**, the differences between the current item verified for compliance and the standard selected in the replacement list are displayed. This list is empty if the item name differs, but not the properties.
3. Optionally, set **Ignore this standards violation** to flag the current item as not to be replaced. The **Ignored by** information shows the login name of the user who set the ignore option. This status is stored with the drawing.
4. Click **Fix** to accept the replacement of the current item by the specified drawing standard.
5. Click **Next** to proceed to the next item.
6. Repeat steps 2 through 5 for subsequent items to check for standards compliance.

7. Click **Close**.
8. At the end of the verification process, a summary screen reports the total number of standards violations, the number of automatically fixed items, the number of manually fixed items, and the number of items that have been marked as "ignored."

7.4.13. Dimension Snap Offset Distances (Professional & Enterprise versions only):

You can force dimension lines to be placed at specified distances from measured linear entities and between successive dimension lines or at specified angles for radius and diameter dimensions.

1. Do one of the following:
   - Click **Tools > Options** (or type **Options**).

   In the **Options** dialog box, click **Drawing Settings** .

   - Type **DrawingSettings**.
2. Expand **Dimension Snap Offset Distances**.
3. Specify whether to **Enable offset distances**.
4. Under **Offset Distances**, set the:
   - Offset of the first dimension line from a measured linear entity.
   - Offset distance between successive dimension lines.

   The default offset distances are 0.40 inches (or 10 mm) between the entity and first dimension line and 0.25 inches (or 6 mm) between dimensions.
5. In **Radial/diameter snap angle**, set the snap angle intervals to use when you drag radius and diameter dimensions along radial locations. The default snap angle is 15°.
6. Under **Bounding Box**, set
   - **Enable dimension bounding box**. Enables the use of tools for working with dimension bounding boxes. The corresponding options are available in the context menu.
   - **Show dimension bounding box**. Displays all bounding boxes in the drawing.

7.4.14. Centerlines Settings (Professional & Enterprise versions only)
▶ To set preferences for Centerlines
1. Do one of the following:
   - Click **Tools > Options** (or type **Options**).
     In the **Options** dialog box, click **Drawing Settings**.
   - Type **DrawingSettings**.
2. Expand **Centerlines**.
3. In **Extension**, specify the extension for Centerlines to exceed the entities which define the contour.

7.4.15. Arrow Key Movement (Professional & Enterprise versions only)

▶ To set preferences for Arrow Key Movement

1. Do one of the following:

   - Click **Tools > Options** (or type **Options**).

     In the **Options** dialog box, click **Drawing Settings**.

   - Type **DrawingSettings**.

2. Expand **Arrow Key Movement** and set

   - **Arrow Key Increment**. Specifies a positive value to move entities using the arrow keys. Specifies the distance that the selected entities move (**Shift + Arrow** key). For example, if you set **Arrow Key Increment** to 2.5, pressing **Shift + Arrow** once moves the selected entities 2.5 units orthogonally, in the arrow direction.

   - **Page up/down increment**. Specifies a multiplication factor for the Arrow Key Increment. For example, if you set **Arrow key increment** to 2.5 and **Page up/down increment** to 2, pressing **Shift + Arrow** key once moves the selected entities 5 units orthogonally, in the arrow direction.

7.5. Drafting Styles

The **Drafting Styles** page of the Options dialog box lets you manage TextStyles, DimensionStyles, RichLineStyles, and TableStyles. In addition you can set a style for use with subsequent commands.

▶ To access the Drafting Styles page of the Options dialog box:

Do one of the following:

- Click **Tools > Options** (or type **Options**).

In the **Options** dialog box, click **Drafting Styles** .
- Type **DraftingStyles**.

7.5.1. Setting Active Drafting Styles

Use the **Styles** command to activate a drafting style for use with subsequent commands.

Drafting styles include TextStyles, DimensionStyles, RichLineStyles, TableStyles, Layers, and line fonts (LineStyles, LineColors, and LineWeights).

▶ To set a drafting style as active :
1. Type **Styles** at the command prompt.
   In the **Options** dialog box, the **Drafting Styles** page opens and **Active Drafting Styles** expands.
2. Expand a style:
   - **Text.** Sets the active TextStyle for new text entities created with the Note or SimpleNote command.
   - **Dimension.** Sets the active DimensionStyle for new Dimensions created with the dimensioning commands.
   - **RichLine.** Sets the active RichLineStyle for new RichLine entities created with the RichLine command.
   - **Table.** Sets the active TableStyle for new Tables created with the Table command.
   - **Layer.** Sets the active Layer for new entities.
   - **Line Font.** Sets the active:
     - **LineStyle**
     - **LineColor**
     - **LineWeight**
3. Double-click an item to activate it.
   A appears before the item to indicate that it is activated.

   An in front of a TextStyle or DimensionStyle name indicates that you can apply this style for annotative scaling of Notes, SimpleNotes, and Dimensions.
4. Click **OK**.

7.5.2. To Manage TextStyles

Use the **TextStyle** command to create, edit, activate, or delete TextStyles in drawings.

When you add Notes or SimpleNotes to a drawing, it uses the active TextStyle. A TextStyle is defined by font, type face characteristics, size, and other properties.

You can use TrueType fonts or compiled shape fonts (of type .shx).

The **TextStyle** command loads fonts from files and customizes them to the drawing requirements.

You can define TextStyles to apply annotative scaling for Notes and SimpleNotes.

▶ To create TextStyles:
1. Click **Format > Text Style** (or type **TextStyle**).

In the **Options** dialog box, the **Drafting Styles** page opens and **Text** expands.

2. Click **New**.
3. In the **Create new TextStyle** dialog box, type a new name and click **OK**.

The new TextStyle appears in **Style**.

4. Under **Text**, set:
   - **Font**. Lists all installed TrueType fonts provided with your operating system by font family name. Fonts of type .shx are listed by the name of the file where they are stored.
   - **Format**. Lists formats you can apply to the font (**Normal, Italic, Bold, Bold Italic**, for example, for TrueType fonts). While creating a TextStyle, the command displays a default font style dependent on the selected font name. When you make changes to the default name in **Style**, a new default name is no longer suggested and your changes become the new default.
   - **Big font**. Lists all files that have big fonts which are stored in .shx files.
5. Under **Height**, set:
   - **Annotative Scaling**. Specifies whether annotative scaling is used for Notes and SimpleNotes which apply the TextStyle you define. In **Style**, annotative TextStyles are marked with an A .
   - **Match text orientation to Sheet**. Specifies whether the orientation of Notes and SimpleNotes in Viewports of layout Sheets follows the Sheet orientation. This option is available only if you selected annotative scaling.
   - **Height** or **Sheet text height**. Sets the TextStyle height in drawing units.
     - ○ **Height**. If the TextStyle is not defined for annotative scaling: A numeric value sets the font at a fixed height that you cannot change when inserting a Text entity that uses the selected Font. Set Height to 0.0 if you need to change the TextStyle height.
     - **Sheet text height**. If the TextStyle is defined for annotative scaling: A numeric value sets the font at a fixed height that you cannot change when inserting a Text entity that uses the selected Font. Set Height to 0.0 if you need to change the TextStyle height.
6. Under **Orientation**, set:
   - **Backwards**. Displays a mirror-image of the text. Applies to SimpleNotes, not Notes.
   - **Upside down**. Displays text upside down. Applies to SimpleNotes, not Notes.
   - **Vertical.** Aligns the text vertically. Applies to SimpleNotes, not Notes. This option is available only for *.shx font files that support dual orientation.

- **Angle**. Defines the inclination of the characters in relation to a horizontal (X-axis) line. Values between 0 and 84.90 result in an inclination to the right (forward), values between 0 and -84.9 result in an inclination to the left (backward).
- **Spacing**. Controls the width of the characters in relation to the height. This relation is called the aspect ratio.

You can combine these settings, although in some cases the combination of properties can interfere with each other. Some fonts do not support all options.

Note : The **Preview** area displays the TextStyle you define with the specified font and parameters. You can edit the Preview text.

▶ To edit TexStyles :

When you edit TextStyles, all existing Text entities that use the TextStyle automatically update to reflect the modified style.

1. Click **Format > Text Style** (or type **TextStyle**).
   In the **Options** dialog box, the Drafting Styles page opens and **Text** expands.
2. In **Style**, select a TextStyle.
   The **Style** list contains all TextStyles that are defined in the drawing. You cannot change the name of the **Standard** TextStyle, but you can edit its settings.
3. Set options under **Text** and **Orientation**.

▶ To activate a TextStyle :

The active TextStyle is used for the Note and SimpleNote commands.

1. Click **Format > Text Style** (or type **TextStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Text** expands.

2. In **Style**, select a TextStyle.
3. Click **Activate**.

▶ To rename TextStyles :
1. Select **Format > Text Style** (or type **TextStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Text** expands.

2. In **Style**, select a **TextStyle**.
3. Click **Rename**.
4. Type a new name in the **Rename TextStyle** dialog box and click **OK**.

▶ To delete TextStyles :
1. Select **Format > Text Style** (or type **TextStyle**).
   In the **Options** dialog box, the **Drafting Styles** page opens and **Text** expands.
2. In **Style**, select a TextStyle.
3. Click **Delete**.

Note : You cannot delete a TextStyle that is currently used in the drawing.

TIP : TextStyles are saved with the drawing file only with a reference to the corresponding font file. They are available any time you open the drawing if the corresponding font file exists in the program folders..

7.5.3. Dimension Styles

Use the **DimensionStyle** command to create and modify DimensionStyles.

DimensionStyles control the way Dimensions look.

You can define DimensionStyles to apply annotative scaling for Dimensions.

▶ To create a new Dimension Style :
1. Select **Format > Dimension Style** (or type **DimensionStyle**).
   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.
2. Click **New**.
3. In the **Create new DimensionStyle** dialog box :
   a. For **Name**, type a value.
   b. In **Based on**, select an existing DimensionStyle. This style serves as the base settings for the new DimensionStyle.
   c. In **Apply to**, select a Dimension type. This specifies that the new DimensionStyle is valid for all Dimensions or for a specific type of dimensioning.
   d. Click **OK**.
4. Under **Dimension**, set up the DimensionStyle. (See DimensionStyle Settings below).
5. Click **OK.**

▶ To modify a DimensionStyle :
1. Click **Format > Dimension Style** (or type **DimensionStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.

2. In **Style**, select a DimensionStyle to modify.
3. Under **Dimension**, set up the DimensionStyle. See DimensionStyle Settings below.
4. Click **Activate** or **OK**.

▶ To set the active DimensionStyle :
1. Click **Format > Dimension Style** (or type **DimensionStyle**).
   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.
2. In **Style**, select a DimensionStyle to activate.
3. Click **Activate**. An ⇨ displays beside the active DimensionStyle.
4. Click **OK**.

▶ To compare DimensionStyles :
1. Click **Format > Dimension Style** (or type **DimensionStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.

2. Click **Differences**.
3. In the **Find Differences in DimensionStyles** dialog box, in **Compare** and **To**, select a DimensionStyle. The DimensionStyle settings that differ are listed in the dialog box.
4. Click **Copy** to copy the differences, or click **Close**.
5. Click **Close**.

▶ To override DimensionStyle settings :

You can temporarily change settings of the active DimensionStyle. These changes do not modify the DimensionStyle settings. The overriding settings can be applied as long as no other DimensionStyle is set as active.

1. Click **Format > Dimension Style** (or type **DimensionStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.

2. In **Style**, select a DimensionStyle to override.
3. Click **Activate**.
4. Click **Set Overrides**.
5. Set DimensionStyle overrides. See DimensionStyle Settings below.
6. Click **OK.**

▶ To rename a DimensionStyle :
1. **Click Format > Dimension Style** (or type **DimensionStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **Dimension** expands.

2. In **Style**, select a **DimensionStyle** to rename.
3. Click **Rename**.
4. In the **Rename DimensionStyle** dialog box specify a new name for the selected DimensionStyle and click **OK**.

▶ To delete a DimensionStyle :
1. Click **Format > Dimension Style** (or type **DimensionStyle**).

In the **Options** dialog box, the Drafting Styles page opens and **Dimension** expands.

2. In **Style**, select a DimensionStyle to delete.
3. Click **Delete**.

Confirm the deletion of the selected DimensionStyle. You cannot delete the DimensionStyle named Standard or DimensionStyles referenced in the drawing by Dimension entities.

TIP : You can remove DimensionStyles that are not referenced in the drawing with the **Clean** command.

7.5.4. DimensionStyle Settings
▶ Angular Dimension

Angular Dimension settings
- **Format:** Sets the primary angular units format (Decimal Degrees, Deg/Min/Sec, Grads, or Radians).
- **Precision**: Sets the number of decimal places.
- **Zeroes display**: Lets you suppress leading and trailing zeroes in angular Dimensions.

Arc length symbols
Lets you set the display of a symbol for arc length Dimensions: **Before dimension text, Above dimension text**, or **None**.

Arrows
- **Start arrow**: Specifies the Dimension's starting arrowhead.
- **End arrow**: Specifies the Dimension's ending arrowhead.
- **Leader arrow**: Sets the Dimension's leader arrow style.
- **Size:** Sets the arrowhead size.

Dual Dimension

These options control the use of a second, alternative dimensioning method. This mode allows dual dimensioning in metric and imperial values.

Show dual dimensions: Determines whether to use alternate units in Dimensions.

Dual dimension settings

- **Format**: Sets the alternate unit format.
- **Precision**: Sets the number of decimal places.
- **Multiplier for converting units**: Sets a multiplier for converting units.
- **Round to the nearest**: Lets you specify a value for rounding.
- **Prefix and Suffix**: Lets you specify a prefix and suffix for the Dimension value.

Zeroes display

- **Hide leading zeroes** and **Hide trailing zeroes**: Lets you suppress leading and trailing zeroes.
- **Hide if 0'** and **Hide if 0":** If you set Format to **Architectural, Architectural Stacked**, or **Engineering**, you can also specify whether to hide zero feet and zero inches.

Insertion

- **After primary units** and **Below primary units**: Specifies whether alternate units are placed after or below the primary Dimension value.

Fit

Fit options determine how to arrange Dimensions if there is not enough space for text and arrows between the extension lines.

Geometry

- **When space is limited, move selected entity outside of extension lines**: When there is not enough room to place text and arrows inside the extension lines, the first entity to move outside the extension lines is:
  - **Automatic:** Either text or arrows (best fit)
  - **Arrows**
  - **Text**
  - **Text and arrows**
  - **Keep text between extension lines**
- **Hide arrows:** Suppresses arrows if they do not fit inside the extension lines.

Dimansion text

- **When dimension text is not in the default position, move it**: When Dimension text is not in the default position, you can place it:
  - **Above the dimension line with leader**
  - **Above the dimension line without leader**
  - **Next to the dimension line**

Dimension scale

- **Annotative Scaling**: Specifies whether annotative scaling is used for Dimensions which apply the DimensionStyle you define. In Style, annotative DimensionStyles are marked with an icon.
- **Scale factor**: Specifies the overall scale for DimensionStyle settings. The scale factor influences size, distance, and spacing, including text and arrowhead sizes.

  This option is available only if you selected annotative scaling for the DimensionStyle.

- **Scale dimensions according to sheet**: Sets a scale factor based on the ratio between the current Viewport and the drawing Sheet.

  This option is available only if you selected annotative scaling for the DimensionStyle.

Additional options

- **Dimension lines between extension lines**: Forces dimension lines to remain between the extension lines, even if the arrowheads are generated outside the Dimension.
- **Specify text placement**: Lets you position Dimension text manually; horizontal justification settings are ignored.

Linear Dimension

- **Format**: Sets the primary linear units format.
- **Precision**: Sets the number of decimal places.
- **Fractional display**: Sets the stack display of fractional units.
- **Decimal separator**: Sets the decimal separator for Dimensions whose unit Format is set to Decimal.
- **Round to the nearest**: Lets you specify a value for rounding.
- **Prefix and Suffix**: Lets you type a character string to appear before or after the Dimension text. For example, the suffix field can display the unit of measurement.

Measurement scale

- **Scale factor**: Forces all linear Dimension texts (including the Dimension text of diameters, radii, and coordinates) to be multiplied with the specified scale factor. Angular Dimensions and the plus-/minus values of Tolerances are not affected. The setting applies especially for non-associative dimensioning (for example, when you dimension scaled details).
- **Follow sheet dimensions**: Applies the measurement scale factor to Dimensions created on Sheets only.

Zeroes display

- **Hide leading zeroes and Hide trailing zeroes**: Lets you suppress leading and trailing zeroes in decimal linear Dimensions.
- **Hide if 0' and Hide if 0":** If you set Format to **Architectural** or **Engineering**, you can also specify whether to hide zero feet (**Hide if 0'**) and zero inches (**Hide if 0"**)

Line

Dimension line settings

- **Style**: Sets the Dimension line LineStyle.
- **Weight**: Sets the Dimension line LineWeight.
- **Color**: Sets the Dimension line LineColor.
- **Offset**: Sets the offset distance of Dimension lines when baseline dimensioning is applied using the BaselineDimension command.
- **Distance past start arrow**: Sets a distance to extend the Dimension line beyond the extension line when you apply certain arrowheads such as tick or architectural.
- **Hide**:
  - **Dimension line 1**: Determines whether the first Dimension line and arrowhead between the first extension line and the Dimension text is displayed.
  - **Dimension line 2**: Has the same effect as Dimension line 1 for the second extension line and Dimension text.

Extension line settings

Extension lines are the lines that extend the Dimension outside the perimeter of the measured entity, assuming that dimensioning is to take place outside of these perimeter constraints.

- **Styles:** Sets the LineStyle for Extension line 1 and Extension line 2.
- **Weight:** Sets the extension line LineWeight.
- **Color**: Sets the extension line LineColor.
- **Offset:** Sets the offset distance between the entity and the point where extension lines begin.
- **Distance past dimension lines**: Sets the distance the extension lines should run past the Dimension lines.
- **Hide**: Hides the first and/or second extension line.
- **Fixed length**: Specifies whether extension lines should have a preset length. Set a value in **Length**.

Dimension split (Professional & Enterprise versions only)

- **Split gap**. Specifies the width of the default gap when you use the SplitDimension command to split dimension and extension lines which cross other entities.

Radial/Diameter Dimension

Center mark display

- **None, As mark, As centerline**: Defines the display of marks that indicate a Circle's center point and defines whether or not dashes or strokes should be added to center marks.
- **Size**: Lets you specify the size of center marks for center, diameter, and radius Dimensions.

Radius dimension jog

- **Angle**: Determines the angle of the transverse segment of the dimension line in a jogged radius Dimension.

Text

Text settings

- **Style**: Sets the Dimension TextStyle. Click to define TextStyles.
- **Color:** Sets the Dimension TextColor.
- **Fill:** Sets the Dimension text background color.
- **Height**: Sets the Dimension text height.
- **Fractional scale**: Sets a scale factor for the text height of tolerance values relative to the general Dimension text height.
- **Frame dimension text**: Draws a frame around Dimension text.

Text position

- **Horizontal** and **Vertical**: Sets the horizontal and vertical positions of the Dimension text.
- **Offset from dimension lines**: Sets the distance that text is offset from the Dimension lines.

Text alignment

You can align the Dimension text with the following options:

- **Use ISO standard**
- **Align horizontally**
- **Align with dimension lines**

Tolerance

Tolerance settings

- **Calculation**: Sets the format for tolerance creation:
  - **Basic**. Displays the additional Dimension measurement and deviation in a single value with a box around it.
  - **Deviation**. Appends separate plus and minus values of deviation to the Dimension measurement.
  - **Limits**. Displays a maximum and a minimum value, one on top of the other.
  - **None**. Does not generate a tolerance value.
  - **Symmetrical**. Appends a plus/minus tolerance value to the Dimension measurement which indicates the positive and negative deviation in a single value.
- **Precision**: Sets the number of decimal places.
- **Maximum value** and **Minimum value:** Sets values for the positive or negative tolerances.
- **Scale**: Sets the tolerance scale.

- **Vertical text justification**: Sets the tolerance text justification.
- **Zeroes display**:
  - **Hide leading zeroes** and **Hide trailing zeroes**: Lets you suppress leading and trailing zeroes in decimal tolerance Dimensions.
  - If you set the **Format** for **Linear Dimension** to **Architectural** or **Engineering**, you can also specify whether to hide zero feet (**Hide if 0'**) and zero inches (**Hide if 0"**).

Dual Dimension

- **Precision**: Sets the number of decimal places for alternate Dimensions in geometric tolerances.
- **Zeroes display**:
  - **Hide leading zeroes** and **Hide trailing zeroes**: Lets you suppress leading and trailing zeroes in decimal alternate Dimensions.
  - If you set the **Format** for **Linear Dimension** to **Architectural** or **Engineering**, you can also specify whether to hide zero feet (**Hide if 0'**) and zero inches (**Hide if 0"**).

7.5.5. RichLineStyles settings

RichLine entities consist of two or more parallel linear constructions created as one object. Before using RichLine entities, you can create custom RichLineStyles to specify the LineColor, LineStyle and other entity properties. The default RichLineStyle is named **Standard**.

DraftSight - Configuration & Basic Customization

To create RichLinesStyles :

1,2,3,4

DraftSight - Configuration & Basic Customization

To create RichLinesStyles :

▶ To modify junction and cap ends in RichLineStyle definitions :
1. **Click Format > RichLine Styles** (or type **RichLineStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.

2. In **Style**, select a RichLineStyle.
3. Under **Display**, select or clear **Show junctions** and specify the **Color** for junctions.
4. Under **Cap ends**, specify cap settings for the **Start** and **End** caps:
   • **Angle**: Sets the angle of the start and end caps relative to the direction of the first or last RichLine entity.
   • **External arc**: Caps the outer ends with an arc.
   • **Internal arc**: Joins the two line elements closest to the outer ones with an arc when there are four or more lines defining the RichLine entity.
   • **Line**: Caps the RichLine entity with a line segment.

▶ To set a RichLine Style as active
1. Click **Format > RichLine Styles** (or type **RichLineStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.

2. In **Style**, select a RichLineStyle and click **Activate**.

A ⇨ displays beside the active RichLineStyle.

▶ To save RichLineStyles:
1. Click **Format > RichLine Styles** (or type **RichLineStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.

2. In **Style**, select a RichLineStyle and click **Export**.
3. In the **Save RichLine Style** dialog box, type a file name and click **Save**.

> ▶ To import RichLineStyles

1. Click **Format > RichLine Styles** (or type **RichLineStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.

2. Click **Load**.
3. In the **Load RichLine Definitions** dialog box, click **Browse** to navigate to the .mln style file and click **Open**.
4. Click **OK**.

> ▶ To rename a RichLine Style :

1. Click **Format > RichLine Styles** (or type **RichLineStyle**).

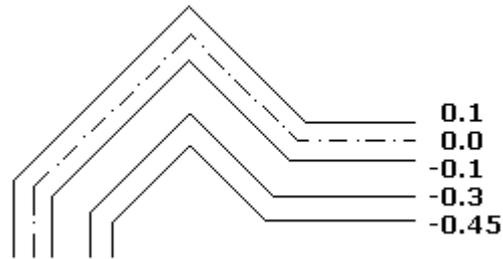   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.

2. In **Style**, select a RichLineStyle and click **Rename**.
3. In the **Rename RichLineStyle** dialog box, change the name.
4. Click **OK.**

> ▶ To delete RichLineStyles :

1. Click **Format > RichLine Styles** (or type **RichLineStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens and **RichLine** expands.
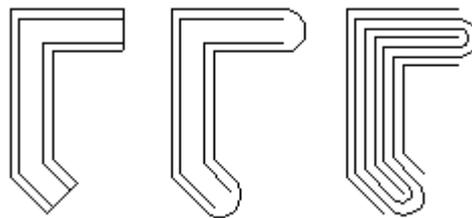
2. In **Style**, select a RichLine Style and click **Delete**.
3. Click **Yes** to confirm the deletion.

7.5.6. TableStyles settings

You can create, modify, and delete TableStyles. You can also set a TableStyle as the active one.

▶ To create TableStyles :

1. Click **Format > Table Style** (or type **TableStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens, and **Table** expands.

2. Click **New**.
3. In the **Create new TableStyle** dialog box, type a new name and click **OK**.

   The new TableStyle appears in **Style**.

▶ To modify TableStyles :

1. Click **Format > Table Style** (or type **TableStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens, and **Table** expands.

2. In **Filter**, select an option:
   - **All styles**. Lists all of the styles defined in the drawing.
   - **Styles in drawing**. Lists only the styles that are referenced by Tables in the drawing.
3. In **Style**, select a TableStyle.
4. Under **Cell style settings**, in **Contents**, select the cell type to edit (**Data, Head**, or **Title**).
5. Under **Display**, set:
   - **Background color**: Sets the background color for the table.
   - **Align**. Sets the justification and alignment of the text in the cells.
6. Under **Text**, set:
   - **Color**: Sets the text color.
   - **Style**: Contains all TextStyles defined in the drawing. Click Display text styles to define TextStyles for subsequent use.
   - **Height:** Sets the text size.
7. Under **Borders**, set:
   - **Color:** Sets the border color.
   - **Weight:** Sets the border weight.
   - **Apply to:** Sets the specified Color and Weight to the border(s) you select.
8. Under **Cell settings**:
   - Type a value for the **Horizontal** and **Vertical** cell margins (in drawing units).
   - In **Table header orientation** select an item to specify whether the table is generated downward or upward from the insertion point.

   The modifications will reflect in tables using that style.

▶ To set a TableStyle as active :

1. Click **Format > Table Style** (or type **TableStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens, and **Table** expands.

2. In **Style**, select a TableStyle.
3. Click **Activate**.

   A ➡ displays beside the active TableStyle.

▶ To rename TableStyles :

1. Click **Format > Table Style** (or type **TableStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens, and **Table** expands.

2. In **Style**, select a TableStyle.
3. Click **Rename**.
4. In the **Rename TableStyle** dialog box, type a new name for the TableStyle.
5. Click **OK**.

▶ To delete TableStyles :

You can delete TableStyles if they are not referenced by a Table in the drawing.

You can also use the **Clean** command to remove unreferenced TableStyles.
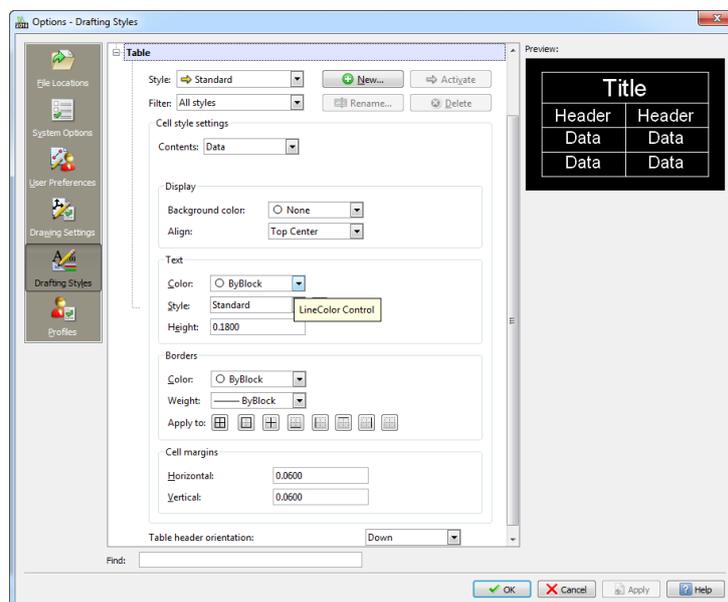
You cannot delete the **Standard** style.

1. Click **Format > Table Style** (or type **TableStyle**).

   In the **Options** dialog box, the **Drafting Styles** page opens, and **Table** expands.

2. In **Style**, select a TableStyle.
3. Click **Delete**.
4. Click **Yes** to confirm the deletion.

7.6.   Profiles

The **Profiles** page of the **Options** dialog box lets you store individual profiles based on the settings you specify and manage the profiles.

The name of the active profile is displayed at the top of the **Options** dialog box.

▶ To manage settings profiles :
1. Click **Tools > Options** (or type **Options**).

   In the **Options** dialog box, click **Profiles** .

- or -

   Type **Profiles**.

A list of the available profiles is displayed.

2. Use the following to manage profiles:

- **Add.** Opens the **Named Profile** dialog box. Type a **Name** and **Description** for the profile.
- **Rename**. Lets you rename the selected profile. Rename opens the **Rename Profile** dialog box. Type a new **Name** or **Description** for the profile.
- **Delete**. Lets you delete the selected profile. You cannot delete the active profile.
- **Import**. Reads a profile from disk which was created with the **Export** option. You can import profile files from the same computer or different computers.
- **Export**. Writes the selected profile as an .xml file.
- **Activate**. Sets the selected profile as active.
- **Reset**. Sets the values in the selected profile to the default settings.

8. Setting the Language of the System

Use the **Language** command to set the language to communicate with the software.

Note: You must restart the software to update the language.

8.1.   To set the language of the system :

1. Type **Language** at the command prompt.
2. Specify a number for the language to use.

   Specify the **?** option to list the supported languages.

   Note: Specifying 0 uses the operating system's default language.

3. Save your work and type **Exit** to exit the software.
4. Restart the software.

   The system uses the specified language.

▶ Supported languages/command options :

Supported languages/command options	
0 – Operating System default language	12 – Greek (not yet supported)
1 - German	13 - Korean
2 – English	14 - Vietnamese (not yet supported)
3 - Turkish	15 – Catalan (not yet supported)
4 – Hungarian (not yet supported)	16 – Thai (not yet supported)
5 - Polish	17 – Dutch (not yet supported)
6 - Japanese	18 - Russian
7 - French	19 - Portuguese
8 – Traditional Chinese	20 - Czech
9 – Simplified Chinese	21 – Bulgarian (not yet supported)
10 - Italian	22 – Slovak (not yet supported)
11 - Spanish	

9. Loading Applications

Use the **LoadApplication** command to locate and load applications for use in the program. Typically, the application sends a message that it has been loaded successfully. You can then use the commands and functions provided by the application.

Supported formats include:

Lisp files (*.lsp)

Menu Lisp files (*.mnl)

Dynamic Link Libraries provided by application vendors (*.dll)

You can load Dynamic Link Libraries (*.dll) provided for the software.

10. Running Scripts

Scripts (also referred to as macros) automate the execution of specific instructions or program commands one step at a time, which eliminate the need to enter the commands manually.

This section discusses:

- ▶ Writing and Running Script Files
- ▶ Pausing Script Execution
- ▶ Resuming Script Execution
- ▶ Repeating a Script
- ▶ Hiding the Command History Window

10.1.   Writting and Running Script Files

Use the **LoadScript** command to execute a sequence of commands from a script file.

Writing a Script File

You can write a script file with any text editor or word processing program that is able to store ASCII text format (without the addition of any formatting information).

- ▶ To create a script file :
1. Enter the commands and instructions and their corresponding input values into the file in the same order in that the instructions are to execute.
   Command execution takes place line-by-line or instruction-by-instruction when separated by a space. Either an end of line or space character is interpreted as confirmation of the previous entry.
2. Save the file in plain text format as an .scr file.

Example

These lines define a script that sketches a Circle at the coordinates 5,5 with a radius of 10 drawing units:

```
Circle
5,5
10
```

An equivalent is (note the spaces):

```
Circle 5,5 10
```

▶ Using the clipboard

You can write script files with the Copy and Copy History commands.

The command history window contains a list of program commands and data entries that you made during the program session. The history lets you reference and reconstruct the procedures you used.

▶ To write script files by copying command history:
1. Perform the command steps that you want to store.
2. Type **CommandHistory** to open the separate command history window.
3. Right-click and select **Copy History**.
4. Open a text editor.
5. Paste the command steps into the editor program.
6. Save the file as an .scr file.

Running a Script file

▶ To run a script file :
1. Click **Tools > Run Script** (or type **LoadScript**).
2. Select a script and click **Open**.

10.2.   Pausing Script Execution

Use the **PauseScript** command in a script file to pause the script for a specified time.

▶ To pause script execution :
1. Type **PauseScript** at the command prompt.
2. Type the duration (in milliseconds) before issuing the next command. The value can be an integer between 0 and 32767. A value of 1000 pauses a script for one second.

10.3.   Resuming Script Execution

The **ResumeScript** command lets you continue an interrupted script.

You can interrupt a script by pressing **Esc** or **Backspace**. Scripts can also be interrupted by an error in the script file.

The command is helpful when writing and testing script files.

- ▶ To resume an interrupted script :
1. Type **ResumeScript** at the command prompt.

10.4. Repeating a Script

The **ScriptN** command repeats a script file. You can run scripts continuously until you interrupt them with the **Esc** or **Backspace** keys.

The command is helpful for script files used for demonstrations in showrooms and exhibitions.

- ▶ To repeat a script :
1. Type **ScriptN** as the last command in a script file.

10.5. Hiding the Command History Window

The **HideCommandHistory** command closes the command history window.

- ▶ To hide the command history window :

Do one of the following :

1. Type **HideCommandHistory** at the command prompt or Press **F2.**

11. Customizing LineStyles

LineStyles are used in drawings to enforce the informative value of drawings and to conform with industry standards. The **LineStyle** command lets you load and manage LineStyles. You can assign LineStyles to layers or directly to new entities. To use LineStyles, you must load them from files that define the dash-dot patterns.

11.1. LineStyle Files and File Location

LineStyle definition files are stored in ASCII text files using the .lin extension.

- ▶ To change the search location for LineStyle definition files :
1. Click **Tools > Options** (or type **Options**).

2. In the **Options** dialog box, Click **File Locations** .
3. Expand **Drawing Support > LineStyle File**.
4. Select the path and click **Browse** (or double-click the path).
5. In the **Browse For Folder** dialog box, browse to the new path and click **OK** twice.

11.2.   LineStyle File Syntax

You can place comments in the file by beginning the file lines with a semicolon followed by text.

A LineStyle format comprises two lines:

> ▶ The first line, or header, starts with an asterisk and contains the LineStyle name followed by a comma and a symbolic representation of the LineStyle made up of a string of dashes, spaces, and dots.
> ▶ The second line, or definition line, contains a geometric description of the LineStyle.

Examples :

> ▶ Header: *LineStyle [, LineStyle description]
> ▶ Definition line: Line segment length 1, Line segment length 2, ..., Line segment length **n**

The following example shows the definition of a dash-dot LineStyle:

```
*Dashdot, _ . _ . _ . _ . _ . _ . _ . _ . _ . _ .
A, 0.5, -0.25, 0, -0.25
```

The header includes an asterisk followed by the line LineStyle (Dashdot). A comma separates the symbolic representation of the LineStyle ("_ . _ .").

The second line contains the LineStyle's geometric definition.

All definitions of dashes, dots, and spaces are separated by commas:

- **Dash**: The drawing elements are shown as positive figures, for instance 0.5 represents a dash ("pen down") with a length of 0.5 drawing units.
- **Dot**: Dots are shown as 0 values.
- **Space**: Spaces are shown as negative figures, for instance -0.25 represents the space ("pen up") in which no line should be drawn.

The length specifications represent drawing units when the **LineScale** factor is set to 1.00.

11.3.   Complex LineStyles

Complex LineStyles specify single - possibly broken - lines interspersed with symbols. These LineStyles can include text or shape definitions as pattern descriptors along with the dash and dot descriptors of simple LineStyles. Usually they denote boundaries, contours, or utilities.

Text elements or shapes embedded in Lines are always drawn completely (never trimmed).

Syntax

The syntax for complex LineStyles is similar to that of simple LineStyles.

The syntax for text and shape descriptors in a LineStyle description is a comma-delimited list of pattern descriptors as follows:

Shape definitions
[Shape_Name, SHX_Filename]

- or -

[Shape_Name, SHX_Filename, Transformation]

The **Shape_Name** argument specifies the name of the shape to draw. This argument must be included. The shape name must exist in the specified shape file.

The **SHX_Filename** argument specifies the name of a compiled shape definition file (.shx). This argument must be included. If no path is defined for the file name (which is recommended), the library path is searched.

Text definitions
["String", TextStyle_Name]

- or -

["String", TextStyle_Name, Transformation]

The **String** argument defines the text to use in the complex LineStyle. You cannot use the characters ' (single quotation) or " (double quotation) in the string. To use these characters, use a control code %% with the sub-seeding ASCII value for the character.

The **TextStyle_Name** argument determines the TextStyle to elaborate.

Transformation specifications
The **Transformation** argument is optional and can be any series of the following, each preceded by a comma:

R=**value**	Relative rotation
A=**value**	Absolute rotation
S=**value**	Scale
X=**value**	X offset
Y=**value**	Y offset

In this syntax, the value argument is a signed decimal number (for example, 1, -0.25, 0.3).

The rotation arguments are in degrees, the other arguments are in LineStyle-scaled drawing units.

The preceding transformation letters, if used, must be followed by an equal sign and a number.

11.4.   Loading and Setting LineStyles

Use the **LineStyle** command to load and set LineStyles. Choose a LineStyle to display on the currently active segment of the drawing.

To set the LineStyles pattern definition and LineStyles definition file syntax, refer to the topic **Customizing LineStyles**.

▶ To load LineStyles :
1. Click **Format > Line Style** (or type **LineStyle**).
2. In the dialog box, click **Load**.
   The **Load LineStyles** dialog box displays the LineStyles contained in the .lin file.
3. Click **Browse** to select a LineStyle file, and click **Open**.
4. Select one or more LineStyles in the list.
   To select more than one LineStyle, press **Ctrl** and select multiple LineStyles.
5. Click **OK**.
   The selected LineStyles appear in the **Line Style** dialog box. However, a selected LineStyle does not become the active LineStyle automatically. It is only added to the list of LineStyles that are available. You have to set the active LineStyle explicitly.
6. Click **OK**.

▶ To set the active LineStyle :
1. Click **Format > Line Style** (or type **LineStyle**).
2. In **Show**, select the LineStyles you want to appear in the dialog box:
   - **All LineStyles**
   - **LineStyles in Use**
   - **Referenced LineStyles**
3. Click **Reverse Filter** to invert the option you selected.
   For example, reversing **LineStyles in Use** shows all unused LineStyles.
   The LineStyle list shows the dash-dot patterns for the LineStyles. These LineStyles can be loaded from LineStyle definition files or inherited from drawings.
   Every drawing has three LineStyle definitions:
   - **Continuous**. Solid line without a pattern.
   - **ByBlock**. Entities are drawn as continuous lines until they are grouped into a Block. The entities then inherit the LineStyle setting when you insert the Block into the drawing.
   - **ByLayer**. New entities adopt the LineStyle of the Layer on which they are placed.
4. Select the LineStyle you want to activate.
5. Click **Activate**.
6. The LineStyle is used when you draw a new entity. The LineStyle of the active Layer does not change.

▶ To delete a LineStyle :
1. Click **Format > Line Style** (or type **LineStyle**).
2. Select one or more LineStyles in the list.
3. Click **Delete**.

Note : You can only delete LineStyles that are currently not in use.

▶ To edit a LineStyle :
1. Click **Format > Line Style** (or type **LineStyle**).
2. Select a LineStyle in the list.
3. Click **Show Parameters**, and under **Parameters**, edit the options:
   - **Name**. Specifies the name of the LineStyle definition to store in the drawing.
   - **Description**. Specifies a Note or symbolic representation for the LineStyle to display in the Line Style dialog box.
   - **Global scale**. Scales the LineStyles so they fit to the units of measurement.
   - **Entities scale**. Sets a LineStyle scale factor for new entities relative to the general LineStyle scale factor.
   - **Scale based on sheet's units.** Forces LineStyles to be drawn at the same scale as the Viewport scale. Clear the option to scale LineStyles equally in the model and Sheet.

▶ To modify the LineStyle of existing drawing entities :

Do one of the following :

- Change the LineStyle property in the **Properties palette**.
- Select one or more entities in the drawing and select a different LineStyle in the Properties toolbar.
- Use the **ModifyProperties** command. You must use the exact name of the loaded LineStyle you want to apply.

12. Customizing Hatch Patterns

Hatches are designed by repeating a number of lines. These lines can be rotated at any angle, start at various points, and be spaced at different intervals. It is also possible to generate dash-dotted sequences instead of elongated dashes.

You can load Hatch patterns defined in pattern files using the Hatch command, and you can select the pattern from the **Hatch** dialog box. Once you set up a new pattern file, it is used as the default file until you select another pattern.

12.1.   Hatch Pattern Files and File Location

Predefined Hatch patterns are stored in .pat files (pattern files).

To generate a pattern file, use a text editor to create a file with a .pat extension.

> ► To change the seach location for pattern files :
1. Click **Tools > Options** (or type **Options**).
2. In the **Options** dialog box, click File Locations .
3. Expand **System > Support Files Search Path**.

12.2.   Hatch Pattern File Syntax

Hatch patterns are made up of a header followed by the name of the Hatch pattern. An asterisk (*) indicates the beginning of the Hatch pattern name, this can be followed by a comma and the pattern description. The next line contains the actual Hatch pattern definition. Every Hatch pattern definition starts on a separate line and contains the following elements:

- The angle of the line
- The X and Y coordinates of where the line is to begin
- X and Y spacing of the offset
- Line segment length

The line segment lengths are needed for elongated and dotted Hatch lines. They are not required for continuous lines.

You can enter comments into the Hatch file header for documentation purposes. These comment lines begin with a semicolon.

Header	*Hatch pattern name [,Description of the pattern]
1st Hatch line :	Angle, X start point, Y start point, X spacing, Y spacing [,Ls1, Ls2, …, Ls**n**]
2nd Hatch line	Same as 1st Hatch line
n-th Hatch line	Same as 1st Hatch line

[Ls1,Ls2,...,Lsn] = Line segment length 1, Line segment length 2, ..., Line segment length n

The Hatch pattern name must be less than 15 characters. The description must be less than 80 characters.
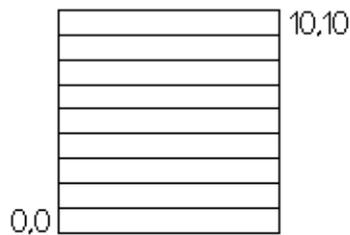
No more than six line segment length entries are permitted per Hatch line definition.

Examples

Example 1 : Horizontal Hatch

This example shows a Hatch pattern with the name HLINE using a 0° angle. The start point is located at 0,0 and the Y line offset is 1 drawing unit wide.
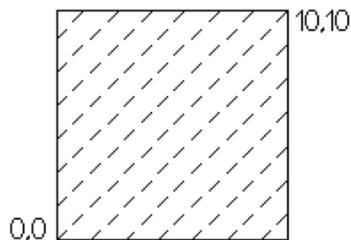
```
*HLINE, Horizontal line
0, 0,0 , 0, 1.0
```


Example 2 : Dash dot Hatch

This example shows a dash dot Hatch pattern drawn at a 45° angle. The start point is located at 0,0 and the Hatch line offset is 1 drawing unit wide. The dash length is 0.5 drawing units. A space of 0.25 drawing units separates each dot and dash.

```
*DASHDOT, Dash dot line 45 degrees
45, 0,0 , 0,1,0.5,-0.25,0,-0.25
```
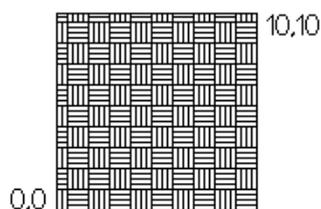

Example 3 : Parquet Hatch

This example shows a parquet Hatch pattern that comprises a number of Hatch lines. The pattern contains 4 parquets with a width of 0.25 drawing units.

This pattern is used to create a pattern containing five, 0° Hatch lines and 5, 90° Hatch lines. The start points are offset by 0.25 units at 90° in the X direction and 0° in the Y direction.

```
* PARQUET, 1 x 1 parquet pattern
0, 0,0.00 ,1,1, 1.0,-1.0
0, 0,0.25 ,1,1, 1.0,-1.0
0, 0,0.50 ,1,1, 1.0,-1.0
0, 0,0.75 ,1,1, 1.0,-1.0
0, 0,1.00, 1.1. 1.0,-1.0
90, 0.00,0 ,1,1, -1.0,1.0
90, 0.25,0 ,1,1, -1.0,1.0
90, 0.50,0 ,1,1, -1.0,1.0
90, 0.75,0 ,1,1, -1.0,1.0
90, 1.00,0 ,1,1, -1.0,1.0
```

13. Command Variables

Command variables control the state of drawings, options and preferences in commands, aspects of the user interface, and settings for drawing, editing, and viewing modes.

You can use some variables like a command (especially those that turn on and off certain states of the drawing environment).

A comprehensive list of the DraftSight Command variables (and Legacy variables handled by DraftSight) can be found in the DraftSight Help files, Contents Tab, under the topic **Command Variables**.

Note: Some variables are present only for compatibility with other CAD programs or for legacy reasons to older software.

13.1. Setting Command Variables

Use the **SetVariable** command to check, set, and change current command variable settings. Command variables store settings and preferences for commands and functions as well as for drawing, editing, and viewing modes.

▶ To view or set command variables :
1. Type SetVariable at the command prompt.
2. Type the variable name.
   The current value of the variable displays as default.
3. Type the new variable value.
   Note: Some of the variables are read-only.

▶ To list all command variables :
1. Type **SetVariable** at the command prompt.
2. Type **?**.
3. Type *.
   In the command window, the command variables are listed alphabetically with their current values.

Note : You can type variable names at the command prompt directly instead of calling the SetVariable command explicitly.

Example :
The following toggles filling mode for entities:

```
: SetVariable
Options: ? or
Variable name» EnblFills
Default: 1
Enter new value for EnblFills» 0
```