

ORGPLUS 6.0 A D V A N C E D

The #1 Selling Org Chart Maker

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User's Guide

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The information contained in this user's guide changes periodically. These changes will be incorporated in new editions.

Your questions and comments about the program and documentation are welcome.

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What's New in Version 6.0

Org Plus® Advanced Version 6.0 gives you the following new features:

- pull down menus
- full mouse support
- enlarged titles in Chart
- text enhancement in Chart
- automatic name formatting and title abbreviation
- new import and export capabilities
- virus detection

Getting Started

Using This Chapter

This chapter will focus on new features. Where appropriate, it will point out any differences between Org Plus Advanced Version 6.0 and Org Plus Advanced Version 5.0. There are 4 sections in this chapter. This section, "Getting Started," provides an overview of the new features, explains installation, and details the new commands on the Command Menu.

"Mouse Support" explains how to use Org Plus with a Mouse and how to change the mouse setup.

"Printing Your Chart" explains the additional options you have when printing your chart or drawing.

"Advanced Chart Making" explains additional methods of importing and exporting charts. It provides recommendations on how to merge Org Plus charts with leading word processing and graphics packages.

Installation

Org Plus comes on both $3^{1}/2$ inch and $5^{1}/4$ inch diskettes. To install, follow the procedure described in the user's guide (See "Installing Org Plus on Your Computer" in "Chapter 2: Getting Started"). This version of Org Plus does not support two diskette drive systems, you must have a hard disk.

Printer/Setup

Org Plus now comes with 32 additional soft fonts for HP LaserJet and compatible printers. To use these new fonts, you must change Printer/Setup from the Main Menu. (See "Printer/Setup" in Chapter 2: Getting Started".) Select the No cartridge req'd - Letr Gothic Many or the No cartridge req'd - Quick Print Many setting on the Installing the Printer — Step 2 of 3 form. (See "Appendix E: Laser Printer Soft Fonts" for a listing of the fonts available).

Virus Detection

Virus detection is a new feature included with Org Plus. Each time you start, Org Plus checks itself to see if the program has been altered since the last time you used it. If an alteration is detected, Org Plus will ask whether you wish to proceed. Select Yes to continue running Org Plus. Select No to stop.

Banner Blue recommends that you select **No** and contact the Technical Support department. (See "About Customer Assistance" in "Chapter 1: Introduction to Org Plus Advanced".) An alteration could be caused by a virus, hard disk failure, or operating system problems. All of these may cause serious damage to your computer.

Note: Org Plus cannot cause a virus to occur. Org Plus can only check itself for signs that a virus which already exists on your computer has attacked it.

Work On Chart

The Command Menu

You can select most Org Plus commands from the Command Menu. The only exceptions are the commands found on the Main Menu. The Command Menu is now displayed at the top of your screen in the Work Group Display.

This chapter identifies commands like this: "Edit Chart: Move Position." The first half of the command refers to the item on the Command Menu. The second half refers to the item on the list displayed when you select the first half of the command.

Only the first word of each command is displayed. For example, the command Edit Chart: Move Position, is shown as "Edit" in the Command Menu.

The 3 ways to select a command are:

1. Using a keyboard with the Command Menu: To select a command, press Alt followed by the highlighted letter on the Command Menu. Then, press the highlighted letter in the list.

For example, to select Edit Chart: Move Position, press [Alt] - [E] to display the Edit Chart list, then press M. If you wish to change your selection, press Esc to back up. You can also still use the method described throughout the User's Guide. That is, press [F9] (to move your cursor to the Command Menu), then press E for Edit Chart, and finally M for Move Position.

2. Using the function keys: You may select commands through any function key instructions described in the User's Guide.

For example, to select Edit Chart: Move Position, press Alt - F3. If you wish to change your selection, press Esc to back up.

3. Using a mouse with the Command Menu: You may select commands using a mouse. (See "Working with a Mouse" later in this chapter.)

The Command Menu now contains 5 "new" commands. Actually, these commands were available in previous versions of Org Plus. They have been added to the Command Menu for convenient access.

File: Save Chart

This command allows you to save your chart while in the Work Group Display. It is the same as the Save Chart command on the Main Menu. (See "Save Chart" in "Chapter 3: Building a Chart" for complete details on saving a chart.)

File: Retrieve Chart

This command lets you retrieve a previously saved chart while in the Work Group Display. It is the same as the Retrieve Chart command on the Main Menu. (See "Retrieve Chart" in "Chapter 3: Building a Chart" for complete details on retrieving a chart.)

File: Clear Chart

This command lets you remove the chart you have been working on from the Work Group Display and start a new one. It is the same as the Clear Chart command on the Main Menu. (See "Clear Chart" in "Chapter 3: Building a Chart" for complete details on clearing a chart.)

File: Exit (Main Menu)

Select File: Exit (Main Menu) from the Work Group Display to return to the Main Menu. This command is available only if you have a mouse.

Help

This command allows you to get help while working in the Work Group Display. You can press [f] for help at any time. (See "Getting Help" in "Chapter 3: Building a Chart" for complete details on Org Plus' on-screen help system.)

Mouse Support

Org Plus now gives you the ability to use a mouse. All commands can be selected with a mouse. In addition, there are special tools and buttons allowing you to execute commands and quickly move through forms.

What You Need

Org Plus supports all Microsoft® compatible 2 or 3 button serial and bus mice. The mouse must be compatible with Microsoft mouse driver software version 6.11 or greater, available after September 1987.

To install your mouse, follow the instructions in your mouse documentation

Some Essential Terms

This section explains some terms that will help you understand how Org Plus works with a mouse.

Point: To slide the mouse until the mouse cursor rests on the item of choice.

Primary Mouse Button: The mouse button used to select files in a list, tools, and commands. The default primary mouse button is the left mechanical mouse button for right-handed users.

Secondary Mouse Button: The mouse button used only in the Drawing Board for special functions. The default secondary mouse button is the right mechanical mouse button for righthanded users.

Select: To use the mouse or a key combination to pick an item that begins an action.

Tool: An item that, when selected, executes a command.

Form Button: An item in a form on the computer screen that is surrounded by a box and when selected moves you from one form to another.

Click: To quickly press and release the mouse button. To double-click, press and release the mouse button twice. Single clicks are used to select Form buttons, double-clicks are used to select items from lists in forms. (See "Forms" later in this chapter.)

Drag: The act of positioning the cursor, pressing and holding the mouse button, moving the mouse, and then releasing the mouse button.

Mouse Setup

Org Plus uses a two button mouse. Only the left and right mouse buttons are used with a three button mouse. One button of the mouse is your primary mouse button. It selects all commands and items from lists. Org Plus comes with the left mouse button configured as the primary button. Unless otherwise stated, all mouse button actions in this chapter refer to the primary mouse button. Your secondary mouse button is used in the Drawing Board for special functions (see "The Drawing Board" later in this chapter).

There are two mouse configurations you can adjust. The first allows you to change your primary mouse button from the default left to the right button. The second allows you to modify the tracking speed of your mouse — the responsiveness of your mouse cursor on the screen to a physical movement of your mouse.

Adjusting the Mouse Buttons and Tracking Speed

To change your primary mouse button and tracking speed, follow these directions:

- 1. Select Printer/Setup from the Main Menu.
- 2. Click on Next in all the forms presented until you reach the Preferences Step 3 of 4 form.
- 3. Double-click **Right** at the Primary Mouse Button setting if you want the right button to be the primary mouse button; that is, you are left-handed. Double-click **Left** if you want your left button to be the primary mouse button; that is, you

are right-handed.

If you do not wish to change your primary mouse button setting, click on Next.

Selecting an item or clicking on Next brings up the Preferences — Step 4 of 4 form which allows you to set the Mouse Tracking Speed.

4. Double-click **Slow 1** at the Mouse Tracking Speed setting to decrease the responsiveness of your mouse pointer to a movement by your mouse. Double-click Slow 2 to decrease the responsiveness even more. Double-click Fast 1 to increase the responsiveness of your mouse pointer to a movement by your mouse. Double-click Fast 2 to increase the responsiveness even more. Double-click Normal to select the default setting.

If you do not wish to change your Mouse Tracking Speed, click on OK.

Selection of one of the items in the list or clicking on **OK** takes you back to the Main Menu.

Working With A Mouse

All commands can be selected from the keyboard or with your mouse. Org Plus looks for the presence of a mouse driver when you run the program. If a mouse driver is present, special tools will be displayed. These tools are used only with a mouse.

Forms

Form buttons are present in each Org Plus form and are selected with a click. Buttons help you quickly move forward to the next form and backward to review a previous form.

In forms with lists, form buttons let you Page Up and Page Down the list. To select an item in a list, double-click on the item.

Org Plus has the following form buttons:

NEXT: Confirms your current form settings and moves you to the next form in a series of forms.

BACK: Moves you back to the previous form.

OK: Shows that you are in the last in a series of forms or the only form required by the command. Click on the button to confirm your current form settings and exit the form.

CANCEL: Cancels your current form settings and exits the form.

PgDn: Pages down the list to allow you to view items not on the screen.

PgUp: Pages up the list to allow you to view items not on the screen.

The Command Menu

To select a command with your mouse, point to the command in the Command Menu. Drag your mouse down the list until you reach the desired item. For example, to select Edit Chart: Move Position, point to Edit in the Command Menu and drag your mouse over the displayed list until you reach the Move Position item. To cancel a command before selecting an item, drag your mouse off the list. Figure N-1 shows the Work Group Display with a mouse.

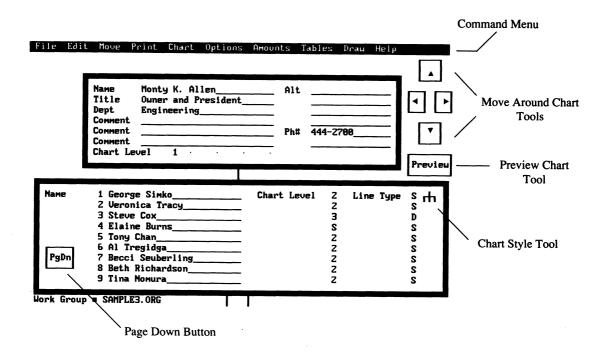


Figure N-1. Work Group Display with a Mouse

Chart

In addition to the commands on the Command Menu, tools are available. These tools allow you to execute commands faster and more conveniently than with the Command menu.

Move Around Chart Tools: In the Work Group Display, to the right of the Current Position Box, are 4 tools consisting of an Up arrow, Down arrow, Left arrow, and Right arrow (see Figure N-1).

Click on the Up arrow to move the Current Position up one level in the chart. The new Current Position is the manager of the old Current Position. The position that was the Current Position appears in the Subordinates' Box along with its siblings. This tool is equivalent to pressing [Ctrl] - [PgUp] or selecting Move Around Chart: Up.

Click on the **Down arrow** while the cursor is in the Current Position Box and the first subordinate at the next lower level becomes the Current Position. The Subordinates' Box now shows any subordinates that report to the new Current Position.

Click on the **Down arrow** while the cursor is on any line in the Subordinates' Box and the position on that line becomes the Current Position. This tool is equivalent to pressing Ctrl - PgDn or selecting Move Around Chart: Down.

Click on the **Left arrow**. The position to the immediate left of the Current Position, at the same chart level, becomes the Current Position. Clicking on the Left arrow has no effect if there is no position to the left. This tool is equivalent to pressing [Ctrl] - [—] or selecting Move Around Chart: Left.

Click on the **Right arrow**. The position to the immediate right of the Current Position, at the same chart level, becomes the Current Position. Clicking on the Right arrow has no effect if there is no position to the right. This tool is equivalent to pressing Ctrl - | or selecting Move Around Chart: Right.

Chart Style Tool: The Chart style tool is located in the top right corner of the Subordinates' box (Figure N-1). It defines the chart style of all subordinates that report to the Current Position. This tool is equivalent to defining the Chart Style through Options: Set Options. This tool shows a symbol of a chart if no chart style has been set using the Options command. It shows the initials of the chart style (for example, BL for Boxed List), if a chart style option has been set.

To define a chart style:

- 1. Click on the **Chart Style** tool, and the Chart Style form will appear.
- 2. Click on the chart style you want then click on **OK**. Or, simply double-click on the chart style. Click on **Cancel** to reselect the default chart style (horizontal) and return to the Work Group Display.

Clicking on **OK** will bring you back to the Work Group Display. The Chart Style tool will display the initials representing the chart style selected.

Preview Tools: In the Work Group Display, to the right of the Current Position Box, (Figure N-1), beneath the Move Around Chart tools is the Preview tool. This tool is equivalent to selecting Chart: Preview Chart.

1. Click on the **Preview** tool and the Preview Chart screen appears. It is a detailed image of how the printed chart will look, with the Current Position at (or near) the center of the screen.

The Preview Chart screen has 6 tools at the bottom of the screen. The Zoom tool and the 5 navigation tools: Up arrow, Down arrow, Left arrow, Right arrow, and Center.

Click on the **Up arrow** to move a full screen up. Click on the **Down arrow** to move a full screen down. Click on the **Left arrow** to move a full screen to the left. Click on the **Right arrow** to move a full screen to the right. Click on **Center** to move to the center of the chart. You can also move one space at a time in any direction by pressing Shift while clicking on any of the arrow tools.

2. Click on **Zoom** to "zoom out," displaying the Preview Chart (Medium Zoom) screen. The Zoom tool is equivalent to the F5 key.

The Preview Chart (Medium Zoom) screen is a more compact view of the chart, showing only names and connecting lines. This screen contains the same 6 tools as the Preview Chart screen, plus the WrkGrp tool. You can navigate from name to name using the navigation tools or by clicking on a name. The name blinks when the cursor is moved to it.

If you want to exit Preview Chart and make the blinking position the Current Position in the Work Group Display, click on **WrkGrp**.

3. Click on **Zoom** to "zoom out" even more, displaying the Preview Chart (Maximum Zoom) screen.

The Preview Chart (Maximum Zoom) screen is a map of the chart, giving you an overall view. It contains the Back and WrkGrp tools. Each regular position appears as a small square, each staff position appears as a dash, and each hidden position appears as a small circle. The current position blinks. If you have a large chart, some of the positions may overlap.

If you want to exit Preview Chart and make the blinking position the Current Position in the Work Group Display, click on WrkGrp.

4. Click on **Back** to return to the Medium Zoom screen. Click on Back again to return to the Preview screen. Click on **Back** from the Preview Screen to return to the Work Group Display.

Print Preview Tools: There are 5 navigation tools available when Org Plus prints the chart on the screen. They are: Up arrow, Down arrow, Left arrow, Right arrow, and Center.

Click on the **Up arrow** to move a full screen up. Click on the **Down arrow** to move a full screen down. Click on the **Left** arrow to move a full screen to the left. Click on the **Right** arrow to move a full screen to the right. Click on Center to move to the center of the chart. You can also move one space at a time in any direction by pressing **Shift** while clicking on any of the arrow tools.

When you are done viewing the chart on screen, Click on **OK** to print the chart on paper.

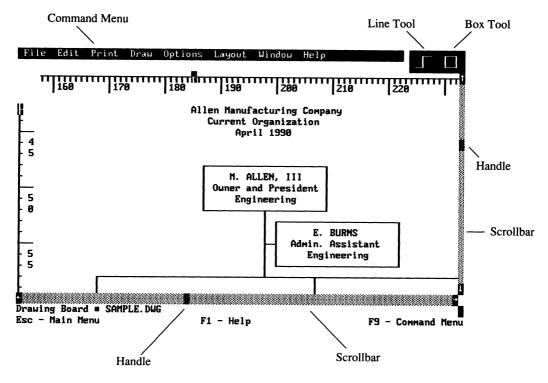


Figure N-2. The Drawing Board Display with a Mouse

The Drawing Board

Improvements in the Drawing Board make it much easier to use. In addition to the commands available through the Command Menu, you now have drawing tools. These tools allow you to execute commands faster and more conveniently than with the Command Menu. Figure N-2 shows the Drawing Board with a mouse.

Scrollbars and Handles: The vertical scrollbar on the right side of the screen in the Drawing Board represents the height of your drawing area. The horizontal scrollbar on the bottom of your screen represents the width of your drawing area. The handles on the scrollbars show where you are in relation to the whole drawing area.

For example, when you are at the top-left corner of the drawing area, the horizontal scrollbar handle is at the far left. The vertical scrollbar handle is at the very top. When you are at the bottom-right corner of the drawing area, the horizontal scrollbar handle is at the far right. The vertical scrollbar handle is at the bottom.

To view a different part of your drawing area, drag the vertical scrollbar handle to move the drawing area in a vertical direction. Drag the horizontal scrollbar handle to move the drawing area in a horizontal direction.

Box Tool: The Box tool is in the upper right hand corner of the Drawing Board. The Box tool creates boxes anywhere in your drawing. This tool is equivalent to selecting Draw: Boxes.

To draw a box with the Box tool:

- 1. Click on the **Box** tool.
- 2. Point to where you want a corner of the box to start.
- 3. Drag the mouse to specify the dimensions of the box. As you move the mouse, you create a dotted rectangle that expands and contracts with your mouse movement.

You can continue to resize the box by pointing to the corner of the box and dragging.

If you want to cancel the command, click on the secondary mouse button.

- 4. When the rectangle is the size you want, move the mouse pointer outside the rectangle and click the mouse button. This will display the Box Style form.
- 5. Click on the box style you want.
- 6. Click on **OK**. A box, in the style you selected, replaces the dotted rectangle.

Line Tool: The Line tool is in the upper right-hand corner of the Drawing Board to the left of the Box tool. The Line tool helps you create solid horizontal and vertical lines anywhere in your drawing. This tool is equivalent to selecting Draw: Solid Lines.

To draw a line with the Line tool:

- 1. Click on the Line tool.
- 2. Point to where you want the line to start.
- 3. Drag your mouse along the route the line will take. When the line is the length you want, release the mouse button. Pressing the mouse button causes the mouse pointer to act like a drawing pen on a sheet of paper. Releasing the mouse button lifts the drawing pen from the paper.
- 4. To draw another line or to continue this one, point to where you want the line to start and begin dragging your mouse again.
- 5. Click on your secondary mouse button to end the command.

Printing Your Chart

Org Plus now offers several additional print settings from Chart and from the Drawing Board. These settings will allow you to customize your chart and fit it on a single page with greater ease. The Chart enhancements are found in the Print Chart: Print command. The Drawing Board enhancements are found in the Layout: Printer Settings and Layout: Center Drawing commands.

Print Chart: Print

The Print Chart: Print command now allows you to:

- make the text in specified field(s) bold, underlined, or an alternate font
- bold or expand the chart title and subtitle
- select from 15 name abbreviation formats
- abbreviate the titles of the individuals in your chart with abbreviations available in Org Plus or those you add yourself
- more easily control font size with a laser printer
- see the % reduction required for your chart to fit on a single page

These new features are located on the Alternate Settings form. (See "Alternate Settings" in "Chapter 4: Printing Your Chart" for more information about the Alternate Settings form). The new features are described in detail below.

Alternate Settings

The Alternate Settings form is shown in Figure N-3. Once you are at the Alternate Settings form you can press Alt - F10 to have Org Plus prepare your chart immediately; or you can change one or more settings. The new settings are in F4 — Title & Annotations Of The Chart, F8 — Enhance Text With Bold Or Underline, and F9 — Make Fit.

Alternate Settings				
Press Ali	t-F10 to continue, or	press:		
F2	Items That Print In Each Box	F6	Amount Fields In Each Box	
F3	Box Style	F7	Orientation And Other Printer Settings	
F4	Title & Annotations Of The Chart	F8	Enhance Text With Bold Or Underline	
F5	Chart Format	F9	Make Fit	
Next Back				
Press Alt-F10 when complete				

Figure N-3. Alternate Settings Form

F4 — Title & Annotations Of The Chart

Your chart can have a title of up to three lines with 39 characters in each line. Org Plus centers the title above the chart.

You can also put annotations in the four corners of your chart. Each annotation can be four lines of 39 characters.

Title Font Size: This setting lets you choose an enhanced font for the chart title. Select Normal to make the text in the title the same size you have selected on the Make Fit — Step 3 of 3 form in F9 — Make Fit. Select Bold to make the text in the title bold. Select Expanded to make the text in the title larger than normal text.

Subtitle Font Size: This setting lets you choose an enhanced font for the chart subtitle. Select Normal to make the text in

the subtitle the same size you have selected on the Make Fit — Step 3 of 3 form in F9 — Make Fit. Select **Bold** to make the text in the subtitle bold. Select **Expanded** to make the text in the subtitle larger than normal text.

Bold and Expanded fonts will be displayed only when printing. They will not be displayed when Org Plus prints or previews to the screen.

To combine bold and expanded fonts on the chart title and subtitle, use the Options commands in the Drawing Board (see "Options" in "Chapter 9: Custom Drawing").

Adding the date: You can have Org Plus automatically print the date in a title or annotation. To print the date, type the Date Print-Time Code (%) as the first character in the field where you want the date. Then type a number from 1 through 6 following the %. This number tells Org Plus what format to use when printing the date. The formats are:

- 1 March 19, 1968
- 2 19 March 1968
- 3 3/19/68
- 4 19/3/68
- 5 -- 3-19-68
- **6** 19-3-68

For example, type %3 and Org Plus automatically prints the formatted date "3/19/68" in the title or annotation.

Org Plus ignores anything you type after the code. For the date to print correctly, the system date on your computer must be current.

F8 — Enhance Text With Bold Or Underline

This form allows you to vary the font used for the text and amount fields in the chart. The font you select for a field effects that field throughout the entire chart. If you want to change the font only for selected positions, you can use the Options commands in the Drawing Board (see "Options" in "Chapter 9: Custom Drawing").

Font for Name Field: Select Normal to make all the text in this field the same size you have selected on the Make Fit — Step 3 of 3 form in F9 — Make Fit. Select Bold to make all the text in this field bold. Select Underline to make the text underline. Select Alternate to make the text an alternate font. In most cases, the available alternate font is outline for laser printers and italics for dot matrix printers.

Font for Title Field: Select Normal to make all the text in this field the same size you have selected on the Make Fit — Step 3 of 3 form in [5] — Make Fit. Select Bold to make all the text in this field bold. Select Underline to make the text underline. Select Alternate to make the text an alternate font. In most cases, the available alternate font is outline for laser printers and italics for dot matrix printers.

Font for Other Fields: Select Normal to make all the text in this field the same size you have selected on the Make Fit — Step 3 of 3 form in [5] — Make Fit. Select Bold to make all the text in this field bold. Select Underline to make the text underline. Select Alternate to make the text an alternate font. In most cases, the available alternate font is outline for laser printers and italics for dot matrix printers.

Bold, underline, and alternate fonts will be displayed only when printing. They will not be displayed when Org Plus prints or previews to the screen.

Note: Typically, the Name field is the first text field and the Title field is the second text field of your chart. Changing the field labels will change the setting names in this form. If, for example, you change the first text field label from "Name" to "Person," the Font for Name Field setting in this form will change to Font for Person Field.

F9 - Make Fit

The selections on these 3 forms control the details by which Org Plus reduces your chart when you print. All of the selections described below are available if you print your chart using Manual. If you print using Automatic, the Name Format selection on the Make Fit — Step 1 of 3 form and the Abbreviate Titles selection on the Make Fit — Step 2 of 3 form are available. Org Plus makes the remaining selections on the Make Fit — Step 2 of 3 form and all of the selections on the Make Fit — Step 3 of 3 form for you. (See "Manual or Automatic" in "Chapter 4: Printing Your Chart" for more information on the difference between Manual and Automatic printing.)

Make Fit — Step 1 of 3: This form lets you select the Name Format by which you abbreviate the names in your chart when printing. Name formatting is available only for Text Field 1 (the default field label for this field is Name). There are 15 formats in the Name Format list.

For example, if you select the F. LAST item in the Name Format list, the name Kenneth L. Hess will be printed as K. HESS.

Note 1: Org Plus can usually correctly identify most two-word last names. If Org Plus has incorrectly identified someone's last name, place the entire last name between backslash characters in the Work Group Display. (The backslash characters will not print on charts or reports.) For example, to maintain the two-word last name Irish Hess, in the name Connie Irish Hess, it must be entered into the Name field (Text Field 1) as Connie \text{\text{Irish Hess}}\

Note 2: Name formatting is not available if you have used the Append Alt Field Print-Time Code. (See "Print-Time Codes" in "Chapter 6: Advanced Chart Making" for more information on Print-Time Codes.)

Make Fit — Step 2 of 3: On this form you select whether you will abbreviate titles, reset margins to minimum, reset box sizes to minimum, or use minimum line spacing.

■ At the Abbreviate Titles setting, select **Yes** if you want Org Plus to abbreviate the titles in the title field (Text Field 2) of your chart. Select No if you do not want Org Plus to abbreviate the titles.

Org Plus gives you the ability to modify the title abbreviations used. The abbreviations list is in an ASCII file named ABBREV.BIN. You can edit this file if you wish to add to or change the abbreviations.

The format used by each record in the file is:

<unabbreviated title>\<abbreviated title>

For example, if you wish to create a title abbreviation of "Emp." for the word "Emperor," quit Org Plus and use a word processor to edit the ABBREV.BIN file and add the following line:

Emperor\Emp.

There are 63 abbreviations in the default ABBREV.BIN file. The maximum number of abbreviations is 100 and the file must be saved as an ASCII file.

■ At the Reset Margins to Minimum setting, select **Reset** if you want to reset the margins in your chart. This will automatically set the Left Margin and Top Margin to Center on the Printer — Step 3 of 4 — Other Settings form (F7) on the Alternate Settings form).

Select **Don't Reset** if you want to use the current margin settings.

■ At the Reset Box Size to Minimum setting, select **Reset** if you want to reset the box sizes in your chart. This will automatically set Make Boxes Equal Height to No, Make Boxes Equal Width to No, and Squeeze Chart to Both on the Chart Format form (F5) on the Alternate Settings form).

Select **Don't Reset** if you do not wish to reset the box size settings to their minimums.

■ At the Minimum Line Spacing setting, select Yes if you wish to use the minimum line spacing available. This will automatically set the Line Spacing setting on the Printer — Step 3 of 4 — Other Settings form to the minimum available.

(F7) on the Alternate Settings form.)

Select No if you want to use the maximum available Line Spacing.

Make Fit — Step 3 of 3: On this form you select whether to change your printer font settings to reduce or expand the printing area of your chart.

The Font Size list shows the font settings you have available to expand or reduce your chart. Your current setting is the highlighted item in the list as represented by font size.

For example, if in Printer/Setup you select HP LaserJet II/III with the Great Start font cartridge, the Font Size list will have two items. That is, only 2 font sizes are available for this printer and cartridge.

If you are using a laser printer, Banner Blue recommends that you select a model in Printer/Setup that has "Many" in the "Pitches" column. For example, HP LaserJet users can select the No cartridge req'd - Letr Gothic Many or the No cartridge req'd - Quick Print Many setting to have the widest selection of fonts (see "Printer/Setup" in "Chapter 2: Getting Started").

If you have already chosen the smallest font available for your printer during Printer/Setup, you will only be able to expand your chart.

The Characters Per Inch (CPI) line tells you the character spacing for text in the chart. The CPI shown is based on your selection in the Font Size list and your selection in Printer/Setup.

The Size (pages) line tells you the chart size in pages (width x height) based on your selection in the Font Size list. Changes

in the Font Size list settings may change the number of pages required.

Org Plus tells you whether your chart will fit on a single page with the current Make Fit settings. If your chart does not fit, Org Plus tells you the % you will need to photo-reduce the chart to fit on a single page. You can use this number to set the % reduction number on your copier. A change in the Font Size setting will usually change the % you need to photo-reduce.

Layout: **Printer Settings**

In the Drawing Board, the Layout: Printer Settings command now allows you to more easily control font size with a laser printer.

To use this new feature:

- 1. From any place in the Drawing Board, select Lavout: **Printer Settings.**
- 2. Press Alt F10 until you reach the Printer Step 4 of 5 Make Fit form.
- 3. Select one of the items in the Font Size list.

The Font Size list shows the font settings you have available to expand or reduce the chart based on the selections you made in Printer/Setup. Your current font setting is the highlighted item in the list.

For example, if in Printer/Setup you select HP® LaserJet II/III with the Great Start font cartridge, the Font Size list has two items. That is, only 2 font sizes are available for this printer and cartridge.

If you have already chosen the smallest font available for your printer in Printer/Setup, you will only be able to expand your chart.

The Characters Per Inch (CPI) line tells you the character spacing for text in the drawing. The CPI shown is based on your selection in the Font Size list and your selection in Printer/Setup.

The Size (pages) line tells you the drawing size in pages (width x height) based on your selection in the Font Size list. Changes in the Font Size list settings may change the number of pages required.

Note: The other forms in this command are unchanged except for control of the character spacing (CPI). CPI is now controlled through the Font Size list in the Printer — Step 4 of 5 — Make Fit form. (See "Layout: Printer Settings" in "Chapter 9: Custom Drawing" for information on the other forms in this command.)

Layout: Center Drawing

The Layout: Center Drawing command is a new Drawing Board command that automatically centers your drawing for you. To use this feature, select **Layout**: **Center Drawing**. Your drawing is centered within the page or pages on which it prints.

Advanced Chart Making

There are now several additional methods of importing charts into Org Plus and exporting charts out of Org Plus. Harvard Graphics® charts can be retrieved directly. Other new import and export methods are found in the File: Exchange Data command in Chart and the File: Create TIFF File command in the Drawing Board.

File: **Exchange Data**

The File: Exchange Data command in Chart lets you import information from and export information to other programs such as dBase® or Lotus 1-2-3®.

This command now allows you to:

- Export data directly to Harvard Graphics organization charts
- Export ASCII data with manager names defined
- Import ASCII data into Org Plus with manager names defined

Exporting Data from Org Plus to Harvard Graphics

Org Plus directly exports a chart into a file that can be read by Harvard Graphics. To export your chart:

- 1. From the Work Group Display, select File: Exchange Data.
- 2. Select Export to Harvard Graphics.
- 3. Org Plus asks you to specify a name for the file to contain the exported data. Give the file a name. It must be different than the chart name.
- 4. Press Enter .

Note 1: To export a branch of the chart, use the File: Save Branch command first to save the branch as a separate chart (see "File: Save Branch" in "Chapter 6: Advanced Chart-Making").

Note 2: Chart titles and subtitles will be exported as expanded text. The fields in the chart will be exported as normal text.

Because of Org Plus' greater capacity and flexibility, data may be lost during the exporting process. To insure that no data is lost, make sure your chart does not exceed the Harvard Graphics limitations:

- 80 positions
- 3 regular text fields (Name, Title, and Comment 1 only) per position
- maximum regular text field size of 22 characters
- 3 alternate fields (Alt1, Alt2, and Alt3 only) per position
- maximum alternate text field size of 11 characters
- bottom left annotations only
- Solid or Shadow box styles only
- no amount field data

Org Plus will give you an error message if you violate the Harvard Graphics 80 position maximum. No warning will be given if you violate any of the other limitations and the data will be truncated.

Exporting ASCII Data with Manager Names

Org Plus now allows you to export data to a comma-delimited ASCII file that contains an extra text string which defines each position's manager. You can use this command to take the data out of Org Plus, edit it with another software program, and then import it back into Org Plus using the File: Import with Manager Info command (see below).

- 1. From the Work Group Display select File: Exchange Data.
- 2. Select Export ASCII with Manager Info.

Org Plus asks you to specify a name for the file to contain the exported data. Give the file a name. It must be different from the chart name.

- 3. Press Enter .
- 4. Provide the file name and drive (or path) if necessary.
- 5. Press Enter . Org Plus creates a comma-delimited ASCII file using the name you have provided.

Importing Data into Org Plus with Manager Names

Org Plus now allows you to import data from a commadelimited ASCII file without structuring a chart for the data. The structure can be determined by specifying each position's manager in the first text string of each record.

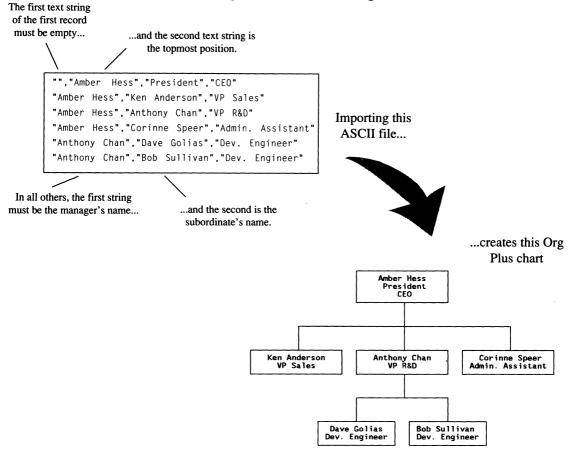


Figure N-4. ASCII Import with Manager

Figure N-4 shows an example of a comma-delimited ASCII file with manager names and the resulting Org Plus Chart. In each record the first text string contains the manager's name. The topmost position of the chart, Amber Hess, must have a blank first text string ("") and it must be the first record in the file. There can be only one topmost manager in an imported ASCII file. The second text string in each record must contain the subordinate's name.

When you are ready to import your chart from a commadelimited ASCII file:

- 1. From the Main Menu select **Work On Chart**. You should now have a new empty chart on your screen in the Work Group Display.
- 2. Select File: Exchange Data.
- 3. Select **Import ASCII with Manager Info**. Org Plus asks you to specify the name of the comma-delimited ASCII file that contains the data to import.
- 4. Provide the file name and drive (or path) if necessary.
- 5. Press Enter . Org Plus reads the data, record by record, from this file. It matches each record with its manager, based on the manager defined in the first text string and the subordinate name in the second text string.

The first item in each line (record) of the imported file must be a text string (in quotes). Org Plus uses the first text string to identify the position's manager. The second text string must contain the subordinate's name. The manager text strings are matched with the subordinate text strings to determine the chart structure. The manager text string is not imported into the chart. The other strings in the record will be imported in order. The second text string (always the subordinate's name) goes into Text Field 1, the third into Text Field 2. The first number goes into Amount Field A, and so on.

In order for Org Plus to match the subordinates to their managers, the spelling and punctuation of the names must match

exactly. For example, in Figure N-4, if the first text string of Corinne Speer's record contained "A. Hess" instead of "Amber Hess," Org Plus would display an error message and none of the records would be imported. Org Plus can correctly match names that do not have the same capitalization.

The first 13 text strings (including the manager text string) in an imported record can be up to 80 characters in length. However, Org Plus uses only the first 25 characters for Text Fields and 15 characters for Alternate Text Fields. Extra characters are truncated. Text Fields cannot include embedded quotation marks.

You can import up to twelve text strings (not including the manager text string) and up to six numeric strings. You cannot import data into Consolidated Amount Fields.

Once Org Plus imports the data, you can edit the chart, add formulas and Amount Field labels, and so on.

The text in the first and second text strings does not have to be names. You can use any sort of identifying codes you want as long as the first string identifies the position's "Manager" and is different from the second string. (However, codes might make your chart harder to work with.)

Text and numeric data can be mixed in the imported file after the second text string. Org Plus still places them in order, in their respective field types. For example, you can import "manager", "subordinate", 33, "title", 543, "comment 1", etc.

You can skip a field when you import data. For example, you can import data for Text Field 1 and Text Field 3 but not Text Field 2. Use "" in place of the field you want to skip. Skip numerical fields with a comma (321,45, 50, 63).

Note: If you get an error message when importing an ASCII file with manager names, verify that the following statements are true for your ASCII file:

■ the first text string of the first record (topmost manager) is an empty field ("")

- there is only one topmost manager (i.e. there is only one record with empty quotes as the first text string)
- each record starts with a manager text string followed by the subordinate text string
- no manager reports to him or herself
- where names appear in more than one record, they are punctuated and spelled exactly the same

Importing Charts from Harvard Graphics

Org Plus can now directly retrieve a Harvard Graphics (version 2.1 or higher) organization chart. Retrieving a Harvard Graphics organization chart is the same as retrieving an Org Plus chart.

Note: Harvard Graphics has a specific feature for creating organization charts. You must create your organization chart with this feature in order for Org Plus to be able to import the file (see "Creating Organization Charts" in your Harvard Graphics manual).

To work on a Harvard Graphics chart, follow the same instructions used to retrieve an Org Plus chart (see "Retrieve Chart" in "Chapter 3: Building a Chart").

The following Harvard Graphics data will be maintained when imported into Org Plus:

- Chart titles
- Chart subtitles
- Footnotes
- Names
- Titles
- Comments
- Assistant Positions
- Chart Styles
- Box Styles
- Paper Orientation

Org Plus does not import character enhancements, such as bold text, or graphical enhancements, such as graphical symbols. Footnotes will be imported as bottom left annotations in your chart. Harvard Graphics Assistant positions which have subordinates will be imported as regular positions instead of staff level positions.

File: Create TIFF File

Org Plus now supports the export of drawings into a TIFF (Tagged Image File Format) file through the File: Create TIFF File command in the Drawing Board (see "Drawing Board" in "Chapter 9: Custom Drawing"). A wide variety of word processing, desktop publishing and presentation programs support the TIFF format.

To export your drawing into a TIFF file:

- 1. Create a drawing from your chart or retrieve an existing drawing in the Drawing Board (see "Create Drawing" and "Retrieve Drawing" in "Chapter 9: Custom Drawing").
- 2. Select File: Create TIFF File. The Create TIFF File form appears.
- 3. On this form, you tell Org Plus the font size (in characters per inch) with which you want the TIFF file to be created.

Select Very Small if you want to create a TIFF file that uses 37 cpi fonts. Select Small if you want to create a TIFF file that uses 30 cpi fonts. Select Normal if you want to create a TIFF file that uses 23 cpi fonts. Select Large if you want to create a TIFF file that uses 20 cpi fonts. Select Very Large if you want to create a TIFF file that uses 16 cpi fonts.

Org Plus displays the approximate file size (in bytes) of the TIFF file based on the size you select and the dimensions of the drawing. You can use this information to make sure you have adequate disk space available for creating the TIFF file.

Note: Creating a TIFF file from a large chart may require significant disk space. Make sure you have sufficient disk space available before proceeding.

Org Plus also displays the approximate printed size (in inches) of the TIFF file. The printed size estimate is based on the assumption that, after export, you will be printing your chart to a laser printer that has a resolution of 300 dots per inch. If you are printing to a dot matrix printer, the printed size estimate will be too low. In other words, the TIFF file, when printed, will be larger than Org Plus indicates.

- 4. After you have selected from the Size list, Org Plus displays the Name for Tiff File form and asks you to provide a drive (or path) and a file name.
- 5. To store the TIFF file on a drive (or path) different from the one displayed, press Tab → Type the correct drive (or path). Then press Enter ← ...
- Give the TIFF file a name. The file name must end with ".TIF". Org Plus adds this extension to the file name if you do not.

Note: For best results when creating a TIFF file for use with another program, select the Size list item which displays a printed size smaller than or equal to the size you want the drawing to appear in the other program. If you attempt to reduce the size of the drawing once it is in the other program, lines may disappear.

Exporting Your Charts

Export Formats

Charts made in Org Plus can be exported to several different file formats. The following is a summary of the available formats and the method used to create them:

ASCII Data File: Export the data (not including lines and boxes) from your chart as a comma-delimited ASCII file. You can create this file with the File: Exchange Data command in Chart (see "Exporting Data from Org Plus" in "Chapter 6: Advanced Chart-Making"). This format is used to export data into database products such as Lotus 1-2-3 and dBase.

ASCII With Graphics File: Export your chart (including lines and boxes) as an ASCII file that uses the IBM extended Graphics character set for the lines and boxes. You can create this file by following the instructions on printing to disk with the Sideways-Ver3 file format (see "Printing to Disk" in "Chapter 4: Printing Your Chart"). This format is best used for charts that fit on a single page.

ASCII Without Graphics File: Export your chart (including lines and boxes) as an ASCII file. Graphics fonts will not be used. Lines and box shapes will be printed using ASCII characters. You can create this file by following the instructions on printing to disk with the Sideways-Ver2 file format (see "Printing to Disk" in "Chapter 4: Printing Your Chart"). This format is best used for charts that fit on a single page.

ASCII Data with Manager Names File: Export the data (not including lines and boxes) from your chart as a commadelimited ASCII file with an extra text string for each record which defines each position's manager. You can create this file with the File: Exchange Data command in Chart (see "Exporting ASCII Data with Manager Names" earlier in this chapter). This format is used to export data into word processors or text editors so that you can use the text editing features in these programs and then easily import the data back into your chart.

Harvard Graphics File: Export your chart into a Harvard Graphics organization chart file. You can create this file with the File: Exchange Data command in Chart. (See also "Export-

ing Data from Org Plus to Harvard Graphics" earlier in this chapter.) This format is only used for Harvard Graphics.

HPGL File: Export your chart into an HPGL (Hewlett Packard Graphics Language) format file. You can create this file by selecting one of the HP Plotter settings in Printer/Setup and then printing to disk (see "About HPGL Format" in "Chapter 4: Printing Your Chart"). Note that the program you are exporting to must accept HPGL files. Also, the HPGL file format does not support enhanced text information such as bold or enlarged titles.

TIFF File: Export your drawing into a TIFF file. You can create this file with the File: Create TIFF File command in the Drawing Board. (See also "File: Create TIFF File" earlier in this chapter). Note that the program you are exporting to must accept TIFF files. Also, this format is best used if the printed size of the drawing, as specified by Org Plus during TIFF file export, is the same size or smaller than the space you have designated for it in the other program.

Recommended Export Formats

If you are using one of the following software packages and wish to export an Org Plus chart or drawing to it, we recommend the following file formats:

Aldus PageMaker: TIFF file.

Harvard Graphics: Harvard Graphics file.

Microsoft Word: TIFF file. Word for Windows has scaling utilities which allow you to resize or reduce the size of your TIFF file without losing information.

Word Perfect (Version 5.1 and later): HPGL file, unless enhanced text is used. You can use a TIFF file but you need to be careful to create the TIFF file small enough to fit the allocated space in your Word Perfect document.

Ventura Publisher: HPGL file, unless enhanced text is used. You can use a TIFF file but you need to be careful to create the TIFF file small enough to fit the allocated space in your Ventura document.

Introduction to **Org Plus Advanced**

What Org Plus Advanced Can Do

Org Plus Advanced automatically prints tree diagrams for a wide range of applications. You can use Org Plus for organization charts, work breakdown structures, and more. Just enter the names and comments. Then Org Plus draws and spaces the boxes, positions the text, and precisely lays out the connecting lines. Org Plus offers a selection of seven different chart styles.

A simple diagram may have a single name in each box. A complex diagram may have up to eight lines of text and twelve additional lines of numerical data in each box. You can also print four lines of text on the outside corners of each box. Keep track of numerical information such as salaries, commissions, budgets, office space, and project hours with a minispreadsheet for each position. Org Plus does the arithmetic so it is easy to compare results by position, branch, or level. The power lies in its ability to consolidate numerical results, position by position, up the branches of your chart.

Org Plus prints simple tabular reports, such as a phone list, from the information in your chart. And its exciting, unique ability to recognize names from around the world is a real time saver. Enter names in your chart first name first. Then Org Plus can do the hard work of sorting and printing your reports last name first.

Org Plus gives you a complete set of editing capabilities that let you insert, delete, and move positions. You can update charts in minutes.

Org Plus lets you electronically cut and paste your chart. Put your chart in the Drawing Board and make changes right on the screen. Draw vertical and horizontal lines. Add boxes and annotations anywhere. Depending on your printer, enhance the text with bold, underline, and italics. Make chart titles larger, and add borders to your chart.

Here are examples of the kinds of charts you can produce with Org Plus.

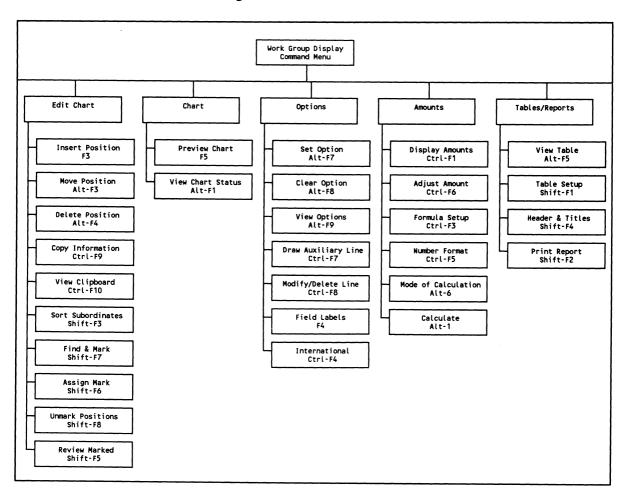


Figure 1-1. Work Group Display menu tree showing the program command structure

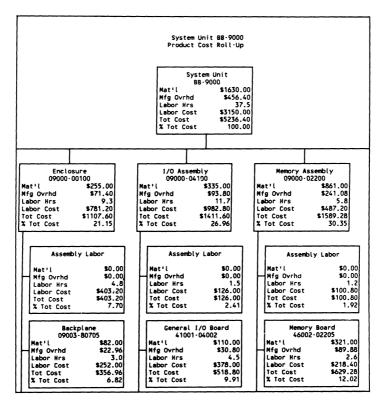


Figure 1-2. Product cost roll-up chart showing component costs

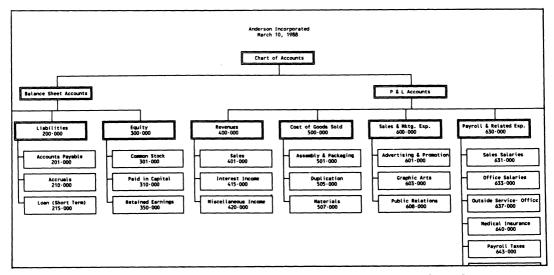


Figure 1-3. Chart of accounts diagram with account names and numbers

Using this Guide

"Chapter 2: Getting Started" tells how to install Org Plus for use with your computer and printer. Everyone should read this chapter.

"Chapter 3: Building a Chart" describes how to use the basic capabilities of Org Plus. It includes a short tutorial to help you get started.

"Chapter 4: Printing Your Chart" explains how to print a chart. It discusses the choices you can make to control the way your chart appears.

"Chapter 5: Editing Your Chart" tells you how to make changes to an existing chart. This includes revising the text, moving parts of the chart around, and much more.

Read the following chapters as your needs require.

"Chapter 6: Advanced Chart-Making" discusses some advanced features. These features can help you achieve even more flexibility in the way your final charts appear. It also provides hints for accomplishing a number of specific chart layouts and applications.

"Chapter 7: Tables and Reports" shows you how to produce a tabular report, such as a phone list, from the information in your chart.

"Chapter 8: Amounts" discusses how to use the numerical abilities of Org Plus for counting, classifying, calculating, and consolidating.

"Chapter 9: Custom Drawing" explains how to use the Drawing Board to electronically cut and paste or customize your chart.

"Appendix A: Key Assignments" puts all key assignments in one convenient location. This appendix also describes advanced cursor movement and text editing commands.

"Appendix B: Troubleshooting" addresses a few of the most common problems that users of Org Plus may encounter.

"Appendix C: Memory Utilization and Other Org Plus Limits" describes the specifications and requirements for running this program.

"Appendix D: More on Printers" includes printer information specific to individual printer models.

"Appendix E: Laser Printer Soft Fonts" is a list of soft fonts included with the program.

Note: Most examples in this guide refer to an organization chart because that is the most common use for Org Plus. Don't let that discourage you from using it for other applications.

What You Need

Org Plus requires an IBM personal computer or 100% compatible computer. It must have at least 512KB of memory and a hard disk.

You also need IBM Disk Operating System (PC-DOS) Version 3.0 or above and a graphics printer or plotter.

Org Plus runs with monochrome, CGA, EGA, VGA, and Hercules display adaptors.

Org Plus supports a wide variety of printers. For the best quality output, you should use a printer that supports graphics, such as a dot matrix or laser printer. Org Plus also works with a daisywheel (letter-quality) printer. However, a daisywheel printer cannot produce the solid lines and boxes you normally expect in an organization chart.

Org Plus supports printers from most major printer manufacturers. It also supports most printers that use the standard protocols defined by Epson or IBM printers, or the Hewlett-Packard LaserJet family.

It supports Hewlett-Packard plotters and other plotters that use Hewlett-Packard's plotter language (HPGL).

First Things First

Please fill out and return the Registration Card now! We offer registered users the following special benefits:

- Free telephone assistance on using Org Plus Advanced.
- A periodic newsletter with tips and suggestions.
- Substantial discounts through the Banner Blue Product Upgrade Program.

About Customer Assistance

If you have any problems using Org Plus Advanced, take these steps in the order listed:

- 1. Check the index in this manual for a listing of the subject you need help on.
- 2. Review "Appendix B: Troubleshooting."
- 3. Call Banner Blue product support. The hours are Monday through Friday, 8:00 AM to 5:00 PM, Pacific time.

Until September 2, 1991, please call: 415-794-6850. After September 2, 1991, please call: 510-794-6850.

We can help you best if you call while you are at your computer.

To be eligible for free Customer Assistance, you must first send in your registration card!

Product Upgrade Plan

Periodically we make new versions of our software available to registered owners at substantial discounts. If you return your registration card, we will notify you about new versions as they become available.

Getting Started

This chapter contains information and procedures you need to set up Org Plus on your computer system. It covers:

- the README program
- installing and starting Org Plus on a fixed-disk system
- telling Org Plus about your printer or plotter

About the Diskettes

Org Plus comes on both $3^{1}/2$ inch and $5^{1}/4$ inch diskettes. (The $5^{1}/4$ inch diskettes have a hole in the middle when you take the disk out of its sleeve.) Follow the appropriate set of instructions below for your system.

Your Org Plus diskettes contain two sample charts that are already created and ready to print. You can use the Retrieve Chart command to retrieve and look at these charts. The Figures in "Chapter 3: Building a Chart" show the SAMPLE1.ORG chart. "Chapter 7: Tables and Reports" also refers to SAMPLE1.ORG. And SAMPLE2.ORG contains the chart pictured on the front of this user's guide (with slight modifications).

The README Program

"Diskette 2 - Draw" (or "Diskette A - Chart & Draw" if you have a $3^{1}/2$ inch drive) contains a program named README. This program contains information about Org Plus not possible to include in the user's guide due to publication lead times. You may also find advanced topics, timely tips, and troubleshooting information.

Follow these steps to access this information:

- 1. Insert "Diskette 2 Draw" into your diskette drive. Or insert "Diskette A - Chart & Draw" if you have a 31/2 inch drive.
- 2. Make sure that the DOS prompt for that diskette drive is on

your screen. In other words, if the Org Plus diskette is in drive A, the prompt on your screen is A>.

- 3. Type README and press Enter . (You can type in uppercase or lowercase letters.)
- 4. Use the cursor up ↑ and cursor down ↓ or PgUp and PgDn keys to scroll through the information.
- 5. Press Escape Esc to return to DOS.

You can also print the information on your printer. Make sure your printer is turned on. Then type PRINTDOC at the DOS prompt.

Installing Org Plus on Your Computer

Do not run Org Plus from the original Org Plus diskettes. Install Org Plus on your fixed disk and store the originals as a backup.

This software and the user's guide are protected by U.S. and International copyright law. Like a book, the software can only be used by one person on one computer at a time. You may not make copies of the software except for back-up purposes. You may make a maximum of two back-up copies. The software must be installed on your fixed disk. Be sure to read the license agreement at the front of this user's guide before installing and using Org Plus.

A separate license is required for installing or downloading Org Plus on a network. Contact Banner Blue for details.

Installing Org Plus on a Fixed Disk

Banner Blue recommends that you install Org Plus in its own subdirectory on your fixed disk. A subdirectory is like a folder in a filing cabinet. When you keep Org Plus in its own subdirectory, you avoid intermingling charts with files produced by other programs. This makes it easier to locate the file you need.

Note: Org Plus-does not run on a two-diskette system. A hard disk is required.

If you already have an earlier version of Org Plus installed in the same subdirectory, this version will replace it. Your chart files will not be disturbed, but you will have to select your printer again through Printer/Setup.

Follow these steps to install Org Plus onto a Fixed Disk.

- 1. Make sure the DOS C> prompt is on your screen. If you are installing Org Plus in a subdirectory, make it the current subdirectory.
- 2. Insert "Diskette 1 Chart" (for computers with a $5^{1}/4$ inch drive) or "Diskette A - Chart & Draw" (for computers with a $3^{1}/2$ inch drive) into drive A and close the door.
- 3. Type A: FD and press Enter . A message appears on the screen to tell you that the installation is taking place. The installation procedure copies the files from drive A to the current drive and directory (drive C).

Messages prompt you to insert diskettes until all of the files have been copied.

4. When installation is complete, store the original Org Plus diskettes in a safe place.

Note: If you copy Org Plus from a diskette drive other than drive A, do not use the instructions above. Use the DOS COPY command instead. Refer to your DOS (operating system) manual for instructions.

Starting Org Plus from a Fixed-Disk System

To start Org Plus:

- 1. Make sure the DOS C> prompt is on your screen.
- 2. If you installed Org Plus into a subdirectory, make this subdirectory the current directory.
- 3. Type ORG and press Enter . After several seconds you see the Org Plus Main Menu and copyright notice. You also see the version number of Org Plus.

If your system has insufficient memory available, Org Plus tells you how to proceed.

If this is the first time you are using Org Plus, proceed to the section "Printer/Setup" below.

Starting Org Plus Stand-alone

You may wish to start Chart or Draw stand-alone if you have a very large chart. Or, you may wish to start only Draw if you're working with existing drawings and don't need to go through Chart to get to the Drawing Board. To start Chart stand-alone, type CHART from the DOS prompt; to start Draw stand-alone, type DRAW from the DOS prompt.

Printer/Setup

Org Plus needs to know some information about your printer or plotter and where you will store your charts. (It also needs to know your preferences about certain aspects of the program, such as the colors the program should use on screen.) To get the information, Org Plus displays a set of forms on which you make selections. Org Plus saves this information and uses it from work session to work session until you change it.

Printer/Setup has three sections: Installing the Printer, Defining the Page, and Preferences. Just follow the instructions below (as well as the helpful comments that appear on the screen from time to time); the whole process takes only a few minutes.

Start Org Plus as described in "Starting Org Plus from a Fixed-Disk System." When the Main Menu appears, select **Printer/Setup**. (Press cursor down key to highlight Printer/Setup, then press Enter . Or, just type the letter P.) Org Plus displays a list of printer manufacturers.

Note: Org Plus takes you through a series of screens on which you make choices. To move on to the next screen, press

Alt - F10. To move back to the previous screen, press Esc.

Installing the Printer

1. Select your printer's manufacturer. Use the cursor keys, \uparrow \downarrow , to move through the list.

Note: Not all manufacturers are listed. However, many printers emulate (behave like) the ones listed. For example, a printer may emulate an Epson FX printer or an IBM Proprinter (just to name two).

If your printer manufacturer is not listed, but your printer emulates one that is, select that manufacturer. You can usually find this information in your printer manual.

In the unlikely event that your printer manufacturer is not listed and does not emulate one that is, select **Other**. For more help in determining which manufacturer to select, see "When You Are Not Sure What Printer Setting To Use" in "Appendix D: More on Printers."

When you have made your choice, press Alt - F10 to continue: a list of models appears.

2. Select your printer's model. Use the cursor keys, $\uparrow \uparrow \downarrow$, to move through the list.

Not all models are listed. If your printer is made by the manufacturer you have chosen, but the model is not listed, select the closest description. For example, if your printer is an Epson LQ 2500, you will not see the specific model number, but there is a choice called LQ Series. Since your model number has LQ in it, you should choose this one.

If you are using a large format plotter, and your model is not listed, choose the selection "Other HPGL Plotter." (See "Large Format Plotters" in "Appendix D: More on Printers.")

Sometimes more than one choice will work correctly with your printer. Usually these other choices are for special purposes. For example, you can use LO Tiny Font (under the manufacturer Epson) for any Epson LQ series printer: It will cause the print to be much smaller (more characters per inch) than the print with the selection LQ Series.

When you have made your choice, press Alt - F10 to continue: A list of ports appears.

Note: Org Plus sometimes displays a message specific to the printer model you have chosen before the list of ports appears. For more information about specific printer models, see "Appendix D: More on Printers."

3. Use the cursor keys, \uparrow \downarrow , to select the appropriate port.

Your printer connects to your computer via a cable to a "port." If your system has more than one port, you need to tell Org Plus which one your printer connects to.

If you do not know which connection to use, try LPT1 (the most commonly used port for printers). Or ask someone who knows how your computer is set up to help you.

When you select one of the "COM" choices, Org Plus asks additional questions about the connection (baud rate, data bits, stop bits, and parity). If you do not know what to answer and the information you need is not in the documentation that came with your printer, use the suggested (default) settings.

If you have a printer that is listed by name and after following these instructions you discover that it is not working properly, refer to "Appendix D: More on Printers."

(If you have an HP 7470A, 7475A or ColorPro plotter, Org. Plus displays an image of the plotter's switch block. If the image does not match the switches on your plotter, you may have selected the wrong plotter in Printer/Setup.)

Note to plotter users: If your model choice is "Other HPGL Plotter", an extra form appears asking you about the pens in the plotter. Answer the questions; then press Alt - F10 to continue.

Defining the Page

1. Set the paper size to match the actual size of the paper in your printer. If you change the paper size in your printer, you must repeat these steps to change the paper size in Org Plus. (You can also set the paper size while printing.) Otherwise, your charts do not center on the page.

For printers, you can use up to 14 inch wide paper. For plotters, you can select paper sizes up to 34 x 44 inches.

You must use D-size paper (22 x 34 inches) or larger with an HP 7580B, 7585B, 7586B, DraftPro, or DraftMaster plotter. If you use smaller paper your chart prints out of limits. (See "Large Format Plotters" in "Appendix D: More on Printers.")

Make your selection, then press Alt - F10 to continue.

2. When the question about Continuous Forms appears, select Yes if your printer uses continuous forms (where each sheet of paper connects to the next one), or if your printer automatically loads the next sheet of paper (like most laser printers).

If you manually insert single sheets of paper into your printer, select No.

Make your selection, then press Alt - F10 to continue.

3. When the question about Cut-Sheet Feeder appears, if your printer has a cut-sheet feeder attached, select Yes. This tells Org Plus to compensate for the extra top margin most sheet feeders leave at the top of the page. (You should also have Continuous Forms set to Yes.)

Org Plus ignores this setting if you are using a laser printer.

Make your selection, then press Alt - F10 to continue.

Preferences

1. "Save Files To:" wants to know the drive to use for saving and retrieving the charts you create.

With a fixed-disk system, you probably save your charts to the fixed disk, in the same subdirectory as the Org Plus program itself. If this is the case, leave the "Save Files To:" line *completely blank* to indicate that Org Plus should look for files in the current directory on the fixed disk.

If this is not the case, you can specify a different subdirectory name as the path, such as, C:\ORG. In this case Org Plus looks in the ORG subdirectory for your charts. Or, finally, if you wish to save your files to a floppy diskette, you can type the name of your floppy drive; for example, A:

Note: Path is an advanced DOS concept. Its use is optional.

Make your selection, then press Alt - F10 to continue.

2. If your computer has a Graphics Display Adapter, Org Plus asks you to choose the colors for your display. Use the cursor keys to highlight your selections. Org Plus displays the set of colors that corresponds to that choice. Press

Alt - F10 to select one of the colors. The selection takes effect immediately.

The setup process is now complete. Org Plus automatically stores the settings onto the disk. To change any of these settings, repeat these steps.

Using Org Plus Advanced on a Network

If you plan to download Org Plus from a network, you will need Banner Blue Software's 5-Pack License. This is a cost-effective way to provide network users simultaneous access to Org Plus. A 5-Pack License ensures that you are in compliance with Banner Blue's License Agreement. You also get technical information about using Org Plus Advanced on a network. Contact Banner Blue Software directly regarding a 5-Pack License if you want to use Org Plus on a network.

Exiting Org Plus

You can exit from Org Plus by selecting Quit from the Main Menu.

To select Quit, cursor down 1 to highlight Quit on the Main Menu and press Enter . Or, type the letter Q.

If you have worked on your chart without saving it, Org Plus gives you a warning message. Select Yes to lose the chart and exit to DOS, or select No to return to the Main Menu for another chance to save your chart.

Building A Chart

This chapter covers some basics about the use of Org Plus. Then it takes you step-by-step through the construction of a typical application, an organization chart.

This chapter covers:

- definition of program concepts and terminology
- general rules for making charts
- tutorial—creating and printing a chart
- using the program—menus, screen displays, Help
- working with your chart—editing text, commands, moving around the chart
- saving, retrieving, clearing, and erasing chart files

The step-by-step tutorial in this chapter leads you through creating and printing a simple chart. It is a good way to get hands-on experience with Org Plus. However, you can skip the tutorial and read in detail how Org Plus works. You can run Org Plus while you read, observe the screen displays, and experiment with the program features.

Some Essential Terms

This section explains some terms that will help you understand how Org Plus works.

Position

Positions are the things that Org Plus charts. In an organization chart, each position is an individual or department. Technical users can think of positions as nodes. Generally, each position represents a box on the printed chart.

Work Group

A work group is a position and its direct subordinates (if any). In a company organization chart, a work group usually includes a manager or supervisor and his or her direct reports.

The work group is the building block for all Org Plus charts. A chart is just a collection of work groups stacked upon each other like a pyramid. The manager of a lower work group is a subordinate in the next higher work group.

Chart Level

A chart level is a single tier or layer of the chart. Figure 3-1 shows a four-level chart. Positions at a single level usually appear next to each other, as in level 2 or 3. However, the positions at level four appear in a column, stacked vertically upon one another.

Normally, the direct subordinates of a position are one chart level below the position. For example, a manager at chart level 2 has subordinates at chart level 3.

Allen Manufacturing Company Current Organization September 15, 1988

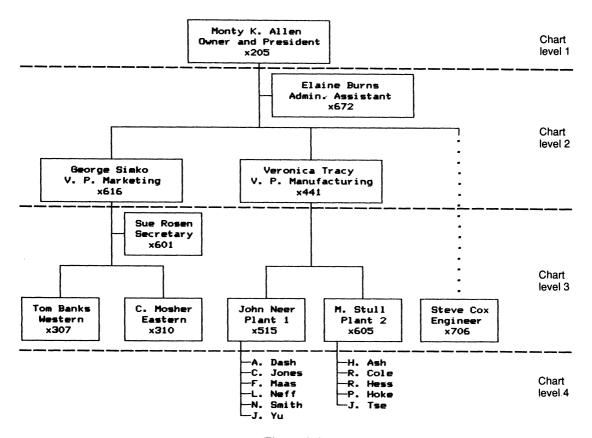


Figure 3-1

Siblings

Siblings are subordinate positions that report directly to the same position. In Figure 3-1, Tom Banks and C. Mosher are siblings. John Neer and M. Stull are siblings. However, C. Mosher and John Neer are not siblings, because they do not report to the same position.

Branch

A branch consists of a position and all positions, to the bottom of the chart, that report to it. In Figure 3-1, Veronica Tracy's branch includes John Neer, M. Stull, and their subordinates.

Chart Style

Chart Style is the arrangement of positions in the printed chart. Org Plus normally arranges boxes horizontally. Other arrangements are available. "Chapter 6: Advanced Chart-Making" contains a detailed discussion of chart styles.

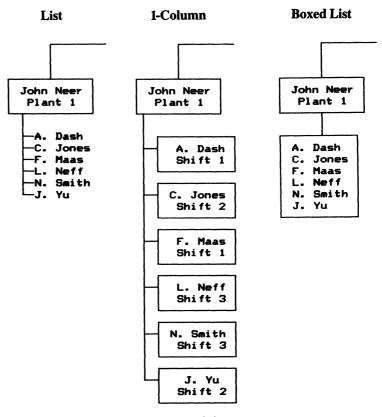


Figure 3-2

You can select from a variety of different chart styles when you print. (See "Print Chart: Print" in "Chapter 4: Printing Your Chart.")

The style you select controls the arrangement of positions at the bottom levels of your printed chart. At higher levels, Org Plus uses a horizontal style unless you specify another using the Set Option command. You can also use the Set Option command to change the chart style for a work group or chart level. (See "Options: Set Option" in "Chapter 6: Advanced Chart-Making.") And, using hidden positions, you can create special chart style effects. (See "Hidden Positions" in "Chapter 6: Advanced Chart-Making.")

General Rules for **Making Organization** Charts

Here are some general rules for making organization charts. Following these rules will make your charts easy to understand. They will look professional, too.

Keep the chart simple.

A chart that is crammed with information can be very hard to read and understand. To avoid this:

- make reporting relationships easy to see
- don't try to show too much on one chart
- use auxiliary lines sparingly

Treat equal status or rank equally.

Make boxes at the same level the same size. Make boxes at the top at least as big as boxes lower down in the chart.

(Org Plus has both of these rules built into the program.)

Use horizontal chart styles except at the bottom of the chart.

The horizontal chart style is the easiest to read and is the most professional looking. Equal positions are aligned in a horizontal style. Columnar or list chart styles are very useful at the lowest levels of the chart. They maintain clarity while limiting the width of your chart.

(Again, Org Plus has this rule built into the program.)

Make the order of information consistent throughout the chart.

Decide whether the name or the title (or other information) should be first in each position. Then do it the same way throughout the chart. Org Plus lets you select which field prints first: from the Alternate Settings form select "F2 — Items That Print In Each Box" then move forward to the third form (Print Control — 3 of 3). (See "Chapter 4: Printing Your Chart.")

Within groups, put individuals in alphabetical name order.

You can use the Sort Subordinates command to sort work group positions, including by last name first. (See "Chapter 5: Editing Your Chart" for details on sorting subordinates.)

Break up cluttered and crowded charts into separate charts by division or department.

You can print sections of your chart with the Print Part command. (See "Chapter 4: Printing Your Chart.") Or save branches of your chart as separate charts using the Save Branch command. (See "Chapter 6: Advanced Chart-Making.")

A Tutorial

The best way to learn to use Org Plus is to create and print a small chart. This tutorial shows you how to create the chart in Figure 3-3.

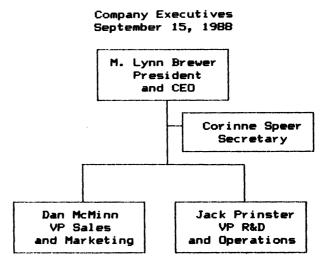


Figure 3-3

You will also learn how to move around the chart and how to print.

Before you begin, install Org Plus on your computer, and start the program following the instructions in "Chapter 2: Getting Started."

Start a new chart from the Main Menu.

1. Select Work On Chart from the Main Menu.

To make a selection, you can press the first letter of the selection. Or you can use the cursor keys \uparrow \downarrow \rightarrow \leftarrow to highlight your selection and then press Enter \leftarrow . If your selection is already highlighted, just press Enter \leftarrow to confirm your selection.

You should see a Current Position Box at the top of the screen with only the Name field displayed.

2. Type M. Lynn Brewer and press Enter . Org Plus now shows the complete Work Group Display.

The Work Group Display consists of a Current Position Box at the top of the display and a Subordinates' Box underneath.

- 3. Press the cursor down key ↓ to move the cursor to the Title field.
- 4. Type President press Enter . The cursor moves to the first Comment field.

Enter the President's subordinates.

- 1. Press the cursor down key \downarrow to move to the Name field in the Subordinates' Box.
- 2. Type Dan McMinn and press Enter . Another line appears in the Subordinate's Box.
- 3. Type Jack Prinster and press Enter \blacksquare .

4. Type Corinne Speer

Make Corinne Speer's position a Staff-Level position.

On a printed chart, a Staff-Level position appears at a location between a position and the position's other subordinates.

- 1. Press Tab (square) to move the cursor to the Chart Level Field on line 3.
- 2. Type S over the 2 and press Enter \square .

Your work group display should now appear as shown in Figure 3-4.

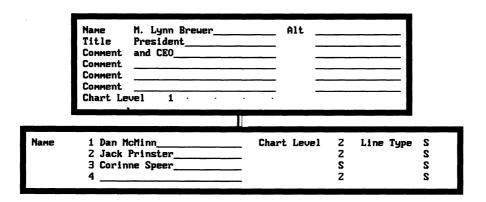


Figure 3-4

Make Dan McMinn's position the Current Position.

(You can make any position the Current Position.)

1. Press the cursor up key \(\backslash \) until the cursor is in the Name 1 field in the Subordinates' Box (Dan McMinn).

3.	Press the cursor down key 1 to move the cursor to the Title Field.
4.	Type VP Sales and press Enter . The cursor moves down a field.
5.	Type and Marketing on the first Comment field.
	ake Jack Prinster's position the Current Position. Press Ctrl - → to make the position to Dan's right the Current Position. Ctrl - → moves you to the right one position.
	Jack's position becomes the Current Position and you can now type information about his position. An empty Subordinates' Box appears underneath.
2.	Press the cursor down key ↓ to move the cursor to the Title Field.
3.	Type VP R&D and press Enter . The cursor moves down a field.
4.	Type and Operations on the first Comment field.
	Take Corinne Speer's position the Current Position. Press Ctrl - → to make the position to Jack's right the Current Position.
	Building a Chart 3-9

2. Press Ctrl - PgDn to make Dan McMinn the Current

Ctrl - PgDn moves you down one level in the chart.

Subordinates' Box appears underneath.

Dan's position becomes the Current Position and you can now type information about his position. An empty

Position.

Corinne's position becomes the Current Position and you can now type information about her position. No Subordinates' Box appears because within Org Plus Staff-Level positions cannot have subordinates. (For more information, see "The Staff-Level Location" later in this chapter.)

- 2. Press the cursor down key ↓ to move the cursor to the Title Field.
- 3. Type Secretary

You have now finished filling in the details about each position. Press Alt - F6 to make the topmost position the Current Position.

Add a title to your chart and print it.

1. Press F9 to display the Command Menu.

The Command Menu gives you access to most of the commands in Org Plus. To use the Command Menu, first select from the list on the left, then select from the list on the right.

- 2. Press P to select **Print Chart**. (You add a title to your chart on your way to printing it.)
- 3. Since Org Plus already selected the **Print** command, press Enter to confirm the selection. The first form in the print sequence appears.
- 4. Press A to select **Automatic**. This means Org Plus will control the style of your chart. The Alternate Settings form appears.
- 5. Press [4] to select **Titles & Annotations**. A form for typing the titles appears.
- 6. Type Company Executives on the Chart Title Field.
- 7. Press Enter . The cursor move to the Chart Subtitle Field.

- 8. Type today's date.
- 9. Press Alt F10 to continue. A form for typing Annotations appears.
- 10. Press Alt F10 to return to the Alternate Settings form.

 (You will not print annotations in your chart.)
- 11. Press Alt F10 one more time. The messages "Formatting" and then "Working" flash on the screen.

Then Org Plus displays your chart.

To see what your chart looks like on paper, print it by pressing Alt - F10. (Make sure you have set up your printer in Printer/ Setup, covered in "Chapter 2: Getting Started," before printing.)

If you do not want to print your chart on paper, press Esc several times to return to the Work Group Display.

Press Esc to return to the Main Menu.

From the Main Menu, you can:

- save the chart (Save Chart);
- clear it (Clear Chart) so you can start another chart; or
- leave Org Plus (Quit).

Using the Program

The Main Menu

When you start Org Plus, the first screen you see displays the Main Menu. From this menu you can begin a new chart or get a chart you saved previously. You can set up or change your printer settings, and so on.

On the Main Menu, you can select from the following:

Work On Chart — allows you to create a new chart. It also allows you to resume work on a chart if you go to the Main Menu to use another command. For example, you must go to the Main Menu to save your chart. Then select Work On Chart to return to work on your chart.

Retrieve Chart — lets you work on an existing chart you saved on a disk at an earlier time. Once you have retrieved it, you can make changes to the chart or print it.

Save Chart — lets you save the chart you are working on to a disk file. This is where you give your chart a name.

Erase File — lets you erase a file permanently from the disk.

Clear Chart — allows you to start a completely new chart if you have been working on another chart. Save your chart before selecting Clear Chart or you will lose the chart or any changes made to it since the last time you saved.

Printer/Setup — lets you give Org Plus necessary information about your printer, plotter, or disk drive.

Quit — allows you to exit Org Plus and return to DOS.

Making a Selection

When Org Plus presents you with a menu or "multiple-choice" question, you can respond in either of two ways:

- You can highlight your selection by using the cursor keys,
 ↑ ↓ → ←. Then press Enter ←.
- Or you can type the first letter of your selection.

Both methods of making a selection are always possible.

Getting Help

You can press [f1] for help at any time.

The Help topic is the one judged appropriate given your location in the program. You can choose another Help topic by making a selection at the bottom of the Help form.

A message tells you when there is more information about a topic than you can see at one time. You can scroll through the information using PgUp and PgDn or the cursor keys 1.

You can leave Help by selecting Exit or by pressing Esc.

Work on Chart The Work Group Display

To create a chart, select **Work On Chart** from the Main Menu. Assuming you haven't been working on a chart already, Org Plus displays a box that represents the topmost position in your chart. The box is blank except for a Name field. Enter a name (or other text) and press Enter . Then you see the Work Group Display. It consists of the Current Position Box and the Subordinates' Box.

Current Position Box

In the Work Group Display, the box at the top is the Current Position Box. Here you enter the information you want to appear in that position on your printed chart. The position displayed in the Current Position Box is the Current Position. To add information about a position, it must be the Current Position. Also, many commands act only upon the Current Position.

The Current Position does not have to be a "manager." Any position in the chart can be the Current Position.

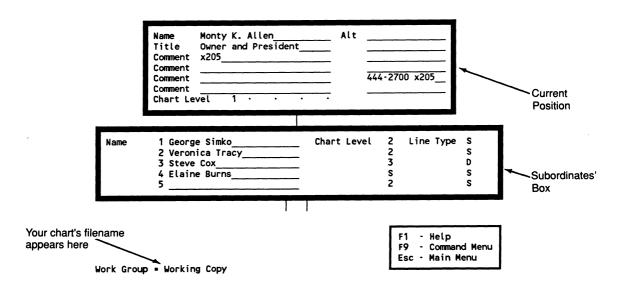


Figure 3-5. The Work Group Display

The Current Position does not have to have subordinates. (Positions at the bottom level of your chart do not have entries in their Subordinates' Boxes.)

At the bottom of the Current Position Box is the Chart Level Field. This tells you the chart level of the Current Position.

If the position is at chart level 2 or lower, you also see a Line Type Field. This tells you the type of line (Solid, Dotted, or None) that connects this position to its manager. (Since there is no one above the topmost position, it has no Line Type Field.)

Subordinates' Box

The Subordinates' Box is the lower, wider box in the Work Group Display. Here, you enter the positions that report directly to the Current Position. Org Plus displays "Work Group: Working Copy" at the bottom of the screen after you enter subordinates. Once you save your chart, it displays your chart name instead of "Working Copy."

Each field in the Subordinates' Box represents a separate position in the chart. To the right of each field, you see the Chart Level and Line Type for the position.

You can use the Sort Subordinates command described in "Chapter 5: Editing Your Chart" to sort positions in a work group.

Any position in the Subordinates' Box can become the Current Position. Just move the cursor to that position and press [Ctrl] - [PgDn] (see "Moving Around the Chart" later in this chapter).

Adding Subordinates to the Work Group

You can enter up to 100 subordinates under one manager. Org Plus displays up to 10 subordinates at a time. You can page through them using PgUp PgDn or 1 1.

Notice that Org Plus assumes subordinates are at the chart level immediately below their manager. In other words, their chart level is equal to their manager's level plus one. However, Org Plus allows you to change the chart level for a subordinate to create special types of positions.

Additional Work Groups

The work group is a building block in your chart. A subordinate in one work group is automatically the manager of a work group at the next lower level.

Often, a position displayed in the Subordinates' Box has subordinates of its own. You must make that position the Current Position before you can add its subordinates.

To make a subordinate the Current Position, place the cursor on that subordinate's row in the Subordinates' Box and press Ctrl - PgDn. Once the position appears as the Current Position, simply add its subordinates, as discussed above.

Text Fields

The Current Position provides twelve lines, or *fields*. This is where you enter the information that appears in the position's box when you print the chart.

The six lines on the left, labeled Name, Title, and Comments, are the text fields. Typically, you enter the employee's name into the Name Field, title in the Title Field, and other information in the Comment Field.

Despite their names, you can put any type of information in any of the text fields. For example, you can put a person's phone number in the Title Field. However, Org Plus is easiest to use if the information in the Name Field (Text Field 1) is unique to that position and easily identifies it (like a person's name).

The following table shows other things you can do with text fields.

Alternate Text Fields

The alternate text fields are the six fields to the right of the text fields. They have a variety of uses. They are ideal for birth dates, hire dates, phone numbers, salary grades, social security numbers, and similar information. You can edit these fields in the same way as the text fields. To get to the alternate text fields, press Tab (square) from the corresponding text field.

Things You Can Do With Text and Alternate Text Fields

Command or capability	
What you want to do:	to do it with:
Change order in which fields print	Print; Alternate Settings; F2; Print Control 3 of 3
Have different fields print for columnar style & Staff-Level positions	Print; Alternate Settings; F2; Print Control 2 of 3
Print Alternate Text Fields 1-4 outside corners of box	Print; Alternate Settings; F2; Print Control 3 of 3
Print Alternate Text Fields 5 and 6 in addition to Text Fields	Print; Alternate Settings; F2; Print Control 1 of 3
Print Alternate Text Fields in place of Text Fields	Set Option: Alt Txt field Print
Create longer fields	Append Alt Field Print-Time Code
Suppress printing of a single field	Suppress Field Print-Time Code
Force blank fields to print	Blank Line Print-Time Code
Copying fields contents to other positions	Edit Chart: Copy Information
Printing field labels	Print; Alternate Settings; F2; Print Control 3 of 3
Changing field labels	Options: Field Labels command

Editing Text Fields

Use the \uparrow or \downarrow keys to move to the field directly above or below your current location in the box.

Use the Tab \(\) key to move from field to field (left to right). For example, use the Tab \(\) key to move from the regular Text Field to the Alternate Text Field. If you are in the rightmost field, it moves you to the first field of the next row. Reverse Tab \(\) Shift - \(\) moves you from field to field in the opposite direction.

To edit the information in any of the fields, use the standard IBM PC editing keys:

- Cursor left ← or cursor right → to move character by character without erasing.
- Home or End to go to the beginning or the end of a field.
- Backspace ← to back up and erase the previous character.
- Insert Ins to add characters between those already there. (The cursor changes to a small block to let you know that you are in Insert mode.) Press Ins again to turn insert mode off and overtype characters already there.
- Delete Del to delete characters to the right, one by one.
- Ctrl T to delete the word to the right of the cursor.
- Ctrl N to insert a blank line and push any text already in that field down one line.
- Ctrl Y to clear the field. Pressing Ctrl Y twice pulls the text in the fields below up one line.

Line Type

The Line Type specifies the type of line that connects a position to its manager. Org Plus can draw a solid line (S), a dotted line (D), or no line at all (N).

Org Plus automatically assumes that you want a solid line. You can change the line type by typing the appropriate letter in the Line Type Field.

[&]quot;Appendix A: Key Assignments" describes other useful editing keys.

Chart Level Field

The Chart Level field tells what level the current position occupies on the chart. Org Plus automatically assigns the chart level for a position. You can change the chart level to create positions with unusual attributes (Staff-Level, hidden, and removed) for special chart layouts, discussed next.

Staff-Level Positions

Org Plus provides for positions at a Staff-Level location. This is a special location on the printed organization chart between a manager and his or her other subordinates. Many organizations like to place secretaries and administrative assistants in this special location. A manager can have as many positions in this location as is necessary.

In Figure 3-6, Elaine Burns and Sue Rosen are at Staff-Level locations.

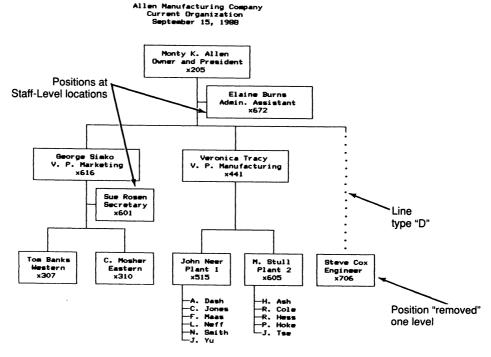


Figure 3-6

To create a Staff-Level position:

- 1. Place the cursor on a Subordinate Field.
- 2. Type the Staff-Level person's name.
- 3. Press Tab (square) to move to the Chart Level field.
- 4. Type S over the Chart Level number; then press Enter

A single Staff-Level position appears to the right of the line connecting its manager to the regular subordinates. If there are several Staff-Level Positions, Org Plus orders them left to right. For an odd number of positions, there is one more position to the right than to the left. Org Plus handles Staff-Level positions in the same way as other subordinates in a columnar chart style.

You can print text fields for Staff-Level positions that are different from text fields for regular positions when you print. (See "Print Chart: Print" in "Chapter 4: Printing Your Chart.")

A position placed at a Staff-Level location may not have true subordinates. When the Current Position shows a Staff-Level position, Org Plus does not display a Subordinates' Box. But you can print a limited set of subordinates under a Staff-Level position. (See "Chapter 6: Advanced Chart-Making".)

Note: Some organizations distinguish between line and staff functions. That is not the meaning Org Plus uses. Often staff functions, such as a legal department, have many subordinates. Do not place them at the Staff-Level location.

Hidden Positions

Hidden positions, useful when you want to create special layouts, do not show when you print your chart. (See "Hidden Positions" in "Chapter 6: Advanced Chart-Making.")

Create a hidden position by typing H into the Chart Level Field.

When you create a hidden position, the line from the hidden position's manager goes straight to its subordinates. Org Plus does not draw a box for a hidden position. It does not print the Text Fields of a hidden position on a chart or a report.

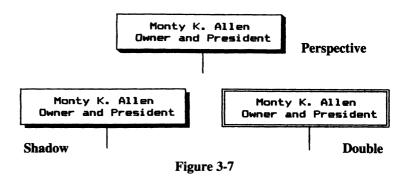
Positions "Removed" to a Lower Chart Level

Occasionally, one subordinate in a work group needs to appear at a lower chart level than the other subordinates. For example, in Figure 3-6, Steve Cox is at level 3. His manager is at level 1.

To remove a position to a lower chart level, change the number in the Chart Level Field.

Boxes

Generally, each position in your chart prints as a box. The term "Box Style" refers to the type of box that encloses each position in the printed chart. Org Plus normally draws boxes with an unbroken, solid line. "Chapter 4: Printing Your Chart" contains a description of the other box styles available.



Select a box style for the entire chart with the Print Command. (See "Print Chart: Print" in "Chapter 4: Printing Your Chart.") Select a different box style for specific positions with the Options command. (See "Options: Set Option" in "Chapter 6: Advanced Chart-Making.")

A printed box can contain any of four types of fields: Text Fields, Alternate Text Fields, Amount Fields, and Consolidated Amount Fields. (See "F2 – Items That Print In Each Box" in "Chapter 4: Printing Your Chart" for details.)

You control the size of boxes in two ways. The width of a box depends on the length of the information you put in the fields — the longer the information, the wider the box. The height of the box is determined by the number of fields selected to print — the more fields, the taller the box.

In addition, Org Plus makes every box at a given level the same size. Just one long name, title, or comment can force Org Plus to assign extra space for all boxes at a level.

Your printer can print only so many characters across one page. If you type long names, titles, and comments, fewer positions can fit across the page.

It is a good idea to limit the length of names, titles, and comments at levels with many positions. (We are not suggesting that you rename people! You can use initials rather than full names and so forth.) How much you should limit the length depends on your printer and the complexity of your chart.

Org Plus prints a field only if it contains something (and if you have selected that field for printing). If a field for any position at a level has text in it, that field prints for all positions at the level (again, assuming that the field has been selected for printing). Generally, all boxes at a given chart level will be the same height.

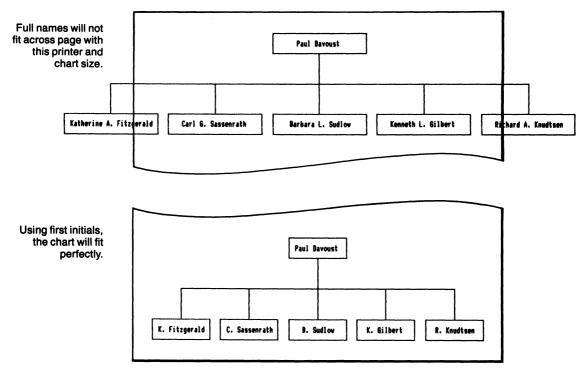


Figure 3-8. Making your chart fit

The one exception is for columnar styles and Staff-Level positions. The Columnar Style/Staff Print Control form (Print Control 3 of 3 under "F2 — Items That Print In Each Box" on the Alternate Settings form) gives separate control over which fields print for these positions.

You can also force all boxes to be the same height and width if you select Manual to Print. Make these choices on the Chart Format form ("F5 — Chart Format" on the Alternate Settings form).

Things You Can Do With Boxes

	Command or capability	
What you want to do:	to do it with:	
Select a box style for all boxes	Print; Alternate Settings; F3; Box Style	
Print multiple box styles in the same chart	Set Option: Box Style command	
Print Text Fields	Print; Alternate Settings; F2; Print Control 1 of 3	
Print different Text Fields in Staff-Level positions	Print; Alternate Settings; F2; Print Control 2 of 3	
Print different Text Fields in columnar chart style positions	Print; Alternate Settings; F2; Print Control 2 of 3	
Print Alternate Text Fields in or around boxes	Print; Alternate Settings; F2; Print Control 3 of 3	
Print Amount Fields	Print; Alternate Settings; [F6]; Amount Print Control 1 of 2	
Print lines in boxes	Line in Box Print-Time Code	

Commands

Commands tell Org Plus what you want to do next. Org Plus has commands for printing your chart, moving positions from one place to another, deleting positions, and many other functions.

You can start most commands from the Command Menu. When learning to use Org Plus, it is a good idea to use the Command Menu.

You can also start commands by pressing the assigned keys. This is the quick way to start a command. Some of the assigned keys are function keys (the keys labeled F1 through [F10]). On most PCs, you find the function keys at the top or the left side of the keyboard. Sometimes you need to press and hold Alt, Ctrl, or Shift while you press another key (for example, Alt - F2). You can find a list of the command key assignments in "Appendix A: Key Assignments."

After you start a command, Org Plus frequently displays a form. You type information or make selections on the form.

The Command Menu

You can perform most Org Plus commands from the Command Menu. The only exceptions are the commands found on the Main Menu.

Press F9 from the Work Group Display and the Command Menu appears. On the left you see a list. Each selection represents a group of commands. On the right you see the commands associated with the highlighted selection on the left.

The Command Menu is easy to use. First select from the list on the left. Then select from the list on the right. The single line box always moves to surround the list you can select from. Press Esc to back up and change your previous selection.

The fastest way to make a selection is to press the first letter of the selection.

This user's guide identifies commands like this: Edit Chart: Move Position. The first half of the command refers to the list on the left in the Command Menu. The second half refers to the list on the right.

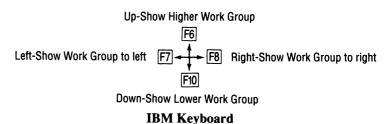
Backing Out

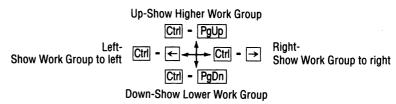
You can press Esc to back out of any Org Plus command or form. If you keep pressing Esc, you will reach the Main Menu. From there you can select **Quit** to return to DOS.

Moving Around the Chart

An organization chart typically has multiple work groups at various chart levels. The Work Group Display, described at the beginning of this chapter, shows you one work group at a time. To work with Org Plus, you move from one work group to another, up, down, and sideways in your chart.

To move between work groups, use the keys identified in Figure 3-9. If the function keys are at the top of your keyboard, it is probably easier to use the control and cursor keys. If the function keys are at the left of your keyboard, it is probably easier to use the function keys. You can also navigate through positions using the Preview Chart command, described later in this chapter.





IBM Enhanced Keyboard

Figure 3-9

Ctrl - PgDn (or F10) moves you down one level in the chart.

- Press Ctrl PgDn while the cursor is in the Current Position Box. The first subordinate at the next lower level becomes the Current Position. The Subordinates' Box now shows any subordinates that report to the new Current Position.
- Press Ctrl PgDn while the cursor is on any line in the Subordinates' Box. The position on that line becomes the Current Position.

Ctrl - PgUp or F6 moves the Current Position up one level in the chart. The new Current Position is the manager of the old Current Position. The position that was the Current Position appears in the Subordinates' Box along with its siblings.

[Ctr] - [Ctr] or [F7] lets you move left to display work groups at the same chart level.

■ Press Ctrl - ←. The position to the immediate left of the Current Position, at the same chart level, becomes the Current Position. Ctrl - ← has no effect if there is no position to the left.

[Ctr] - \rightarrow (or [F8]) lets you move right to display work groups at the same chart level.

Press Ctrl - →. The position to the immediate right of the Current Position, at the same chart level, becomes the Current Position. Ctrl - → has no effect if there is no position to the right.

Press Alt - F6 to make the topmost position the Current Position.

Using Figure 3-10 as an example, suppose Monty Allen's position is the Current Position, and the cursor is in that box. George Simko and Veronica Tracy are on lines 1 and 2 of the Subordinates' Box.

- 1. Ctrl PgDn makes George Simko the Current Position.
- 2. Ctrl → makes Veronica Tracy the Current Position.
- 3. Ctrl PgUp makes Monty Allen the Current Position again.

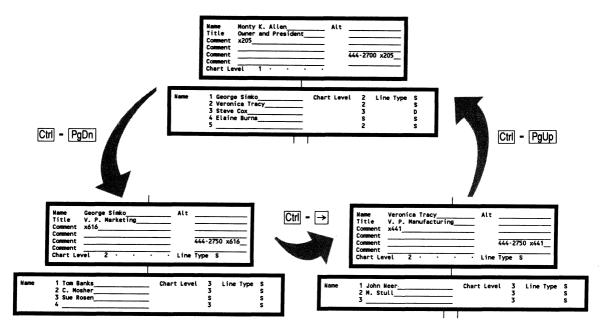


Figure 3-10. Moving Between Work Groups

You can also move around the chart by using the Move Around Chart commands from the Command Menu. However, using the control and cursor keys or the function keys is faster.

Finding a Specific Position in Your Chart

There are two other ways to move between work groups: View Table and Preview Chart.

Tables/Reports: View Table

View Table displays a list of all the positions in your chart. Then you can select the one you want to be the Current Position.

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- Select Tables/Reports: View Table. A table with columns for names, titles, and comments appears, alphabetized by last name. (You can control the fields that appear in a Table. See the Table Setup command in "Chapter 7: Tables and Reports.")

- 3. Find and highlight the position you want as the Current Position. Use the ↑ ↓ and PgUp PgDn keys.

Note: If you have not typed names into some of your positions, blank fields appear at the top of the list.

Chart: Preview Chart

Preview Chart lets you locate the current position relative to the entire chart, and to make any position the current one quickly and easily.

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select **Chart: Preview Chart**. The Preview Chart screen appears. It is a detailed image of what the printed chart would look like, with the Current Position at (or near) the center of the screen.
- 3. Press [5] and the Preview Chart (Medium Zoom) screen appears. This displays the chart in a more compact format with just names and connecting lines. You can navigate from name to name as you do on the Work Group Display; press [7] for a list of navigation keys. A location blinks when the cursor is moved to it. To make the blinking position the current one, press Enter [...].
- 4. Press [5] again to "zoom out" to the Preview Chart (Maximum Zoom) screen. This displays a map of the chart, giving you an overall view of the chart. Each regular position appears as a small square, each staff position appears as a dash, and each hidden position appears as a small circle. The current position blinks on and off. If you have a large chart, some of the positions may overlap.
- 5. Press Alt F10 to return to the Work Group Display.

Save Chart

Once you have finished your chart, you should save it as a file on your disk. Then, you can easily retrieve and change the chart when your organization changes.

When you are ready to save your chart:

- 1. From any Work Group Display, press Esc. Org Plus returns you to the Main Menu.
- 2. Select Save Chart. Org Plus displays the Save Chart form.

The Drive (or path) field is at the top of the form. This is the drive and subdirectory, if applicable, where Org Plus will save your chart. This is the drive or path that you specified in Printer/Setup. Org Plus also displays the names of files already on the disk where your chart will go.

Note: The path tells Org Plus which drive and subdirectory to look in for your chart files. If you keep your charts on a diskette, you normally will not use subdirectories, and will not need a path.

If the Drive (or path) field is empty, Org Plus stores the chart on your default drive (and subdirectory). (The default drive and subdirectory is the one from which you started your program.)

3. If you want to save the chart to a different drive (or path), press Tab [5]. Type the correct drive (or path). Then press Enter [1].

The Filename field is where you enter the name for your chart. If you saved your chart before, its name automatically appears in the Filename field. If you have not yet saved your chart, Org Plus displays the name of the first file listed on the form.

If you previously retrieved or saved your chart, you can replace it on the disk with the one you are working on. Just press Enter ____ to use the name already in the Filename field.

Warning: When you replace a chart file that exists, you lose the contents already in that file. Therefore, Org Plus asks you to confirm your action before it goes ahead.

Org Plus tells you when it saves your chart. If anything goes wrong while Org Plus is saving the file, it tells you so. It does **not** save your file in that case.

Retrieve Chart

To work on a chart you created and saved before:

- 1. If you are working on a chart, press Esc to return to the Main Menu.
- 2. Save the chart you have been working on; if you do not, any changes you have made since the last time you saved it will be lost.
- 3. Select **Retrieve Chart**. If you want to retrieve a chart from a drive (or path) different from the one displayed in the Drive (or path) field, press Tab (square) and type the correct drive (or path).

If you just saved or retrieved a file, its name automatically appears in the Filename field. Otherwise, Org Plus displays the name of the first file from the list in the lower part of the form.

- 4. Select the name of the chart to retrieve in either of two ways.
 - Highlight the name using the cursor keys ↑ ↓ → ←.
 When you have highlighted the name of the chart you want to retrieve, press Enter —.

Org Plus retrieves your chart and displays the topmost position.

Clear Chart

You may want to start a new chart after working on another.

- 1. If you are working in a chart, press Esc to return to the Main Menu.
- 2. Save the chart you have been working on; if you do not, any changes you have made since the last time you saved it will be lost.
- 3. Select Clear Chart from the Main Menu.

Note: Clear Chart removes a chart from the Org Plus working area only. It does not affect charts you have saved on a disk. To remove a chart from your disk, use Erase File (described below).

Erase File

The Erase File command removes a chart or other file *permanently* from a disk. You cannot retrieve it once you have erased it. Erase a file only if you are sure you will not ever need it again.

Use Clear Chart to remove a chart from the Work Group Display.

To erase a file:

- 1. If you are working in a chart, press Esc to return to the Main Menu.
- 2. Select Erase File from the Main Menu.

3.	If you want the file erased from a drive (or path) different from the one displayed in the Drive (or path) field, press Tab [5]. Type the correct drive (or path). Press Enter [1].
	If the Drive (or path) field is empty, Org Plus erases the file from your default drive.
	If you previously saved or retrieved a file, its name will automatically appear in the Filename Field. Otherwise, the name of the first file in the directory appears.
4.	Select the name of the file to erase in either of two ways.
	■ Highlight the name using the cursor keys ↑ ↓ → ←. When you have highlighted the name of the file you want to erase, press Enter ←.
	• Or, type the name of the file in the Filename Field and

Org Plus asks you to confirm that you want to erase the

file.

Printing Your Chart

When you work on a chart, Org Plus keeps it in "shorthand" form. This makes it easy for the program to add, change, or move parts of the chart around when you make changes.

Org Plus first prints to your screen so that you can make changes to the chart before you print it on paper.

This chapter covers (among other things):

- using the Print Chart command
- selecting Automatic versus Manual to print
- alternate settings for different aspects of your chart
- printing parts of your chart
- printing with the Sideways[™] program
- batch printing

When you print your chart, Org Plus determines how to layout the chart, based on a number of built-in rules. The choices you make with the Print command give you control over how your chart will look. "Chapter 6: Advanced Chart-Making" describes several additional features of Org Plus that give you even more control over your chart's appearance. You can also modify the chart layout using the Drawing Board, as described in "Chapter 9: Custom Drawing."

See "Chapter 7: Tables and Reports" for information about printing tables and reports. See "Chapter 9: Custom Drawing" for information about printing drawings.

The Print Chart Commands

You will find the Print Chart commands on the Command Menu. With these commands you can print your entire chart, or just part of your chart. You can specify the chart and box styles and the fields to print. You can also specify a title and annotations for the chart, and set certain special format choices. When you print the chart, Org Plus automatically draws and spaces the boxes, positions the text, and precisely lays out the connecting lines.

Print Chart: Print F2

Before printing a chart on paper, make sure the printer is on-line. Adjust the paper so the top of the sheet is as close to the printing element as possible. This allows Org Plus to center the chart on the page.

Make sure you have selected the correct printer type and page size in Printer/Setup. You can check these by selecting Printer/Setup from the Org Plus Main Menu. If these settings are not correct, your chart will not print correctly. See "Chapter 2: Getting Started" for help in setting up your printer.

Reset your printer (turn it off, then back on) if you have been using it with another software product. Now follow these steps:

- 1. From the Work Group Display, press F9 to display the Command Menu.
- 2. Select Print Chart: Print.

Org Plus now asks some questions to make sure that the chart appears as you want it to appear.

Manual or Automatic

The first form that appears asks you to choose between Manual and Automatic. When you choose Manual, you control virtually every aspect of your chart, including how long and wide your chart will be (no matter how many pages it takes to print it).

When you choose Automatic, Org Plus makes all of the necessary adjustments to fit your chart on one page. Automatic handles many of the decisions you would make if you had chosen Manual.

Select Manual if your chart has more than 35 positions, or if you want a lot of control over the exact layout of the chart. Select Automatic if your chart is fairly small and simple (for example, a chart with 3 or 4 levels, and 2 or 3 positions at level 2).

You should also select Manual if you have already set chart style options for your chart. With Automatic, Org Plus may not try different chart styles if you have already used the Set Options command. Chapter 6, "Advanced Chart-Making", discusses when to use chart style options.

Printing with Automatic

As described above, when you print with Automatic the program makes most of the choices for you. In the following sections, the notation "(Manual only)" appears in a description when that setting is available only if you have chosen Manual.

Sometimes Org Plus needs to put the positions at the bottom of the chart in a boxed list chart style in order to make everything fit; and in some cases it needs to eliminate one or more positions to make everything fit on a single page. (In either case, Org Plus displays a message asking you what to do.)

Printing with Manual

With Manual, Org Plus prints your entire chart, even if it requires multiple pages.

The first form that appears after you select **Manual** (and only when you select **Manual**) lets you choose from a large variety of chart styles. Make a selection then press Alt - F10 to continue.

Org Plus uses the chart styles you select for as many as three of the bottom levels of all branches of your printed chart.

At higher levels, Org Plus uses a horizontal style unless you specify another using the Set Option command. "Chapter 6: Advanced Chart-Making" describes this command.

A chart style set with the Set Option command overrides the one selected now for the bottom of the chart. You can set chart styles for specific branches with the Options command, and set the rest of the chart styles with your choice here.

The horizontal, staggered, and columnar chart styles arrange each position in its own box. You select which fields appear in the boxes.

With the list and boxed list chart styles, Org Plus arranges all the positions in the work group in the same list or box. Org Plus prints only one field from each position — the first field you selected for printing. This is normally the Name Field. Figure 4-1 shows the difference between the 1-column, list, and boxed list chart styles.

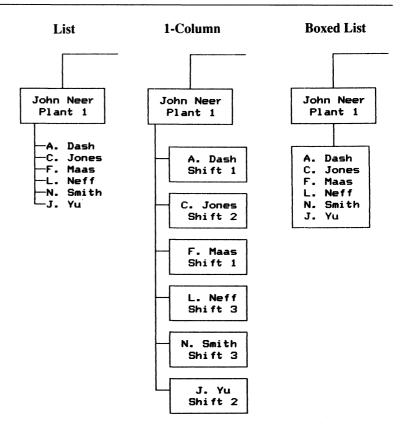


Figure 4-1. 1-Column, List, and Boxed List Chart Styles

Alternate Settings

When the next form appears (Figure 4-2), you can press Alt - F10 to have Org Plus prepare your chart immediately (see "Printing on the Screen", later in this chapter); or you can change one or more settings. Press Alt - F10 when you have finished changing settings; press Esc to back up.

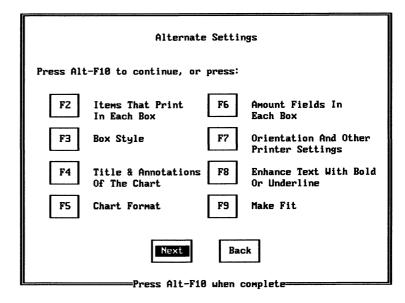


Figure 4-2

Note: Everything in the following descriptions applies to settings you can make whether you have chosen Manual or Automatic. The notation "(Manual only)" appears in a description when that setting is available only if you have chosen Manual.

F2 — Items That Print In Each Box

This choice presents three forms. On the first form (labeled "Print Control — 1 of 3") you tell Org Plus which Text Fields to print in each box (including Alternate Text Fields 5 and 6). The second form (labeled "Print Control — 2 of 3") deals with positions in the columnar box style and positions at the Staff-Level: Select **Yes** for those fields you want to include. In all cases, Org Plus adjusts the height of the boxes accordingly.

The third form (labeled "Print Control — 3 of 3") deals with custom situations. The settings here let you print variations of your charts with only selected positions included, making it easy to print a few levels of your chart without having to include all positions at each level.

Positions to Print: Normally Org Plus prints all positions in your chart (or in a branch if you use Print Part). Optionally, you can mark the positions you want included in your chart, and Org Plus will print only the marked positions. Or, you can mark positions to be excluded, and have Org Plus print only the unmarked positions. (See "Chapter 5: Editing Your Chart" for information about the Find & Mark and Assign Mark commands.)

Select **Marked** to print only marked positions in your chart. Org Plus does not print subordinates of unmarked positions even if they are marked.

Select Unmarked to print only unmarked positions. Org Plus does not print subordinates of marked positions even if they are unmarked.

See "Print Chart: 1 — Print Part" later in this chapter for more information on printing part of the chart.

Print Alternate Text Fields 1-4 on Corners: Select Yes to print Alternate Text Fields 1 through 4, one outside each corner of every box.

Use caution when you print Alternate Text Fields 1-4 on the corners of each box if you use Squeeze Chart (described under "F5] — Chart Format," later in this chapter). Text on the corners of neighboring boxes might run together.

Figure 4-3 shows the placement of Alternate Text Fields, along with two regular Text Fields.

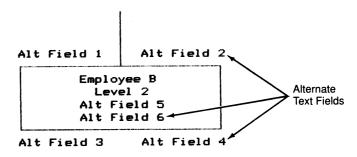


Figure 4-3. Alternate Field Placement

Print Text Field Labels: You can print the field labels before the contents of each field in your chart. This includes the Text and Alternate Text Fields.

You can change the text of field labels with the Options command. See "Options: Field Labels" in "Chapter 6: Advanced Chart-Making."

Left Justify Text Field Labels: This setting left-justifies the Text Field label and right-justifies the text. If you do not print Text Field labels, this setting has no effect.

Print Text Field 1: This setting lets you change the print position of Text Field 1 (usually the Name Field). This means you can keep employee names in Text Field 1, but print them on the last, next-to-last, or second-from-the-last line in each box. Keeping names in Text Field 1 lets you sort them last name first, and see them displayed in the Subordinates' Box. (See Figure 4-4.)

Select **1st** to print Text Field 1 on the first line of each box (its default position).

Select Last, Next-Last, or 2nd-Last to change its print position.

If you also print Alternate Text Fields 5 and 6, Last makes Text Field 1 appear after Alternate Text Fields 5 and 6. Text Field 1, however, always appears above any Amount Fields you print. If you plan to use lines in boxes, make sure you think about their positions in relation to where Text Field 1 prints.

Be sure not to change the position of Text Field 1 if you have used the Staff Subordinates Print-Time Code (see "Chapter 6: Advanced Chart-Making").

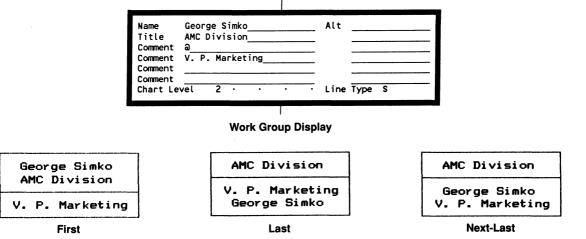


Figure 4-4. Print Text Field 1

F3 — Box Style

You can choose from eight box styles.

If you want some positions to have a different box style, you can use the Set Options command, described in Chapter 6. The selection you make with Set Options overrides the style you set here.

Some printers cannot faithfully reproduce all box styles. For example, the IBM Quietwriter leaves a slight gap in the lower left corner of the shadow and perspective styles. It also prints the shadow and perspective styles the same.

F4 — Title And Annotations Of The Chart

Your chart can have a title of up to three lines with 39 characters in each line. Org Plus centers the title above the chart.

You can also put annotations in the four corners of your chart. Each annotation can be four lines of 39 characters.

Adding the date: You can have Org Plus automatically print the date in a title or annotation. To print the date, type the Date Print-Time Code (%) as the first character in the field where you want the date. Then type a number from 1 through 6 following the %. This number tells Org Plus what format to use when printing the date. The formats are:

- 1 March 19, 1968
- 2 19 March 1968
- **3** 3/19/68
- 4 19/3/68
- **5** 3-19-68
- **6** 19-3-68

For example, type %3 and Org Plus automatically prints the date in the format 3/19/68 in the title or annotation.

Org Plus ignores anything you type after the code.

For the Date to print correctly, the system date on your computer must be current.

F5 — Chart Format

This form controls details of how the chart looks.

Overlap Printing of Pages: Selecting Yes for this setting makes it easier to tape together a chart printed on multiple pages. When you select Yes, Org Plus duplicates the right edge of one page on the left edge of the following page. When you select No, each page starts where the previous page ends.

Use Chart Style At: This setting tells Org Plus where to use the chart style you pick when you print. Select Bottom of All Branches to use the chart style at the bottom of each branch. Select Lowest Level Only to use the chart style only on branches that have positions at the lowest level in the chart. (Selecting Bottom of All Branches usually makes your chart narrower.)

Justify Text: You can choose to justify the text in the boxes to the left, center (the most common), or right. (If you chose to print field labels with a different justification under "F2 — Items That Print In Each Box," the setting you make here is ignored.)

Make Boxes Equal Height: (Manual only) If you select Yes, Org Plus makes every box on your chart as tall as is necessary to print each field that you have selected, even if the field is blank.

If you select **No**, Org Plus prints a field only if it contains something. Generally, all boxes at a given chart level will be the same height. If text selected for printing is in a field in any position at a given level, that field prints for all positions at the level.

The one exception is for Columnar Style and Staff-Level positions. The Columnar Style/Staff Print Control Form (discussed earlier in this section) gives separate control over which fields print for these positions.

This setting does not appear if you have selected Automatic printing.

Make Boxes Equal Width: (Manual only) If you select Yes, Org Plus forces all boxes in the chart to have the same width. All boxes must be as wide as the longest line of text. Selecting Yes may make your chart wider.

If you select **No**, Org Plus makes boxes at least as wide as those at the next lower level. In all cases, Org Plus makes boxes at one level the same width.

This setting does not appear if you have selected Automatic printing.

Squeeze Chart: (Manual only) Turning on Squeeze Chart can reduce the size of your chart by 10 to 20 percent. Squeezing reduces the space between boxes. This makes the chart more compact at the risk of making it less attractive.

Squeezing a chart to reduce the amount of space it requires can conflict with some of the other features of Org Plus. For example, on certain printers, the sides of shadow or perspective boxes may actually touch if you squeeze the chart.

This setting does not appear if you have selected Automatic printing.

F6 — Amount Fields In Each Box

Use the settings on these two forms to specify which Amount Fields (if any) should appear in your printed chart. You can choose whether or not to print each of the Amount and Consolidated Amount Fields A through F. (Amounts are discussed in detail in "Chapter 8: Amounts.")

The first form (labeled "Amount Print Control 1 of 2") lets you select what Amount Fields and Field Labels to print (if any), and how the text in those fields should be justified.

Print: For each Amount Field, select No if you do not want to print the Amount or Consolidated Amount. Select Amount if you want just the Amount printed. Select ConAmnt if you want to print the Consolidated Amount only. Select **Both** to print both amounts, with Amount on one line and Consolidated Amount on the next.

Print Field Labels: Select Yes to print labels with each Amount Field you print. Select No and no field labels print. Amount Field Labels do not print in reports.

Right Justify Amounts: Selecting Yes right-justifies the Amounts and left-justifies the Amount Field Labels. (This selection overrides the choice for Justify Text as described under "F5 - Chart Format" earlier in this chapter for Amount Fields only.)

The second form (labeled "Amount Print Control — 2 of 2") holds the Suppress Print command.

Suppress Print: Use this command to suppress the printing of Amount Fields at the lowest level (including Staff-Level positions at any level) or topmost position.

This feature is useful when amounts are meaningless at the top or bottom of the chart. (In Figure 8-1 of "Chapter 8: Amounts", the Consolidated Amount Fields, Total Budget and Average Salary for all bottom-level and Staff-Level positions were suppressed. The Consolidated Amounts do not make sense for those positions because they have no subordinates.)

For each of the Amount Fields (A-F), select No if you do not want to suppress the amounts.

Select Top to suppress printing the Amount and Consolidated Amount for the topmost position (level 1).

Select **Bottom** to suppress printing the Amount and Consolidated Amount for all Staff-Level and lowest-level positions.

Select Partial to suppress printing of the Consolidated Amount only for all Staff-Level and lowest-level positions.

F7 — Orientation And Other Printer Settings

The selections on these four forms deal with miscellaneous aspects of printing.

Printer 1 of 4 — Orientation: (Manual only) On the first form you select the orientation — that is, the way you would hold a sheet of paper to correctly see an image printed on it. In "Landscape," you hold the paper sideways; in "Portrait," you hold it as you normally would. (See Figure 4-5.)

There are advantages to printing in either orientation. If your chart is tall, select Portrait: on some printers, you can print smaller characters in Portrait. (This makes your chart smaller overall.) If your chart is wide, select Landscape. On some Epson and IBM-compatible printers, printing in Landscape is the only way to use *small* fonts.

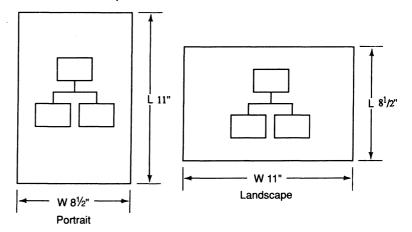


Figure 4-5. Orientation

Org Plus has a limit on how wide a chart can be in Landscape. If your chart is too wide for Org Plus, you see a warning message telling you so. You may want to use the Sideways™ program available from Funk Software, Inc., to print extrawide charts. (See "Printing Through Sideways," later in this chapter.)

Note: If you started the program with the command Chart and you are using a dot matrix printer, Landscape orientation is not available (even though you can select it on the form). To be able to choose Landscape, restart the program by using the command Org from DOS.

Printer 2 of 4 — Page size: On the second form you select the page size that matches the size you use in your printer. This setting overrides the setting you made in Printer/Setup (but if you change the Page Size in Printer/Setup later, then that setting becomes the current one).

Printer 3 of 4 — Other Settings: This form provides you with a series of choices.

Print to: Select **Printer** to send your chart to the printer or plotter as determined in Printer/Setup.

Select **Disk** to write the print image of your chart to a disk file. (See "Printing to a Disk", later in this chapter.)

Number Of Copies To Print: You can print up to 5 copies of your chart. (If you select **0**, Org Plus saves all the print settings, but does not print the chart.)

Paper Bin (LaserJet Only): Certain LaserJet printers have a single paper tray plus a slot for manual feeding. Others have two trays plus a manual feed slot. Select the appropriate tray or slot for the source of the paper: select **Default** to have the printer control bin selection. Only use this setting on newer model LaserJets.

Characters Per Inch: (Manual only) This describes the number of characters that fit in each inch of a printed line — the larger the number that you select, the more characters that fit on a page. Using the smaller type font (that is, the setting with the larger number), if one is available on your printer, makes the chart narrower. Some printer settings, such as the "Plain Vanilla" settings under the manufacturer called "Other," offer only one font size. In this case, Org Plus provides only one selection.

This setting does not appear if you have selected Automatic printing.

Lines Per Inch: (Manual only) This describes how many lines of text fit in each vertical inch of a page — the higher the number, the shorter the chart. Some printers offer only one lines per inch setting; in this case, Org Plus offers only one choice.

This setting does not appear if you have selected Automatic printing.

Left Margin: (Manual only) Select how much space (if any) to leave at the left edge of the chart. The default is set to "Center," which means that Org Plus will center your chart on the paper's horizontal axis, and the margin will vary depending on its size. Even with a setting of 0 inches, there could be a "margin" of anywhere up to one-half inch, depending on the printer. Many printers (e.g., laser printers) cannot print to the

very edge of the paper, so they, in effect, create a left margin. Note that the placement of the paper in the printer can impact the width of the left margin.

If you add space for a left margin, you reduce the page width that your chart can be printed on.

Top Margin: (Manual only) Select how much space (if any) to leave at the top of the chart. The default is set to "Center," which means that Org Plus will center your chart on the paper's vertical axis, and the margin will vary depending on its size. Even with a setting of 0 inches, there could be a "margin" of anywhere up to one-half inch, depending on the printer. Many printers (e.g., laser printers) cannot print to the very edge of the paper, so they, in effect, create a top margin. Note that the placement of the paper in the printer can impact the height of the top margin.

If you add space for a top margin, you reduce the page length that your chart can be printed on.

Printer 4 of 4 — (For Plotters Only): This form is strictly for plotter users. If you are not using a plotter, you can immediately press [Alt] - [F10].

You must select pens for drawing various parts of the chart. You can choose a pen for the text, one for the lines and boxes, and one for "enhancements." Enhancements include the shadow part of a shadow or perspective box. You can also tell Org Plus to slant the text, to give it an italic look.

If you request more pens than your plotter has, Org Plus stops when it needs another color. Then it asks you to change pens.

The Set Option command allows you to select pens for the text in individual positions. You can also specify a pen when you set an auxiliary line. (See "Chapter 6: Advanced Chart-Making" for more information.)

Printing on the Screen

Press Alt - F10 when you have finished making changes on the Alternate Settings form: Org Plus produces your chart. A box on the screen flashes messages as this happens.

Org Plus prints the chart on the screen. Press [f] to see a list of keys you can use to bring different parts of the chart into view if it is too large to fit on the screen all at once.

If you like what you see, press Alt - F10 to print the chart on paper. Or press Esc to back up to previous forms so that you can change what you do not like.

Automatic Printing and Dimension Problems

If you chose **Automatic** and Org Plus cannot make the chart fit on a single page, it displays a message telling you the chart's dimensions. It asks you if it should try the boxed list chart style at the bottom of your chart. This chart style takes the least space, but displays only the first line from each position. If you select **Yes**, Org Plus tries the boxed list chart style.

If the chart still does not fit, Org Plus asks you if you want to omit lower-level positions. If you select **Yes**, it will omit lower-level positions to print on the paper size you selected. If you select **No**, you cannot use Automatic printing. Org Plus switches you to Manual and provides you with the forms to make all the decisions about your chart. With Manual, you can print your entire chart, no matter how many pages it takes. (See "Printing with Manual," earlier in this chapter.)

Printing on Paper

If, having selected **Manual**, you chose **Printer** for the Print To setting in Alternate Settings (form 3 of 4 under [7]), Org Plus now prints your chart. If your chart is too large for one page, it prints on more than one. Org Plus determines how to print a multiple-page chart based on the orientation you select. But it always prints the top left corner of your chart first. On a multiple-page chart, the topmost position may not appear on the first page that comes out of the printer.

It is not uncommon to find charts that are too large to fit on one page. Sometimes, a simple change causes a one-page chart to print on two pages.

If you want even more flexibility in arranging your chart, read about Options in "Chapter 6: Advanced Chart-Making."

Options allow you to control the appearance and arrangement of positions or work groups. See also "Chapter 9: Custom Drawing." This chapter explains how to customize your chart using the Drawing Board.

Do you have some unexpected empty boxes or positions in your chart? That means you accidentally created some blank positions while you were in the Subordinates' Box. Except the bottom field, a blank field in the Subordinates' Box represents a blank (or empty) position. (You may want to do that on purpose.) These positions print as blank boxes. You can remove those empty positions using Delete Position, described in "Chapter 5: Editing Your Chart."

Default Print Settings

Whenever you create a new chart, Org Plus sets the print settings to the defaults. The defaults include printing with Manual, unbroken box style, largest lines per inch settings, etc.

When you save your chart, you also save the print settings you specified for the chart. When you retrieve a chart, the settings saved with it override the default settings (or the settings from the previous chart).

You can also save your print settings with the Name Chart/Report Spec command. You can then use the same settings with other charts by using the Use Chart/Report Spec command. (See "Chapter 6: Advanced Chart-Making" for more information about these commands.)

Printing to Disk

If you chose **Disk** for the Print To setting in Alternate Settings (form 3 of 4 under [F7]) a special form appears when you go forward to print. On this form you enter the Drive (or path) where the file is to be stored, and the name for the file.

Org Plus cannot read a file you print to disk. Save the chart using the Save Chart command before you print to disk. ("Chapter 3: Building a Chart" describes this command.) The file you print to disk is a picture of your organization chart. Your printer can understand it. However, Org Plus cannot modify it.

If you have chosen portrait orientation, Org Plus gives you a choice of formats for your disk file. Select **Sideways-Ver2** or **Sideways-Ver3** if you plan to print your chart using Sideways (the program from Funk Software, described later in this chapter).

If you plan to print the file to a printer using the DOS COPY command, select **Printer**. Selecting Printer tells Org Plus to send the same codes that it would send to the printer to a file instead. (This file contains whatever printer control codes are necessary to control the printer selected in Printer/Setup.)

To print the disk file using DOS, use the DOS COPY command:

copy/b file-specification device-name

for example,

copy/b mychart.prt lpt1:

(Do not use the DOS PRINT command. Some graphics characters in the file might cause the PRINT command to behave incorrectly.)

If you want the chart to be a standard ASCII file, select the **Sideways-Ver2** setting. This creates a print image using the USASCII character set, and does not provide solid lines or boxes.

If you select the **Sideways-Ver3** setting, Org Plus makes the chart an ASCII file. But it uses the IBM extended Graphics character set for the lines and boxes. Select this setting if you plan to import your file into software that can handle lines and boxes.

Attention Dot-Matrix Printer Users: These Sideways choices are not available if you have selected Landscape orientation; selecting Landscape does the same job that Sideways would do. If you want to use Sideways, change the orientation to Portrait.

About HPGL Format: Some programs, such as certain desktop publishing systems, accept files in HPGL (Hewlett-Packard Graphics Language) format. This is the language used by HP plotters. You can create an HPGL output file by selecting one of the HP Plotter settings in Printer/Setup and then printing to disk. When you print to disk, Org Plus does not ask you to select a format. It automatically prints an HPGL file to disk. You can then import this file into a program that accepts HPGL code.

Print Chart: Reprint Ctrl - 2

Sometimes you want to reprint your chart with exactly the same print selections you made previously. Reprint saves you time by doing just that.

- 1. From the Work Group Display, press [F9] to display the Command Menu.
- 2. Select **Print Chart: Reprint**. Org Plus formats the chart and displays it on the screen. Press Alt F10 to print it.

Org Plus uses the settings you chose the last time you printed your chart. No warning messages appear as they do when you Print Chart. If Org Plus needs to cut off the bottom levels of your chart, it does so without warning.

If you just retrieved this chart, Org Plus uses the settings that were in effect when you last saved the chart. (The print settings are saved with each chart.) If this is a new chart that you have not printed before, Org Plus uses the default print settings.

Print Chart: 1 - Print Part

Alt - F2

If you have a large chart, you may want to print it in sections. Printing a part of a chart is the same as printing the whole chart, except you specify the area to print. You can use any position in the chart as the top of the part you print. You can print all the way to the bottom of the branch, or down just a few levels.

- 1. Move the Work Group Display until the position you want at the top of the printed chart becomes the Current Position.
- 2. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 3. Select **Print Chart: 1-Print Part.** Org Plus confirms the position at the top of the chart, and asks you how many levels you want to print.
- 4. Select the number of levels you want to print. Count the current position as one level. If you want to print to the bottom of the chart, select **All**.

From this point on, printing a part of a chart is the same as printing the entire chart.

Print Chart: 2 - Reprint Part

Alt - 2

The Reprint Part command reprints the part of your chart you last printed with the Print Part command. You do not have to confirm all the print settings.

- 1. Move the Work Group Display until the position you want at the top of the printed chart is the Current Position.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select **Print Chart: 2-Reprint Part**. Org Plus formats the part of the chart you asked for and shows it to you on the screen. Press Alt F10 to print it.

Printing Through Sideways

Sideways[™] is a program from Funk Software, Inc., that lets many dot matrix printers print sideways (landscape) on the paper. So wide output (like some organization charts) can print in one pass without requiring taping of the pages.

You do not need to use Sideways to print landscape. Org Plus prints landscape if you select **Landscape** in the Alternate Settings form. (See "F7 — Orientation And Other Printer Settings" earlier in this chapter.) Some charts, however, might be too large to use this feature. If you want to print such a large chart using Sideways, select **Portrait** on the Orientation form. Then follow these instructions:

- 1. Print to disk by selecting **Disk** for the Print To setting in Alternate Settings (form 3 of 4 under [77]).
- 2. Select **Sideways-Ver2** or **Sideways-Ver3** when Org Plus asks you to choose a format for your disk file. Your choice depends on which version of Sideways you have. (If you have Version 2.xx, choose version 2. If you have Version 3.xx, choose 3.)

When you press Alt - F10, Org Plus formats the chart and displays what the chart will look like when you print it on paper. Press Alt - F10 again; Org Plus asks you to provide a file name.

- 3. Provide a file name and press Enter . Org Plus writes the chart to the file you specify.
- 4. Save your chart as described in "Chapter 3: Building a Chart" before you quit Org Plus.

Warning: Be sure to give different names to the file printed to disk and to the saved chart. If you save your chart with the same name as the "Print to disk" file, Sideways will not be able to read it.

5. Quit to DOS then start the Sideways program, and make sure you have configured it for the printer you plan to use.

Note: You must use a version of Sideways that comes directly from Funk Software, Inc. to print Org Plus charts. Do not use a version of Sideways bundled with another software program. (For example, do not use the Lotus 1-2-3® version of Sideways — SW123 — or the version that comes with SuperProject® or SuperCalc® from Computer Associates.) Such versions do not recognize an Org Plus file.

- 6. Make sure you enter the "Print To Disk" file name, not the name of the saved Org Plus chart.
- 7. Set Glue Lines on the Sideways menu to match what Sideways shows is the number of lines per page. (The number of lines per page varies, depending on your printer and the font you choose.) If you do not set the number of Glue Lines correctly, gaps appear when Sideways prints the chart.

If you have a tall chart (top person to bottom person), Sideways may need to print the chart in more than one section. In this case, even when you set the Glue Lines as described above, gaps appear in the chart. If this happens, set Glue Lines to twice the number of lines per page (or 3 times if the chart should print in 3 sections).

Batch Printing

If you have many charts, drawings, or reports that you print regularly, you can have Org Plus print them, one after another. You do not have to retrieve and print each one individually.

For example, to batch print charts DEPT1.CHT , DEPT2.CHT, and DEPT3.CHT, type $\,$ - $\,$ C and the chart names after Org at the DOS prompt:

ORG -C DEPT1.CHT DEPT2.CHT DEPT3.CHT

This command starts Org Plus, retrieves each chart, and prints it. Batch print drawings in the same way. You can mix charts and drawings in the same line.

Org Plus uses the drive or path set in Printer/Setup when executing a batch print command.

You can include as many names as will fit within the 128 character limit for DOS commands. To batch print a great number of charts, write a simple DOS batch file.

If you want to batch print reports instead of charts, type -R (or -r) after ORG. For example:

ORG -R DEPT1.CHT DEPT2.CHT DEPT3.CHT

This prints reports from the charts. (See "Chapter 7: Tables and Reports.")

Org Plus uses the printer model that you selected in Printer/ Setup. It uses the page size, orientation, and other settings that you made from the print path (assuming that you saved your chart after you made those settings). And it uses the saved Table Setup and Print Report settings when you print a report. If you specified that the chart, drawing, or report should print to a file, Org Plus will send it to the printer when you batch print.

If Org Plus cannot find a file, or an output error occurs, printing stops. To abort the batch printing process while a chart is printing, press [Esc].

You cannot mix charts and reports in one batch command. Print all your charts with one batch command. Then print all your reports with another batch command.

Batch printing also works when you start Chart or Draw standalone. If starting Chart stand-alone, you cannot print landscape on a dot matrix printer.

When batch printing charts and reports, you can have Org Plus automatically print the current date. See "F4 — Titles And Annotations Of The Chart," earlier in this chapter, for information on using the Date Print-Time Code on charts. See "Tables/Reports: Headers and Titles" in "Chapter 7: Tables and Reports" for information on using the Date Print-Time Code in reports.

Editing Your Chart

You may discover that you need to make changes to your chart after you have created it. This chapter describes the commands you can use to change the structure or contents of your chart. It covers:

- inserting, moving, and deleting positions
- copying the contents of fields to other positions
- sorting positions in your chart
- searching for positions that match criteria you specify

Selecting Ranges

Some of the editing commands operate on one position at a time. Others operate on several positions at once. The range tells Org Plus what set of positions you want a command to apply to. For example, you can copy the Title Field from one position to other positions in the same level or branch. Or you can copy the information to all the positions in the chart.

Ranges include:

Current Position — the position in the box at the top of the Work Group Display.

Siblings — all positions that report directly to the same manager as the Current Position (including the Current Position).

WrkGrp/Subordinates — all positions that report directly to the Current Position (not including the Current Position).

Level — all positions at the same chart level as the Current Position (including the Current Position).

Branch — the Current Position and all positions below, including those reporting directly and through subordinate managers.

All Positions — all positions in the chart.

Marked Positions — all positions marked by the Find & Mark or Assign Mark command. This range includes the Current Position only if it is marked.

Edit Chart: Insert Position F3

Insert Position adds a new (blank) position to your chart. You can use this command to insert a new level between two existing levels of your chart. You can also use it to add another subordinate to a work group.

If the cursor is in the Current Position Box, Org Plus creates a position at that chart level. The Current Position, and all positions below it in its branch, move down one chart level. This creates a chart level between the Current Position and its manager.

To insert a new position between the Current Position and its manager:

- Find the position that will report to the new position. Make it the Current Position. Place the cursor anywhere in the Current Position Box.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Edit Chart: Insert Position**. An empty Current Position Box appears. The old Current Position and all positions reporting to it move down one level.

If the cursor is in the Subordinates' Box, Org Plus adds a position at the line the cursor is on. Org Plus pushes the position that was on that line, and all the siblings below it, down one line.

To insert a new position in the Subordinates' Box:

- 1. Place the cursor on the row in the Subordinates' Box where you want the new subordinate to appear.
- 2. Press F9. Org Plus displays the Command Menu.
- Select Edit Chart: Insert Position. The position the cursor is on, and those below, move down one line to make room for the new position.

Edit Chart: Move Position Alt - F3

Move Position allows you to pick up an individual position or a complete branch and move it somewhere else within a chart.

To move a position or branch:

- Find the position you want to move. You can move the Current Position or a position in the Subordinates' Box. To move the Current Position, place the cursor anywhere in the Current Position Box. To exchange two adjacent positions in the Subordinates' Box, place the cursor on the lower one.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Edit Chart: Move Position**. Org Plus displays an asterisk by the name of the position you want to move.
- 4. Find the position where the position you are moving should appear. You can move to the Current Position or to a position in the Subordinates' Box. Place the cursor anywhere in the Current Position Box. Or place the cursor on the appropriate row in the Subordinates' Box.
- 5. Press [9]. Org Plus displays the Command Menu.
- 6. Select **Edit Chart: Move Position** once again. Org Plus asks you to confirm the move.

7. Select Yes.

When you move a position within the same work group, Org Plus automatically moves any subordinates along with the position. Use this to rearrange the order of positions in the Subordinates' Box.

You can also move a position with subordinates to a different work group. Org Plus asks if you want to move the individual position, or the branch. If you select **Position**, Org Plus leaves the subordinates behind. They will report to an "open" position (a position with "open" in the first text field).

To move a position to a new chart level and insert it between an existing position and its manager:

- 1. Select the position you want to move using Move Position as described in steps 1 through 3 above.
- 2. Find the position that should report to the position you are moving. Make it the Current Position. Place the cursor anywhere in the Current Position box.
- 3. Press [F9]. Org Plus displays the Command Menu.
- 4. Select **Edit Chart: Move Position** once again. Org Plus asks you to confirm the move.
- 5. Select Yes.

The position you are moving appears as the Current Position. The position that was the Current Position now appears in the Subordinates' Box, reporting to the moved position.

Org Plus allows you to move only an individual position into a new chart level in this manner. If the position you are moving has subordinates, Org Plus leaves them behind, reporting to an "open" position.

Edit Chart: Delete Position Alt - F4

The Delete Position command lets you delete a single position or an entire branch of a chart.

When you delete a position, the box disappears from the printed organization chart. If you are simply replacing the contents of a position, just type over the contents with the new information. There is no need to delete the position.

Conversely, you cannot delete a position just by erasing its contents. Deleting the contents of a position simply makes it blank, and it appears as a blank box in your chart. Use the Delete Position command to remove the position from your chart.

To eliminate a position or branch from your chart, follow these steps:

- 1. Place the cursor on the position you want to delete. You can delete the Current Position, or a position in the Subordinates' Box.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Edit Chart: Delete Position**. Org Plus asks you to confirm that you want to delete the position.
- 4. Select Yes.
- 5. If the position you are deleting has subordinates, Org Plus asks if you want to delete the position or the branch. If you select **Position**, all subordinates move up one chart level, and report to the next higher manager. If you select **Branch**, Org Plus deletes the entire branch.

Note: There can be only one topmost position in each chart. For that reason, you can delete the topmost position only if it has exactly one direct subordinate.

If you want to delete the entire chart, select **Clear Chart** from the Main Menu.

Edit Chart:

Copy Information Ctrl - F9

The Copy Information command gives you a quick way to copy information to other positions in your chart. You may copy a single field, all fields, just the Text Fields, or just the Amount Fields.

Org Plus also provides a clipboard which can temporarily hold information while you decide where to put it. Using the Clipboard gives you the most flexibility in copying information. It is the only way you can copy information to positions which are not part of a defined range.

Copying Information Using the Clipboard

To copy information using the Clipboard, first copy the information from the position to the Clipboard.

- 1. Find the position that contains the information you want to copy. Make it the Current Position. If you want to copy a single field, place the cursor in that field.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Edit Chart: Copy Information. Org Plus asks you what information you want to copy.
- 4. Select the set of fields to copy and press Enter . Org Plus asks you to select the range you want the information copied to.
- 5. Select Clipboard and press Enter . Org Plus copies the field(s) you have specified to the Clipboard.

Now you can copy the information from the Clipboard to another position or range of positions. (You can do other things along the way—the information stays in the Clipboard until you replace it.)

Find the position you want to copy the information to.
 Make that position the Current Position. Place the cursor anywhere in the Current Position Box.

To copy from the Clipboard to all members of a work group or a branch, make the manager the Current Position. To copy to all positions at a given chart level, make any position at that level the Current Position. To copy to a single position, make it the Current Position.

- 7. Press [F9]. Org Plus displays the Command Menu.
- 8. Select **Edit Chart: Copy Information** again. Org Plus asks you what information you want to copy.
- 9. Select **Clipboard** and press Enter . Org Plus asks you to select the range you want the information copied to.
- 10. Select a range and press Enter . Remember that Org Plus uses the Current Position to find the range you pick. The information stays in the Clipboard until you replace it. You can copy from the Clipboard any number of times.

Note: If you select a single field to copy, Org Plus leaves all other fields untouched by the Copy Information command. If you copy a group of fields, Org Plus clears any fields that are blank or zero in the destination position.

You can clear a range of fields by copying a blank field or a zero value over the fields. This does not clear an Amount Field that contains a formula — use the Formula Setup command to do that.

Edit Chart:

View Clipboard Ctrl - F10



The View Clipboard command lets you see the contents of the Clipboard. When you view the Clipboard contents, a dot appears at the far right of all fields you copied. If you copied a blank field, a dot also appears to the right of that field. The dots tell you what fields Org Plus will copy from the Clipboard to positions in your chart.

Copying Information Without the Clipboard

You can copy information without the Clipboard to sibling positions or those in the same level, branch, or work group. For example, you can copy from the Current Position to all positions in the branch below without the Clipboard.

You can also copy directly from the Current Position to marked positions (discussed below) or to all positions in the chart. In both of these cases, Org Plus does not need the Current Position to tell where to put the information.

To copy without using the Clipboard:

- 1. Find the position that contains the information you want to copy. Make it the Current Position. If you want to copy a single field, place the cursor in that field.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Edit Chart: Copy Information. Org Plus asks you what information you want to copy.
- 4. Select the set of fields to copy and press Enter . Org Plus asks you what range you want to copy to.
- 5. Select the range you want the information copied to and press Enter .

Edit Chart: Sort Subordinates

☆Shift - F3

The Sort Subordinates command allows you to sort positions within each work group in your chart. Use this command to alphabetize your subordinates as a matter of protocol, or to rank them according to quota or budget performance. You can sort one work group or the entire chart.

Org Plus is preset to sort on the first Text Field (usually the Name Field), in alphabetical order, last name first. To change the sorting sequence, use the Table Setup command discussed in "Chapter 7: Tables and Reports." You can sort on any field, alphabetically or numerically, in ascending or descending order.

To sort subordinates:

- 1. Find the manager of the work group you want to sort. Make that position the Current Position. If you want to sort the entire chart, any position can be the Current Position. Place the cursor anywhere in the Current Position Box.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Edit Chart: Sort Subordinates**. Org Plus asks you if you want to sort the entire chart or just the work group.
- 4. Select Chart or Work Group.

When you sort a single work group, Org Plus rearranges only the subordinates in that one group. When you sort the entire chart, Org Plus rearranges the subordinates in every work group, at every level.

Caution: If you sort the entire chart, the chart layout may change. For example, if you arranged branches by size so the chart looks balanced, sorting the entire chart could make the chart look out of balance. Therefore, use caution before you decide to sort your entire chart.

Do not use Sort Subordinates on a work group with the Stacked Boxed List Print-Time Code. Org Plus sorts this as one box no matter how many you have, so the results will not be what you expect.

Note: Org Plus sorts hidden positions along with the other positions at the same level. If their fields are blank, an ascending alphabetical sort places them first in the Subordinates' Box. They then become the left-most positions when printed in a horizontal chart style.

Marking Positions

Org Plus provides several commands that let you "mark" positions. A mark is simply an electronic tag that Org Plus uses to identify positions you select. Then Org Plus can easily find those positions when you want to do something with them as a group.

For example, suppose you need to change the titles of all the "Product Managers" in your chart to "Brand Managers." You can use Find & Mark to search for and mark all positions with the title "Product Manager." Change the title in one position. Then use the Copy Information command to copy the new title to all the other marked positions.

If you want, you can make the following commands operate only on the marked fields: Print, Copy Information, Print Report, Set Option, Clear Option, Exchange Data, and Adjust Amount.

You can mark positions explicitly with the Assign Mark command. Or, let Org Plus mark ones that match criteria you provide with the Find & Mark command. You can also Unmark Positions, and find out what positions are marked with the Review Marked command.

When the Current Position is a marked position, a plus sign appears in the lower right corner of the box. The plus sign does not appear in your printed chart.

Edit Chart:

Find & Mark Shift - F7

The Find & Mark command lets you search for and identify all positions that meet criteria you specify. For example, you might want to find all positions with a particular title or those with salaries within a certain range.

When you select Find & Mark, you must specify three things: the field to inspect, how to decide whether to mark the position or not, and what to look for. You must also tell Org Plus what to do with marked positions from previous searches.

You can combine the results of multiple searches. For example, you can find all positions with a certain title *and* whose salary is within a certain range.

To find and mark positions:

- 1. Press F9. Org Plus displays the Command Menu.
- 2. Select **Edit Chart: Find & Mark.** Org Plus displays page 1 of the Find and Mark form.
- 3. Select the field you want to inspect. This tells Org Plus where to look. You can select any Text Field, Alternate Text Field, Amount Field, or Consolidated Amount Field.
- 4. Press Alt F10. Org Plus displays page 2 of the Find and Mark form.
- 5. Tell Org Plus how to decide whether to mark the position or not. Org Plus can mark positions that are:
 - = equal to the search value
 - > greater than the search value
 - < less than the search value
 - ≥ greater than or equal to the search value
 - \leq less than or equal to the search value
 - ≠ not equal to the search value

6. Move the cursor to the Search Value Field. Type the text or amount that you want Org Plus to look for.

In text, you may include the "wild card" symbols: * or ?

If you us an * (asterisk), Org Plus matches all characters from the asterisk to the end of the text, or to the next character you type. For example, JO* matches JOE, JOHN, JOSEPH, and JOANN, but not JAMES. *ER* matches any word that has an ER anywhere in the word.

You can use a ? (question mark) to match any single character. For example, JO?N would match JOHN and JOAN but not JOANN.

If you want to search for the characters * or ?, precede them with a backslash — * or \?

If you are searching a Text Field, Org Plus asks if you want to distinguish between capital and lower case letters.

7. Select **Yes** for Match Case if you want Org Plus to match the case exactly. For example, if you select Yes, Org Plus considers e, E, and ë to be different. If you select No then e, E, and ë are equivalent.

Finally, you must tell Org Plus what to do with marked positions from previous searches.

8. Select **Erase**, **Intersect**, or **Overlap**.

Select Erase to clear the results of previous searches. This erases all previous marks, and marks only those cases that match the current search criteria.

Select Intersect to mark those cases found by this search AND those already marked by previous searches (logical AND). For example, to find all Product Managers with salaries greater than \$10,000, first search for Product Managers with Previous Mark set to Erase. Org Plus marks all Product Manager positions. Then search for Salaries greater than \$10,000, with Previous Mark set to Intersect. Org Plus looks for salaries more than \$10,000 only among the Product Managers. It erases the marks from any Product Managers whose salaries are not more than \$10,000. (If Org Plus does not find a case that matches both searches, it does not mark any position.)

Select **Overlap** to mark all cases found by this search in addition to those found by the previous search (logical OR). For example, to find all individuals with titles of either Product Manager or Project Manager, first search for Product Managers with Previous Mark set to Erase. Then search for Project Managers with Previous Mark set to Overlap. Org Plus first marks all the Product Managers, then marks all the Project Managers.

9. Press Alt - F10.

When Org Plus finishes the search, it displays a table of the positions that match the search criteria. This table appears in the same form as View Table. Org Plus sorts the entries in the table according to the settings made with the Table Setup command.

If no entry matches your criteria, you see a message to that effect.

You can examine the table of marked positions using

↑ ↓ and PgUp PgDn.

10. To make the highlighted position the Current Position, press Enter . Or press Esc to return to the Work Group Display. Org Plus saves your search criteria. Or press Alt - F10 to perform another search.

The Assign Mark command lets you mark positions directly. You can mark a single position or a range of positions.

1. Find the position you want to mark. Make it the Current Position. Place the cursor anywhere in the Current Position Box.

To mark all members of a work group, make the manager of the work group the Current Position. To mark all positions at a chart level, make any position at that level the Current Position.

- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Edit Chart: Assign Mark. Org Plus displays the Assign Mark form.
- 4. Select the range to mark and press Enter

Edit Chart: Unmark Positions

☆Shift - F8

You can erase marks for individual positions or for ranges of positions.

1. Find the position you want to unmark. Make it the Current Position. Place the cursor anywhere in the Current Position box.

To unmark all members of a work group, make the manager of the work group the Current Position. To unmark all positions at a chart level, make any position at that level the Current Position.

- 2. Press [9]. Org Plus displays the Command Menu.
- 3. Select **Edit Chart: Unmark Positions.** Org Plus asks you what range of positions you want to unmark.
- 4. Select the range to unmark and press Enter .

Edit Chart: Review Marked

☆Shift - F5

The Review Marked command displays a table of marked positions. This table appears in the same form as View Table. Org Plus sorts the entries in the table according to the settings made with the Table Setup command.

To look at a table of the marked positions:

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select Edit Chart: Review Marked. Org Plus displays a table of the marked positions.

You can examine the table using ↑ ↓ or PgUp PgDn.

To return to the Work Group Display and make the highlighted position the Current Position, press Enter

Press Esc to return to the Work Group Display.

Advanced Chart-Making

The Print command gives you some control over the shape and format of your chart.

Org Plus also provides a number of features that give you additional flexibility. Commands are available to help shape your chart, communicate with other programs, and more.

This chapter covers:

- features that shape your chart: options, Print-Time Codes, and hidden positions
- how to make your chart fit on one page
- special chart layout situations
- other advanced features: checking chart status, appending charts, saving a branch of a chart, exchanging data with other programs, and chart/report specifications

Note: The features described in this chapter should always be your first choice for shaping your chart. They all take advantage of Org Plus's automatic drawing which makes future updating a snap. However, you can manually draw virtually any chart configuration using the Drawing Board. See "Chapter 9: Custom Drawing" for more information.

Features that Shape Your Chart

Org Plus offers many features that allow you to shape the format and layout of your chart to your needs. Among these features are the Options commands, the Print-Time Codes, and hidden positions.

Selecting Ranges

Some of the commands discussed here operate on one position at a time. Others operate on several positions at once. The range tells Org Plus what set of positions you want a command to apply to. For example, you can set a box style for all positions at the same level or in the same branch.

The range can be:

Current Position — the position in the box at the top of the Work Group Display.

Siblings — all positions that report directly to the same manager as the Current Position (including the Current Position).

WrkGrp/Subordinates — all positions that report directly to the Current Position (not including the Current Position).

Level — all positions at the same chart level as the Current Position (including the Current Position).

Branch — the Current Position and all positions below, reporting directly and through subordinate managers.

All Positions — all positions in the chart.

Marked Positions — all positions marked by the Find & Mark or Assign Mark command. This range includes the Current Position only if it is marked.

Options

The Options commands let you fine tune the format and layout of your chart. The Set Option command lets you:

- set chart styles for individual work groups or levels
- set box styles for a single position or a range of positions
- print Alternate Text Fields instead of Text Fields
- select plotter pens or colors for the text in a single position or a range of positions
- exclude the Amount Fields in a position or range of positions from being used in calculations and consolidations
- exclude positions from all Amount Field or print-time counts
- suppress printing all Amount Fields for a position or range of positions

You can also create and modify auxiliary lines with the Draw Auxiliary Line and Modify/Delete Line commands. Auxiliary lines are additional lines between positions in your chart.

You can clear options you set with the Clear Option Command. And you can use the View Options command to see the options set in your chart.

Chart style and box style choices you make using the Set Option command override any choices you make with the Print command. For example, you can use Set Option to select specific chart styles for certain branches in your chart. Then when you print the chart, you can select another chart style for everyone else.

When you set *chart style* options, do not select Automatic when you Print the chart—always select Manual. This ensures that you get the chart style that you want at the bottom levels of your chart.

Options: Set Option Alt - F7

To set an option:

1. Find the position for which you want to set an option. Make it the Current Position. Place the cursor anywhere in the Current Position Box. (But see "An Important Distinction," below.)

To set an option for the *subordinates* in a work group, make the manager the Current Position. To set an option for a *branch*, make the position at the top of the branch the Current Position. To set an option for *siblings*, make any sibling the Current Position. To set an option for all *marked positions*, any position can be the Current Position. To set an option for a *level*, make any position at that level the Current Position.

An Important Distinction: In general, you set chart styles for groups of people rather than for a single individual. To set a *chart style* option for a group of subordinates, be sure to make the subordinates' *manager* the Current Position.

You set the over-all style for your chart on the Chart Styles form. (It's the first form that appears after you select **Manual** during the printing process.)

- 2. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 3. Select **Options: Set Option**. Org Plus lists the options you can select.
- 4. Select the option you want to set. (A detailed description of each option follows.)
- 5. Press Enter . Org Plus asks you for more information about the option you selected. If the selection is a default, Org Plus asks for confirmation.
- 7. Select the range that you want the option applied to and press Enter .

Chart Style

You can set a chart style for any work group or level in your chart.

Another Important Distinction: If you set a chart style for a work group, the option affects the subordinates of the *Current Position only*. If you set a chart style for a level, it affects *all subordinates of managers at the Current Position's level*. For example, if the Current Position is at chart level 2, Org Plus applies the chart style to the *subordinates* of all level 2 managers.

When you select Manual during the Print command, you can set a chart style for the bottom three levels of your chart only. When you set a Chart Style option, you can set a chart style for any work group. Use chart style options in these cases:

- When you want one chart style for some groups at one particular level, and a different style for other groups on the same level. For example, you may want some groups in a one-column chart style, and some in a two-column style. (See Figure 6-10 for an example of this.)
- When you want a combination of styles not available on the Chart Style form. (You only see this when you use Manual to print.)
- When you want a staggered chart style instead of a horizontal chart style at upper levels of your chart.

You can control both the height and width of your chart by your selection of chart style. For example, if a 1-column style work group is too tall, try a 2-column style. It is half the height and only slightly wider. (See "How To Make Your Chart Fit on One Page," and "Special Chart Layout Situations" later in this chapter.)

Do not select Automatic when you print if you set chart style options. (Org Plus might not be able to make the necessary changes to fit your chart on one page because it cannot override the options that you set.)

After you set a chart style option, you will see a letter or number indicator to the right of the top position in the Subordinates' Box. This shows that you set a chart style option for all of the subordinates in your list. The chart style indicators are:

1C — One-Column L — List **H** — Horizontal 2C — Two-Column BL— Boxed List S — Staggered 4C — Four-Column

Some important information about chart styles

The bottom three levels of a chart are special: these are the only places where you can use the narrower chart styles (that is, columnar, list and boxed list). Within those three levels, different combinations of chart styles are possible. Additionally, as soon as you start using the narrower chart styles there are rules that you have to follow.

- You must use a horizontal or staggered chart style for positions with more than two levels of subordinates. Positions with a columnar or list chart style can print only two levels of subordinates. If these styles have more than two levels of subordinates, Org Plus warns you that lower levels of your chart will be omitted when you print.
- You can use the following columnar, list, and boxed list combinations:

List and List

Boxed List and Boxed List

- 1-Column and 1-Column
- 1-Column and List
- 1-Column and Boxed List
- 1-Column and 1-Column and Boxed List
- 2-Column and 1-Column
- 2-Column and List
- 2-Column and Boxed List
- 2-Column and 1-Column and Boxed List
- 4-Column and 1-Column
- 4-Column and List
- 4-Column and Boxed List
- 4-Column and 1-Column and Boxed List

If you choose a chart style combination that the program does not allow, the program corrects it for you.

■ If you change a work group or level to a columnar chart style, be aware that Staff-Level positions will not appear in the Staff-Level location. Org Plus handles them in the same way as the other subordinates.

Box Style

You can set the box style for single positions in your chart, or for a range of positions.

For example, you might use a box style option to set off the top levels of management in your chart. Or you might highlight all the individuals due for promotions.

Org Plus sets a box style option for the Current Position, or for the range you select.

The border around the Current Position changes to indicate the box style when you set a box style option.

Alternate Text Field Print

You can ask Org Plus to print the contents of the Alternate Text Fields instead of the Text Fields. This replaces all six Text Fields with the six Alternate Text Fields. When you set this option, Org Plus highlights the top Alternate Text Field label in the Work Group Display. (The top Alternate Text Field label is Alt unless you change it.)

You can also print the last two Alternate Text Fields in addition to Text Fields. Use the form that appears when you press [F2] on the Alternate Settings form in the Print sequence, discussed in "Chapter 4: Printing Your Chart."

Plotter Pen/Color

You can select a pen/color for the text (and amounts) for a single position or a range of positions. This will override the pen selection you make when you print to a plotter.

Exclude From Amount

This option excludes the Amount Fields in a single position or range of positions from all calculations and consolidations. For more information on using calculations and consolidations, see "Chapter 8: Amounts."

Do Not Count

You can exclude positions in your chart from all Amount Field and Print-Time counts. When you set this option, Org Plus does not include the position in any counting function (@CNT, @CMP, or @CLS). Org Plus does not include the position in the count given by the # (Count Print-Time Code). See "Chapter 8: Amounts" for more information on all of these counting functions.

This option does not affect report counts, the display of amounts with Display Amounts, or the printing of amounts.

Suppress Amount Print

You can suppress printing all six Amount Fields for a single position or range of positions in your chart. This option overrides the Amount Print settings you specify with the Amount Print Control form (F6 on the Alternate Settings form in the Print sequence). For more information on using Amounts, see "Chapter 8: Amounts."

Options: Clear Option Alt - F8

The Clear Option command lets you clear options you have set with the Set Option command.

To clear an option:

Find the position for which you want to clear an option.
 Make it the Current Position. Place the cursor anywhere in the Current Position Box.

Make the manager the Current Position to clear an option for the subordinates in a work group. Make the position at the top of the branch the Current Position to clear an option for a branch. To clear an option for siblings, make any sibling the Current Position. To clear an option for all marked positions, any position can be the Current Position. To clear an option for a level, make any position at that level the Current Position.

Note: To clear a *chart style* option for a work group, branch, or level, make the manager of those positions the Current Position.

- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Options: Clear Option.
- 4. Select the option you want to clear; then press Enter .
- 5. Select the range for which you want this option cleared and press Enter .

Options: View Options Alt - F9

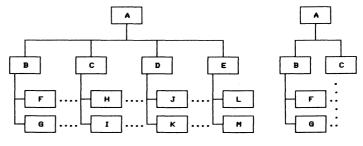
View Options lets you see what options are set for the Current Position.

- 1. Find the position for which you want to see option settings. Make it the Current Position. Place the cursor anywhere in the Current Position Box.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Options: View Options. Org Plus displays the options set for the current position.

Options: **Draw Auxiliary Line**

Ctrl - F7

Auxiliary lines are additional lines between positions in your chart. You might use auxiliary lines if you have a Staff-Level position that reports to two managers. You can also use auxiliary lines to show a matrix management structure. Figure 6-1 shows some common uses of auxiliary lines. (See also "Special Chart Layout Situations" later in this chapter.)



Matrix organizational structures

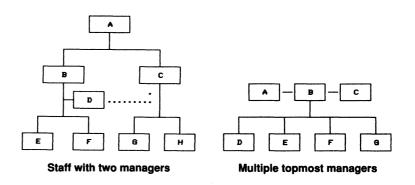


Figure 6-1. Appropriate Uses of Auxiliary Lines

Note: If you do not like the way Org Plus draws an auxiliary line, you can change it or draw it manually in the Drawing Board. See "Chapter 9: Custom Drawing" for more information.

To draw an auxiliary line:

- 1. Find one of the positions to which you want to connect an auxiliary line. Make it the Current Position. Place the cursor anywhere in the Current Position Box.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Options: Draw Auxiliary Line.

- 4. Select the line type you want to use for the auxiliary line (Solid or Dotted). If you are using a plotter, select the pen you want to use to draw this line.
- 5. Press Alt F10.
- 6. Now find the position you want to connect to the other end of the auxiliary line. Make it the Current Position. Place the cursor anywhere in the Current Position Box.
- 7. Press [F9]. Org Plus displays the Command Menu.
- 8. Select **Options: Draw Auxiliary Line** again. Org Plus asks you to confirm the line between the two positions you selected.
- 9. Select **Yes** if these are the two positions you intended to connect. Select **No** if they are not.

A mark appears at the right outside corner of both positions connected with the auxiliary line.

Org Plus draws the auxiliary line in the space between the boxes. It passes underneath any lines it must cross. When planning your chart, place positions you want to connect as close to each other as possible to minimize line crossing.

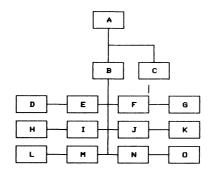
Org Plus draws auxiliary lines between any positions you specify. But lines that span multiple columns or multiple levels may result in an unattractive or confusing chart.

If you use Squeeze Chart when printing, the space between the boxes may be compressed. There may no longer be room for the auxiliary line and part of the line may disappear.

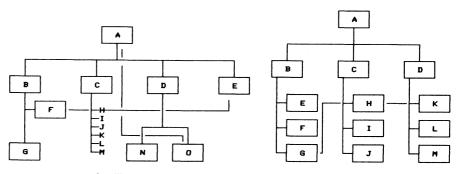
If you have auxiliary lines in your chart, be cautious if you decide to Sort Subordinates. A change in the order of positions could result in awkwardly placed auxiliary lines.

Note 1: An organization chart is already crowded with lines and boxes. Room for auxiliary lines is sparse. Therefore, do not use auxiliary lines casually. To maximize your chances for acceptable results, limit the number of auxiliary lines in your chart. Use auxiliary lines as shown in Figure 6-1. Do not use auxiliary lines as shown in Figure 6-2.

Note 2: Auxiliary lines can produce unpredictable results if you try to connect hidden positions or Staff-Level positions with subordinates. The use of auxiliary lines in either of these cases is not recommended.



Auxiliary line to inside position of a 4-column style work group (from C to I)



Auxiliary lines that cross multiple columns and levels

Figure 6-2. Awkward Uses of Auxiliary Lines

Options: Modify/Delete Line

Ctrl - F8

The Modify/Delete Line command lets you change or remove auxiliary lines, and change the line type and pen setting. It displays in turn each auxiliary line connected to the Current Position.

To modify or delete an auxiliary line:

- 1. Find the position for which you want to delete or modify an auxiliary line. Make it the Current Position. Place the cursor anywhere in the Current Position Box.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Options: Modify/Delete Line**. Org Plus displays the position connected to the first auxiliary line.
- 4. Change the line type or plotter pen if you want.
- 5. Press Alt F10. Org Plus asks if you want to keep (confirm) or delete the line.
- 6. Select **Yes** if you want to keep (confirm) the line. Select **No** if you want to delete the line.
- 7. Press Alt F10. Org Plus then displays the next auxiliary line, if one exists.
- 8. Press Esc to stop the display of any remaining auxiliary lines.

It is possible to clear all auxiliary lines from a chart at once. When you save a chart to a disk file, all auxiliary lines in the chart are saved with it. However, when you append the chart file to a chart you are working on, the auxiliary lines are *not* brought along. For a chart with many auxiliary lines, the following method is faster than searching through the chart and deleting them one by one.

To erase all auxiliary lines in a chart at once:

- 1. Save the chart.
- 2. Use the Clear Chart command to clear the Work Group Display.
- 3. Select Work On Chart to create a new chart.
- 4. Make one new position.
- 5. Use the Append Chart command to append your saved chart to it. (See "File: Append Chart" later in this chapter for more details.)
- 6. Delete the new position.

You end up with your chart minus its auxiliary lines.

Options: Field Labels F4

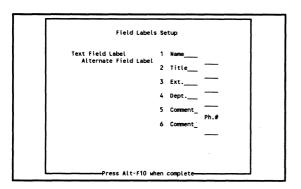
Org Plus lets you customize the default Text Field and Alternate Text Field labels (described in "Chapter 3: Building a Chart"), and the labels associated with amount fields.

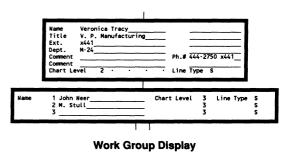
Text field labels are preset to Name, Title, Comment, and Alt. To change a label:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select Options: Field Labels. The first of two forms appears. (Figure 6-3.)
- 3. Use the cursor keys \uparrow \downarrow to move to the label you want to change.
- 4. To change the label, type a new one over the one displayed.
- 5. When you have finished changing all the Text Field and Alternate Text Field labels you want to change, press Alt - F10. The form for changing Amount Field Labels appears.

- 6. For any of the Amount Field Labels (A-F), type over the existing labels. For any of the Consolidated Amount Field prefix labels, the default is "Total." To change it, type over it. To make it blank, just delete it. See "Amount Fields" under "Alternate Settings" in "Chapter 4: Printing Your Chart" for more information.
- 7. Press Alt F10 when you finish.

You can have different labels for different charts because Org Plus saves them with your chart.





Field Labels Setup form

Figure 6-3. Customized Field Labels

Options: International

Ctrl - F4

You can set international money and numbering conventions, and customize the labels used in reports. (Refer to "Chapter 7: Tables and Reports" for information on reports.)

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select **Options: International**. The International Setup form appears.
- 3. Use the cursor keys \uparrow \downarrow to move to the element (label or money sign) you want to change.

- 4. To change the element, type a new one.
- 5. When you have finished changing all the elements you want to change, press Alt F10.

The labels for Totals, Averages, and Counts appear in your report when you ask Org Plus to include those summaries.

You can use any money symbol you want. (If your keyboard does not have the symbol you want — yen, pounds sterling, or another one — use the Alt key with the numeric keypad keys to type the symbol.) Choose whether to place the money sign before or after a number. The decimal point can be a period or a comma.

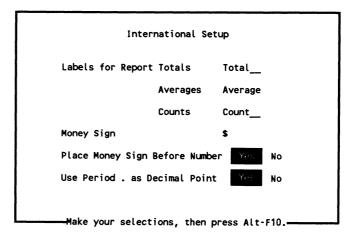


Figure 6-4. International Setup

Print-Time Codes

The Print-Time Codes are special characters that you can place in a Text Field to create a special effect when you print the field. The Codes are:

- **@** Line in Box
- ^ Blank Line
-] Suppress Field
- [Append Alt Field
- > Staff Subordinates
-) Stacked Boxed Lists

@ (Line in Box)

You can place a line in a box instead of text. Just type @ as the first character of the field.

Org Plus ignores any characters you type after the @.

Whether or not the line joins the sides of the box depends on the box style, the chart style, and the type of position. The line joins the sides of an unbroken box in a horizontal, staggered, or boxed list chart style. There is a one-character space between the line and the sides of the box with any other box style. This is also the case with columnar chart styles.

To force a space between the sides of the box, type @@ in the first two spaces of the field.

When using a plotter, lines that join the sides of the box have the same color as the box. Lines that do not join the sides of the box have the same color as the text.

^ (Blank Line)

If you select **Automatic** when you print, fields that are empty across an entire chart level do not print. This is also true if you set Make Boxes Equal Height to **No**.

To force a blank field to print at a particular chart level, type ^ (the caret symbol) as the first character of the Text Field for one position at the level. Org Plus prints the field as a blank line in every position at that level.

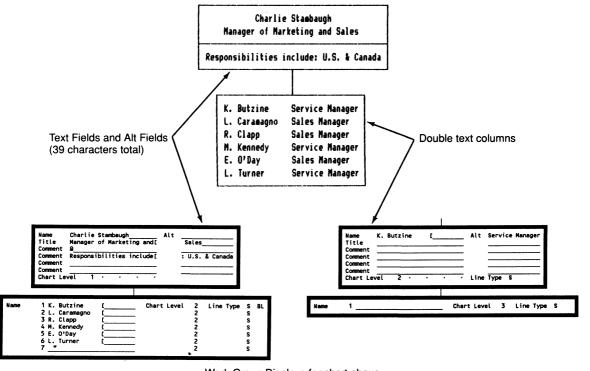
] (Suppress Field)

You can suppress the printing of a single field for a single position. Type] (closed square bracket symbol) as the first character of the Text Field.

[(Append Alt Field)

The [Print-Time Code lets you append an Alternate Text Field to the end of a Text Field. This lets you print double column text in a box or print extra-long fields (up to 39 characters).

To print two columns of information, make sure the ['s line up vertically. This way the Alternate Text Field contents will line up. To make extra-long fields, type the [as the last character of the Text Field. Org Plus appends the contents of the Alternate Text Field at the character position containing the [Print-Time Code.



Work Group Displays for chart above

Figure 6-5. Append Alt Fields

> (Staff Subordinates)

Org Plus does not allow a Staff-Level position to have subordinates in the regular sense. However, Org Plus can format a Staff-Level box so it has a list of subordinates printed below it.

- 1. Find the Staff-Level position that should have subordinates. Make that position the Current Position.
- 2. Place the cursor in the first unused Text Field.
- 3. Type > (greater than symbol) as the first character of the field that is to contain a subordinate name.
- 4. After the > symbol, type the name of the subordinate.

For example, entering "> - Sarah Smith " into Elaine Burns' first unused text field produces the result you see in Figure 6-6. (Note that Org Plus left-justifies these fields below the box in a list.)

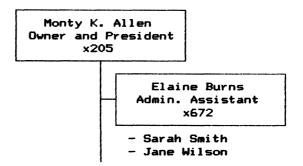


Figure 6-6. Staff-Level Subordinates

5. Make sure you tell Org Plus to print the fields you have used for the subordinates when you print the chart. Make the appropriate selections on the form labeled "Print Control 2 of 3" in the Print command ("F2 — Items That Print In Each Box" on the Alternate Settings form). If you use Alternate Text Fields 5 or 6, you must tell Org Plus to print these fields. Use the form labeled "Print Control 1 of 3" to set Print Alt Text Field 5 and/or 6 to Yes.

Org Plus prints all Text Fields which follow the first > below the box, whether or not they include the >. However, Org Plus does not left justify them unless you include the > as the first character in the field.

Any amounts you print for the Staff-Level position appear below the staff subordinates. In this case you may want to use the Set Option command to Suppress Amount Print for the Staff-Level position.

When you use this Print-Time Code to print subordinates for a Staff-Level position, be sure to print Text Field 1 first. (Text Field 1 prints first unless you use the form labeled "Print Control 3 of 3" to change the print position to Last, Next-To-Last, or Second-From-Last.)

Note 1: This Print-Time Code works only for Staff-Level positions (positions whose Chart Level is "S"). The > prints as a character if you use it in a regular position.

Note 2: Do not draw auxiliary lines to Staff-Level positions with subordinates.

) (Stacked Boxed Lists)

The) Print-Time code lets you split subordinates into more than one boxed list. Type) in the first character position of the Name field in the Subordinates' Box where you want the split to occur. Type another) on the next Name field. The name immediately above the first) is the last name in the upper boxed list. The name below the second) is the first name in the lower boxed list. Any text on the same line as the) is ignored. To make the distance between the boxed lists longer, type) on more than two consecutive lines. You can split subordinates into as many boxed-lists as you wish, within the overall limit of 100 subordinates for each manager.

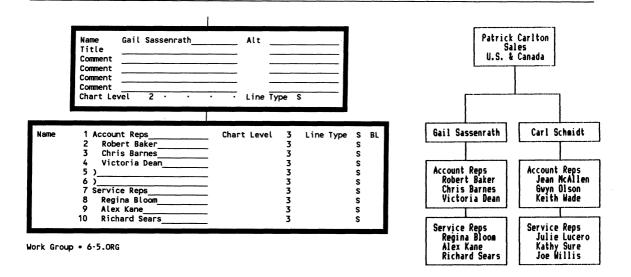


Figure 6-7. Stacked Boxed Lists

Note: Your chart style for the subordinates must be the boxed list style. This Print-Time Code does not work with any other chart style.

Hidden Positions

Hidden positions are positions that do not show when you print your chart. They are useful when you want to create special layouts. For example, you can use two different chart styles for the subordinates of one manager by creating a hidden position. (See "Special Chart Layout Situations" later in this chapter.) They also provide a choice of appearance when printing charts with employees removed more than one level from their manager (see Figure 6-8).

To create a hidden position:

- 1. Place the cursor on the subordinate field that you want to make a hidden position.
- 2. Type something into the field. Most people like to use a descriptive phrase, such as "hidden."
- 3. Press Tab \(\subseteq \) to move to the Chart Level field.
- 4. Type H over the chart level number. (The "H" tells Org Plus to hide the position.)

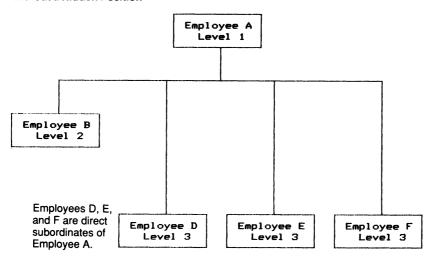
When you create a hidden position, the line from the hidden position's manager goes straight to the hidden position's subordinates. Org Plus does not draw a box for a hidden position. It does not print the Text Fields of a hidden position on a chart or a report.

You can set options for a hidden position and for a hidden position's subordinates.

Org Plus does not count hidden positions when counting positions in a branch. You cannot mark hidden positions. You cannot copy information to them. When you copy information, Org Plus copies the information to the hidden position's subordinates instead. Org Plus treats the subordinates of a hidden position as if they were subordinates of the hidden position's manager.

Caution: You cannot enter amounts for a hidden position. If you make an existing position a hidden position, Org Plus clears the Amount Fields. If you later change the position so it is no longer hidden, all amounts remain blank.

Without a Hidden Position



With a Hidden Position

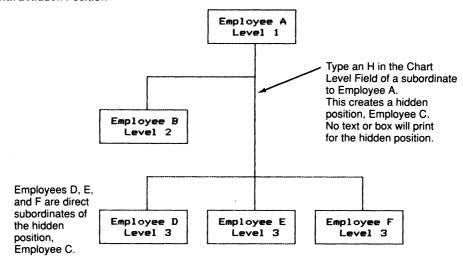


Figure 6-8

How To Make Your Chart Fit on One Page

It is not uncommon for a chart to be too large to fit on one page. Sometimes, a simple change makes the difference between a one-page chart and a two-page chart.

Org Plus decides where to put each piece of your chart based on chart styles, type size, and so on. Most charts get wider at the bottom. Org Plus allows room at the top so that all positions at the bottom fit.

Some charts simply cannot fit on one page. However, here are some tips for adjusting the size of your chart.

Making Your Chart Narrower

If your chart is too wide, there are ways to make your chart narrower. You can make it narrower whether you select Manual or Automatic when you print:

- Use first name initials instead of writing the full name.
- If you have one extremely long name, abbreviate it.

 Org Plus makes all boxes at a level large enough to hold the longest name and makes boxes at higher levels at least that wide. There are four dots at the bottom of each Current Position box to help judge text length. The dots line up with the 10th, 15th, 20th, and 25th characters of the Text Fields.
- Put names and titles on two lines instead of one. This makes boxes (and your chart) narrower but taller.
- If you are printing amounts and they are the widest lines in your boxes, make the labels shorter or print without labels.
- Beware of placing a solitary position at the lowest level of your chart. The narrowest chart styles are available for the lowest three levels only. Do not use up one of the levels for a position you can move up a level or omit.
- If you are printing Alternate Text Fields 1-4 on the outside corners of the box, make sure one of those fields does not include lengthy text. Org Plus makes the boxes more than twice as wide as the longest corner text.

■ Sometimes you can use a hidden position to move a long branch down a level. If it then becomes the only position at that level with subordinates Org Plus does not space the higher positions out as far (see Figure 6-9).

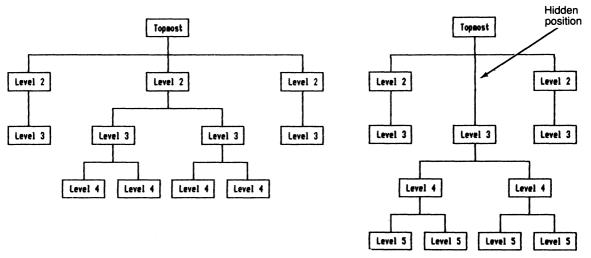


Figure 6-9

■ Print your chart in pieces, one department or group at a time. This often makes your charts more legible as well. You can make an overview chart with department names or other information appropriate to your chart. (Often the overview information can be placed in the Alternate Text Fields and printed using the Alternate Text Field Print option. (See "Options: Set Option" earlier in this chapter.)

These tips help make your chart narrower when you select Manual to print:

- Select the larger number in the Characters Per Inch field of the "Printer 3 of 4" form. (F7 on the "Alternate Settings form in the print sequence.)
- Use a chart style that makes your chart narrower. Try staggered instead of horizontal style if you need to reduce width just a little. Try one of the three-level choices if you need to squeeze a lot (for example, 1-column and 1-column and boxed list). Of course, this makes your chart taller.

- When printing the chart, select Height, Width, or Both for Squeeze Chart on the Chart Format form (F5 on the Alternate Settings form). This eliminates white space between boxes, Select No for Make Boxes Equal Width.
- A large work group at the bottom of your chart makes your chart very wide if left in a horizontal style. It can also cause the higher levels of the chart to spread far apart.

You can solve this problem using options by putting the shorter work groups into a 1-column style, and the longer work group into a 2- or 4-column style. This makes all the groups similar in length, without making the chart much wider.

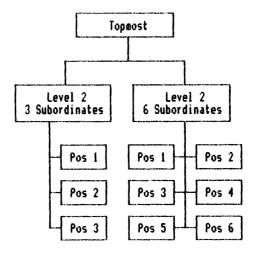


Figure 6-10

Figure 6-11 shows the effect of using the 2-column style instead of the horizontal style at level 3. Figure 6-11 also shows the list style at Level 4.

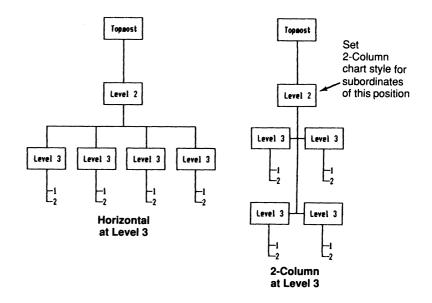


Figure 6-11

Making Your Chart Shorter

Here are some ways to make your chart shorter, whether you select Manual or Automatic when you print:

- Use fewer lines of chart titles and annotations.
- Make sure position names and titles are on one line instead of two. Don't print any lines of text or amounts that are not necessary. In particular, printing Alternate Text Fields 1-4 on the corners increases the height of every box by two lines.
- Do not print Amount Fields that are not necessary for one or more levels of your chart. Turn them off for the entire level with the Suppress Amount Print option. (See "Options: Set Option" in this chapter.) Or use Suppress Print on the form labeled "Amount Print Control 2 of 2" (F6 from the Alternate Settings form in the Print sequence) to turn them off for the lowest level or the topmost level.

- Print in portrait orientation.
- Print your chart in pieces, one department or group at a time. This often makes your charts more legible as well. You can make an overview chart with department names or other information appropriate to your chart. (Often the overview information can be placed in the Alternate Text Fields and printed using the Alternate Text Field Print option, described earlier in this chapter.)

These tips help make your chart shorter when you select Manual to print:

- Select the largest number in the Lines Per Inch Field of the "Printer 3 of 4" form. (F7 on the "Alternate Settings form in the print sequence).
- Use flatter chart styles such as horizontal or 4-column. This makes your chart wider as well as shorter. Even better, use the list or boxed list chart styles. They are extremely compact.
- When printing, select Height or Both for Squeeze Chart. This eliminates some space between levels. Select No for Make Boxes Equal Height.

Trading Off Between Chart Width and Height

If you choose a chart style such as 1-column, one work group might be much taller than the others. Use Options to make that work group 2- or 4-column style. This makes your chart shorter, with a small increase in width.

On the other hand, you might choose 4-column style because most of your work groups are large. If one work group is smaller, use Options to make it a 1-column style. This makes your chart narrower without making it too much taller.

Special Chart **Layout Situations**

This section includes suggestions for meeting special chart layout and formatting needs. These are hints and techniques for getting the most from Org Plus.

Different chart styles for positions under one manager.

Occasionally, you may need to split the subordinates of one manager into several chart styles. For example, you may want a few people to have individual boxes, and the rest to be in a boxed list. Use a hidden position to accomplish this.

In Figure 6-12, the subordinates are to have different chart styles. Positions A, B, and C are to have individual boxes. Positions E, F, and G are to be in a boxed list. Positions A, B, and C are at chart level 2. To change the chart style of positions E, F, and G, first create a hidden position, D, at level 2. Make positions E, F, and G subordinates of the hidden position at chart level 3. To change positions E, F, and G to a boxed list chart style, make the hidden position the Current Position. Place the cursor anywhere in the Current Position Box. Set a boxed list chart style for the level 3 subordinates using the Set Options command.

For more information on hidden positions, see "Hidden Positions" in this chapter.

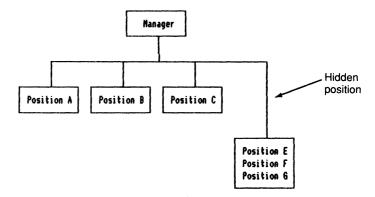


Figure 6-12

More than two levels of subordinates under a columnar chart style.

There may be cases where you want more than two levels of subordinates under a position in a columnar chart style. Use the Stacked Box List Print-Time Code to split subordinates into more than one boxed list. See "Print-Time Codes" in this chapter for more information.

Multiple Names Under a Single Title in One Box

To save space, you can list a group of positions with the same title in one box. You can do this with the boxed list chart style at the bottom of your chart.

With a boxed list chart style you can have boxes up to 100 lines tall. A boxed list prints the first line of text from each of the subordinate positions (usually this is the Name field in the Subordinates' Box).

You can enter the title for the group in the first field (or fields) of the Subordinates' Box. Then list the names of the individuals in the group. You can separate the title from the names by leaving a blank Name field. Or you can separate the title from the names with a line drawn across the box. Use the @ (Line in a Box Print-Time Code) to draw this line.

A second method is to put the shared title into a regular chart position. Then enter the names of the individuals as subordinates of the title position. This way the title will be in its own box above the boxed list containing the individual names.

In either case, once you have entered the information into the Subordinates' Box, move the cursor to the Current Position. Then use the Set Option command to set a Boxed List chart style.

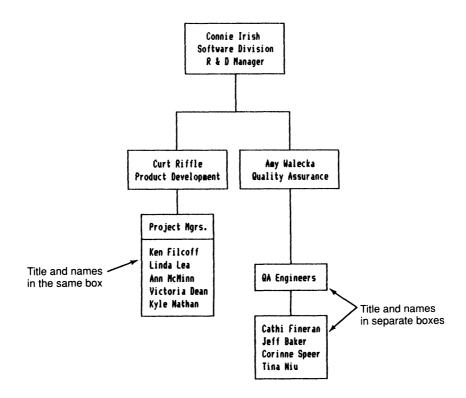


Figure 6-13. Multiple Names Under a Single Title

BIG Boxes

At the bottom of your chart you can have boxes up to 100 lines tall. Type the contents for these boxes in the Name fields (in the Subordinates' Box) below the manager for the box. Then select the boxed list chart style.

You can also specify a line type of None and use Set Option to change the box type to none. Then the big box will look like a large paragraph. These large boxes are ideal for job descriptions.

Another way to do this is to make a box the size you want in the Drawing Board. You can also type blocks of text anywhere on your drawing. See "Chapter 9: Custom Drawing" for more information.

Two or More Topmost Managers

Org Plus allows only one topmost manager in a chart. Of course, you can always put more than one name in the topmost box and separate the names with a line. Or, try this:

- 1. Put your chart title (or no information at all) in the position at Chart Level 1.
- 2. Enter the topmost managers as subordinates of the position at Chart Level 1. Type N in their Line Type Fields.
- 3. Move the cursor to the position at Chart Level 1. Use Set Option to select a box style of None for the position at Chart Level 1.
- 4. Draw auxiliary lines between the topmost managers (at level two).

See the examples under "Options: Draw Auxiliary Lines" in this chapter.

Two or More Managers for One Department

You can use auxiliary lines to create a department with more than one manager.

- 1. Enter all the department managers as subordinates of one manager (the department managers' manager). Make sure they are next to one another at their level. Set the Line Type of the manager closest to the center in the group to S. Set the Line Type of the others to N.
- 2. Enter department employees as subordinates of the manager closest to the center (the one connected to his or her manager with a solid line).
- 3. Draw auxiliary lines to connect the other department managers to the center manager. See "Options: Draw Auxiliary Lines" in this chapter.

Advisory-Level Positions

If you need to place a position off to the side but at the same level as another position, you can accomplish it with the following steps.

- 1. Put your chart title (or no information at all) in the position at Chart Level 1.
- 2. Use Set Option to select a box style of None for the position at Chart Level 1.
- 3. Enter both the topmost manager and the advisory position as subordinates of the position at chart level 1. Type N for both Line Type Fields.
- 4. Draw an auxiliary line between the manager and the advisory position.

If the advisory position is not at the topmost level of the chart, skip steps 1 and 2 above. At step 3, enter both positions as subordinates of one manager. Only the advisory position should have Line Type N. Then draw the auxiliary line as above. See "Options: Draw Auxiliary Lines" in this chapter for more information.

Abbreviating Text Fields

You can print two versions of a chart—overview and detail. To make an overview version, use the Alternate Text Fields to hold the shorter, overview text. Then print the Alternate Text Fields instead of the Text Fields.

Another trick to making a good overview chart is to place the most important information in the Alternate Text Fields, rather than abbreviated versions of what is in the Text Fields. For example, if the name is the most important information to appear on your chart, you might want to put the first name in the first Alternate Text Field and the last name in the second and so on. Then print the Alternate Text Fields instead of the Text Fields.

More Advanced Features

The Chart commands provide an overview of your chart. View Chart Status allows you to see a summary of information about your chart.

The File commands allow you to combine charts, save parts of charts, and exchange data with certain other software packages. You can also name the chart and report specifications for your chart and use them in other charts.

Chart: View Chart Status Alt] - F1

View Chart Status gives you some important information about your chart.

To see this information:

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select **Chart: View Chart Status**. Org Plus displays information about your chart.

Item 1 shows the Org Plus version and revision date. The Mode of Calculation indicator shows you whether Org Plus is set to calculate amounts Automatically (A) or Manually (M).

Item 2 shows which options you have set and how many auxiliary lines there are in your chart. A "Yes" means you set the option at least once in your chart. If you set a chart style option for the current work group, an asterisk appears next to the that option.

Item 3 displays the number of levels in your chart (Lowest level in chart). Levels to bottom of branch shows how many levels there are from the Current Position to the bottom of its branch.

Item 4 displays the number of positions in your chart (Total) and the number of positions you can add (Remaining available). The sum of the numbers is the maximum number of positions you can have in a chart. This value depends on available memory, up to a maximum of 600 positions. On the right, Org Plus displays how many positions are hidden, removed, and marked.

Item 5 shows information about some of the selections you made in Printer/Setup. It displays the printer manufacturer and model, the paper size, and the orientation as they are currently set. A "C" appears if you have continuous forms set to **Yes**. An "S" appears if you have selected **Yes** for Auto Cut-Sheet Feeder.

Item 6 shows how much memory (RAM) was available for the Org Plus program when you loaded it (Available). The Total memory shows how much memory your computer has.

3. Press any key to return to the Work Group Display.

File: Append Chart

Alt - 3

Org Plus lets you attach a chart stored on your disk to the chart you are working on. This combines the two charts into one.

To append a chart:

- 1. Find the work group where you want the topmost manager of the chart you are appending to appear. Place the cursor in the Subordinates' Box on the line where you want the manager to appear.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **File: Append Chart**. Org Plus asks you to identify the name of the chart you want to append.
- 4. Move the cursor to highlight the name of the chart, and press Enter . Org Plus appends a copy of the chart to the chart you are working on. (The chart you append also remains, unchanged, as a file on the disk.)

File:

Save Branch Alt - 4

Save Branch creates a new file that contains a part of the chart you are working on. You can then work on the branch you save as a separate chart. Or you can append it to another chart.

To save a branch as a new chart:

1. Find the position you want to have at the top of the new chart. Make that position the Current Position. Place the cursor anywhere in the Current Position Box.

The file you create will contain every work group below and reporting through this position.

- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **File: Save Branch**. Org Plus asks you to name the new chart.
- 4. Give your chart a name. Be sure to name it something different from your other charts.
- 5. Press Enter . Org Plus saves the branch as a file.

Note 1: Using Save Branch from the position of the topmost manager is the same as selecting Save Chart (on the Main Menu).

Note 2: You can use the Save Branch command together with the Append Chart command to copy a branch to another part of the same chart.

File:

Exchange Data Alt - 5

The Exchange Data Command lets you import information from and export information to other programs such as dBase® or Lotus 1-2-3®. You move only the contents of positions when you export or import.

Org Plus imports and exports data as comma-delimited ASCII. Each record contains the Text, Alternate Text, Amount Fields, and Consolidated Amount Fields for a single position in the chart, ended by a carriage return/linefeed. Each field is separated with a comma and Text Fields are in quotes. For each position, Org Plus exports and imports all the fields in order.

Exporting Data from Org Plus

You can export the data from all positions in your chart, or To export the data from your chart:

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select File: Exchange Data.
- 3. Select **Export All to ASCII** if you want to export the information for your entire chart.

Select **Export Marked to ASCII** if you want to export information from marked positions only.

Org Plus asks if you want to include field labels as the first line of the exported data.

4. Select **Yes** to write the Text and Amount Field labels as the first line of exported data. (This is particularly useful if you plan to import your chart data into a spreadsheet.)

Org Plus asks you to specify a name for the file to contain the exported data.

- 5. Give the file a name.
- 6. Press Enter . Org Plus writes the data, record by record, into this file.

Org Plus encloses each Text Field in quotes. Blank Text Fields appear as two quote marks with nothing in between.

Org Plus exports Amount Fields in scientific notation. Zeros appear in blank Amount Fields. For example, suppose a position contains the following information:

Name—J. Doe, Title—Boss, Amount Field A—\$3000. All other Text, Alternate Text and Amount Fields (except for Consolidated Amount A) are blank.

Caution: Org Plus exports as zero any Amount Field that displays ERR.

Org Plus can export numbers that are very large or close to zero. Programs such as dBase III® or Lotus 1-2-3 cannot import these numbers correctly. If you import numbers that are very large or close to zero, verify that they are imported correctly.

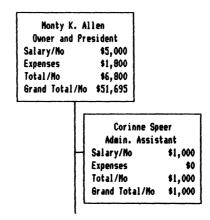
Org Plus can export a record over 500 characters in length if all fields in a position are full. Some other programs may not accept records of this length.

To read exported data into a dBase database, use the APPEND FROM command, with file type DELIMITED (see the dBase documentation for further information).

To export data for use in Lotus 1-2-3, use a file name with an extension of ".PRN." Use the /FILE IMPORT NUMBERS command to read the data into your spreadsheet. Because Lotus has its own international character set definition, international characters may not be imported correctly.

To export a "picture" of your chart, see "Print To Disk" in Chapter 4.

Sample chart with Amounts



Corresponding export records

```
"Monty K. Allen","Owner and President","","","","","","","","","","","54,.18E4,.68E4,0,0,0,.49895E5,.18E4,.51695E5,0,0,0
"Corinne Speer","Admin. Assistant","","","","","","","","","","","1E4,0,.1E4,0,0,0,.1E4,0,0,0
```

Figure 6-14. Export Data

Importing Data into Org Plus

To import data from another program, you must first structure a chart for the data. Org Plus then puts the data in this chart.

Org Plus uses the first Text Field (usually this is the Name Field) to determine where to put each incoming record. When you create your chart, you must put a name, or other information that uniquely identifies the position, into the first Text Field. You can import the data for all the other fields.

To import data into an Org Plus chart:

- 1. Create a chart with a position for each record you want to import.
- 2. Put a unique name (or other text item) in the first Text Field (this is usually the Name Field) of each position.

Once you structure your chart:

- 3. Press F9. Org Plus displays the Command Menu.
- 4. Select File: Exchange Data.

5. Select Import ASCII.

Org Plus asks you to specify the name of the file that contains the data to import.

- 6. Provide the file name.
- 7. Press Enter . Org Plus reads the data, record by record, from this file. It matches each record with a position, based on the contents of the first Text Field.

The first item in each line (record) of the imported file must be a text string (in quotes). It must match exactly the contents of one of the text field 1's in your chart. When Org Plus finds a match, it puts all the data from the record into the fields for that position.

If the first item in the incoming record does not match any position in the chart, Org Plus ignores the whole record. It also ignores any extra data in an incoming record.

There cannot be duplicate information in the first Text Fields in either the chart or the incoming data. Org Plus overwrites each duplicate record from the imported file into the first matching position it finds in the chart.

Org Plus imports fields in order. The first character string goes into Text Field 1, the second into Text Field 2. The first number goes into Amount Field A, and so on.

Each Text Field in an imported record can be up to 80 characters in length. However, Org Plus uses only the first 25 characters for Text Fields and 15 characters for Alternate Text Fields. Text Fields cannot include embedded quotation marks.

You can import twelve text strings and up to six numeric fields. You cannot import data into Consolidated Amount Fields or into an Amount Field containing a formula.

Once Org Plus imports the data, you can edit the chart, add formulas and Amount Field labels, and so on.

The text in Text Field 1 does not have to be a name. You can use any sort of identifying code you want in the field, as long as it uniquely identifies the position. (However, codes might make your chart harder to work with.)

Text and numerical data can be mixed in the imported file (i.e. Text Field 1, Amount Field A, Text Field 2, etc.). Org Plus still stores them, in order, in their respective fields. You can skip a field when you import data. For example, you can import Text Field 1 and Text Field 3 but not Text Field 2. Use "" in place of the field you want to skip. Skip numerical fields with a comma (321,,45, 50, 63).

To import data from dBase III into an Org Plus chart, use the COPY TO command with file type DELIMITED. Use the FIELDS specification in the COPY command to select the data items that should be imported into your Org Plus chart, with the key field first.

Data cannot be exported directly from Lotus 1-2-3 in comma delimited ASCII. However, you can use the /PRINT FILE command to print your spreadsheet data to a file and then edit it into comma-delimited form.

File: Name Chart/Report Spec

Alt - 8

The chart and report specifications include settings, labels, and titles you make for the overall chart, not individual positions.

You can name as many sets of chart/report specifications as you want.

Use Name/Chart Report Specs to:

- Name a custom set of defaults (for example, your company name as the chart title) to use with each chart you start.
- Name and use several chart/report specifications for a single chart to print it in different formats. Or print different reports without having to manually change any of the settings.

The specifications include:

- the print settings you made with the Print command, including the ones from the Amount Print Control and Titles & Annotation forms
- the fields you selected to include in tables and reports with the Table Setup command
- headers and titles you created for reports and tables with the Headers & Titles command
- formulas you entered with the Formula Setup command
- Amount Field formats set with the Number Format command
- Text and Amount Field labels
- Find & Mark command retrieve spec

The chart and report specifications do not include:

- text in Text or Alternate Text Fields
- amounts in Amount Fields
- marks you made with the Find & Mark and Assign Mark commands
- options you selected with the Set Options command
- auxiliary lines

To name the chart and report specifications for your chart:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select File: Name Chart/Report Spec.
- 3. If you want to save the specifications on a different drive (or path), press Tab \(\subseteq \). Type the correct drive (or path). Then press Enter .
- 4. Type a file name for your specifications.

End the name with ".HDR" so you always know that the file contains chart and report specifications. Org Plus adds this extension to the name if you do not.

- 5. Press Enter . Org Plus saves the specifications.
- 6. Press any key to continue.

Note: When you copy a chart to another drive (or path), copy the specifications file, too. The specifications file has the extension ".HDR."

File: **Use Chart/Report Spec** Alt - 9

You can use chart and report specifications you named with the Name Chart/Report Spec command each time you work on your chart.

To use the chart and report specifications:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select File: Use Chart/Report Spec.
- 3. If the specifications are on a different drive (or path), press Tab [5]. Type the correct drive (or path). Then press Enter
- 4. Select the name of the specifications file.
- 5. Press Enter . The specifications are ready to use.
- 6. Press any key to continue.

Tables and Reports

Org Plus lets you create simple tables or reports from information in your chart. You can use this feature to create phone lists, salary reports, or employee listings.

Allen Manufacturing Telephone Directory April 1990			
Name	Title	Dept	Phone
Allen, Monty KOwner and PresidentEngineering444-2700 Ash, HShift 1Manufacturing555-2600			
Banks, TomWesternMarketing444-2800 Burns, ElaineAdmin. AssistantEngineering444-2700			
	Shift 3 Engineer		
Dash, A	Shift 1	Manufacturin	g333-2500
	Shift 2 Shift 1		
Jones, C	Shift 2	Manufacturin	g333-2500
	Shift 1 Eastern		
Neer, John		Manufacturin Manufacturin	

Figure 7-1

This chapter covers:

- setting up tables and reports
- sorting by last names
- viewing tables and reports on the screen
- adding titles and headers to tables and reports
- printing tables and reports

The chart SAMPLE1.ORG on "Diskette 1—Chart" (or "Diskette A— Chart & Draw") has the information for the phone list in Figure 7-1. If you would like to follow along using this as an example, retrieve SAMPLE1.ORG using the Retrieve Chart command from the Main Menu (see "Chapter 3: Building a Chart").

Note: You cannot use the Drawing Board to create, view, or modify tables or reports.

Tables/Reports: Table Setup ☐ Shift] - F1

A table or report can have up to four columns. Table Setup lets you select which field Org Plus should use for each column. You can select from any of the Text, Alternate Text, Amount, or Consolidated Amount Fields.

Table Setup also determines how Org Plus sorts positions when you use Sort Subordinates. It also determines the order of positions when you use the Find & Mark and Review Marked commands.

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select Tables/Reports: Table Setup. The form called Table Setup 1 of 2 appears.
- 3. For each column, move the cursor to select a field. Choose from any one of the following:

Text Fields (numbered 1 through 6) Alternate Text Fields (also 1-6) Amount Fields (A-F) Consolidated Amount Fields (A-F)

Org Plus displays the name of the field you have selected in a box to the left of the selection bar.

If you select " - " instead of a field, the column does not print. If you select L, the column contains the chart level number for each position.

- 4. Select how Org Plus should order the information for each of the first three columns. (The fourth column cannot be sorted.) You can use either ascending or descending order (alphabetic or numeric).
- 5. Press Alt F10 to go to the Table Setup 2 of 2 form.
- 6. Select which of the first three columns to sort first (the Primary Sort). Then select which of the first three columns to sort next (the Secondary Sort).

Org Plus uses the values in the Primary Sort column to order your list. If there are identical entries (ties) in your Primary Sort column, Org Plus sorts them according to the Secondary Sort column.

- 7. Select Yes if you want to sort last name first (see below for more information on this choice).
- 8. Press Alt F10 when you finish.

You can use the Table Setup command to display the Table Setup form for the chart SAMPLE1.ORG. Org Plus includes names (Text Field 1), titles (from Text Field 2), departments (Comment Field 1), and telephone numbers (from Alternate Text Field 5) in this phone list. On each line in the report, the name appears in the first (left-most) column, the title is in the second column, the department is in the third column, and the phone number is in the fourth (right-most) column. Org Plus sorts the list alphabetically by name, last name first, in ascending order. When there are identical names, Org Plus alphabetizes them by title.

Sorting Last Name First

You can sort by last names even if you entered first names first. Select Yes for Sort Last Name First in the Table Setup 2 of 2 form.

Sort Last Name First works only on names in the first Text Field.

The names must be punctuated correctly. Those names you enter last name first must have a comma following the last name (before the first name). You must also include a comma before an abbreviation, such as Jr., Sr., MD, or PhD, that follows a name.

Org Plus recognizes multi-word last names such as San Chirico, di Lorenzo, du Bois, and so on. It is unlikely that Org Plus will not recognize a name. However, if it does not, place underscores between each word of the name (Holmes_A_Court). Or type them as one word (HolmesACourt). Org Plus occasionally treats a first name as if it is a last name prefix. If this happens, add a period or some other character at the end of the first name.

Note: DO NOT select Yes for Sort Last Name First if you do not have proper names in the first Text Field.

Tables/Reports: View Table Alt - F5

This command displays on screen the first three of the four fields you selected with the Table Setup command. (All four fields are printed). You can use this command to see the information included in your printed report. You can also use it to find a position in your chart, as discussed in "Chapter 3: Building a Chart."

Blank lines at the top of the table when it is displayed on the screen indicate hidden or removed positions in the chart.

If you do not change the Table Setup, Org Plus displays the first three Text Fields—Name, Title, and the first Comment field. The appropriate field name heads each column on the screen.

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select **Tables/Reports: View Table** to display the current table.

You can scroll through the list using the ↑ ↓ and PgUp PgDn keys.

3. Press Esc to return to the Work Group Display. Or, select the name of the position you want to display and press Enter . That position becomes the Current Position.

If you use View Table to look at the sample chart SAMPLE1.ORG, you see names, titles, and telephone numbers. This is the information contained in the first two Text Fields and Alternate Text Field 5. Org Plus sorted the list in alphabetical order, by last name.

Note: If you typed Print-Time Codes in any field displayed in the table, they appear in the table. The exception is the Append Alt Field Print-Time Code. If you typed this code in the first Text Field and sorted last name first, the code does not appear. ("Chapter 6: Advanced Chart-Making" discusses Print-Time Codes.)

Tables/Reports: **Header & Titles**

☆Shift - F4

You can print your table as a report. Use the Header & Titles command to add a report title, a page header, and column titles to the report.

- 1. From the Work Group Display, press [79]. Org Plus displays the Command Menu.
- 2. Select Tables/Reports: Header & Titles. Org Plus displays the Report Header and Titles form.
- 3. Type up to three lines as report titles. These will print on the first page of the report.

Type a title for each column. Column titles print at the top of the column on each page of the report.

You can also type a page header. Headers print at the top of each page of the report. The header will not print on the first page of the report if you have entered a title for the first page. By specifying the header location you control where the heading prints—at the left, center, or right side of the page.

4. Press Alt - F10 when you finish.

% (Date Print-Time Code)

You can have Org Plus automatically print the date in a report title or header. To print the date, type % as the first character in the field where you want the date. Then type a number from 1 through 6 following the %. This number tells Org Plus what format to use when printing the date. The formats are:

1 — March 19, 1968 2 — 19 March 1968 3 — 3/19/68 4 — 19/3/68 5 — 3-19-68 6 — 19-3-68

For example, type %3 and Org Plus automatically prints the date in the format 3/19/68 in the report title or header.

Tables/Reports: Print Report ☆Shift - F2

To print your report, use the Print Report command.

- 1. From the Work Group Display, press [9]. Org Plus displays the Command Menu.
- 2. Select **Tables/Reports: Print Report**. Org Plus displays the Report Format Form.
- 3. Specify how to format the information in your report as follows:

Draw Box Around Page

Select **Yes** to enclose your report in a box. If there is not enough room on the page, Org Plus only prints lines at the top and bottom of the page. This may happen if you are printing at 10 cpi on an 80 column printer.

Fill Lines with Dots...

Select Yes to fill the spaces between columns with dots. Org Plus prints dots in all the spaces up to the beginning of the last column. If the last column contains Amounts or Consolidated Amounts, the dots may not fill all the space up to the number.

Skip Line on Letter Change

Select Yes to skip a line each time the first letter of the first column changes. For example, Org Plus prints a blank line

between the end of the "A" names and the start of the "B" names. Org Plus ignores this setting if you select subtotals or subaverages. It also ignores this setting if the first column is not a Text Field.

Double Space

Select Yes to Double Space, and Org Plus prints the entire report double spaced.

Characters per inch

This describes the number of characters that fit in each inch of a printed line — the larger the number that you select, the more characters that fit on a page. Using the smaller type font (that is, the setting with the larger number), if one is available on your printer, makes the chart narrower. Some printer settings, such as the "plain vanilla" settings under the manufacturer called "Other," offer only one font size. In this case, Org Plus provides only one selection.

Lines per inch

This describes how many lines of text fit in each vertical inch of a page — the higher the number, the shorter the chart. Some printers offer only one lines-per-inch setting: in this case, Org Plus offers only one choice.

- 4. Press Alt F10 when you finish. Org Plus displays the Report Print Control form.
- 5. Select what Org Plus should print in your report as follows:

Positions To Print

Select All to print all positions. Select Marked to print only those positions you have marked. This lets you include in your report only those positions you marked with the Find & Mark or Assign Mark commands. Select **UnMarked** to print only *unmarked* positions. See "Chapter 5: Editing Your Chart" for information on marking positions.

Print Page Numbers

Org Plus prints a page number on each page of your report if you select **Yes** for Print Page Numbers.

Print Totals and Print Averages

Select **Sub** to print subtotals (or subaverages). Select **Grand** to print grand totals (or averages). Select **Both** to print both of them. These apply to the right-most three numeric columns (containing an Amount or a Consolidated Amount). If all four columns are numeric, the left-most one will not include totals or averages.

If you select subtotals (or subaverages), Org Plus calculates the break points based on your sorting sequence. Your primary sort column must be non-numeric (Text or Level) to use subtotals or subaverages. For example, if you use Level as your primary sort field, you get a subtotal between each change of level.

Org Plus ignores Print Totals and Print Averages settings if you do not select Amount or Consolidated Amount Fields as columns. "Chapter 8: Amounts" discusses Amounts and their functions.

Note: An amount excluded from calculation (with the Exclude from Amounts option) prints as zero in your report. An amount excluded from printing (with the Suppress Amount Print option) prints as a blank. You can find a discussion of these commands under "Alternate Settings" in "Chapter 4: Printing Your Chart" and under "Options: Set Option" in "Chapter 6: Advanced Chart-Making."

Print Counts

Finally, you can ask Org Plus to print counts for your report. This will print subtotal and/or grand total counts of the lines in your report. You can print counts if your columns contain text or amounts. The Do Not Count options set in your chart do not affect the report count.

Print to Disk File

If you select Yes, Org Plus writes the report to a disk file.

Number of Copies to Print

You can ask Org Plus to print up to 5 copies of your report.

If you want to keep the settings you've just made without printing the report, select 0 copies.

6. Press Alt - F10. Org Plus prints your report.

If you are printing the report to a disk file, Org Plus asks you more questions. See "Printing a Report to Disk" later in this chapter.

When Org Plus prints a report, it makes the left margin one inch wider than the right margin, if possible. This makes the pages more readable when they are bound at the left edge:

Blank lines printed at the top of the table indicate hidden or removed positions in the chart.

If you use Print-Time Codes in your chart, they affect your report as follows:

@ and) (Line in a Box and Stacked Boxed Lists) If you use one of these in the first Text Field (Name field), Org Plus excludes this *position* from the report. This is the case even if your report does not include the first text field.

] and ^ (Suppress Field and Blank Line) The field prints as a blank.

> and [(Staff Subordinates and Append Alt Field) Org Plus blanks these characters, but the remaining text prints.

(Count)

Org Plus displays the appropriate count.

See "Chapter 6: Advanced Chart-Making" for a discussion of Print-Time Codes.

You can print your report to a disk file. You might do this to copy the report into your favorite word processing program.

To print your report to a disk file:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select Tables/Reports: Print Report.
- 3. Make selections on the Report Format form.
- 4. Press Alt F10 when you finish.
- 5. Make selections on the Report Print Control form, selecting **Yes** for Print to Disk File.
- 6. Press Alt F10 when you finish.
- 7. Select a format for the disk file.

Select **Printer** if you plan to print the file to a printer using the DOS COPY command. The resulting file includes printer control sequences based on your choice of printer in Printer/Setup.

Select ASCII or ASCII with Graphics to create an ASCII file. Word processing software and other software programs will read ASCII files. The ASCII setting creates a straight ASCII image of the report. ASCII with Graphics uses line drawing characters for the box around the report. (If you do not select Yes for Draw Box Around Page, the ASCII and ASCII with Graphics settings produce the same results.)

- 8. Press Alt F10 when you finish.
- 10. Select or type a file name and press Enter . Org Plus formats the report and writes it to the file you specified.

8

Amounts

Org Plus lets you work with numbers as well as text. Because Org Plus knows the structural relationships between positions, you can do calculations that are difficult or impossible in a spreadsheet.

Org Plus totals budgets, revenues, project hours, or any quantity you choose, position by position, up the branches of your chart. You enrich your understanding by visually comparing results between positions, departments, and divisions. Rearrange your chart to forecast changes and Org Plus immediately recalculates the totals. A wide variety of counting and statistical functions are available.

The Amounts features of Org Plus act much like a "minispreadsheet" at each position of your chart. You can enter numeric data directly for each position, or set up formulas that apply to all positions.

This chapter covers:

Basic Amounts Features

- entering and modifying amounts
- specifying number formats
- printing amounts

Advanced Amounts Features

- consolidating amounts up the organization
- using formulas and functions

Figure 8-1 highlights many of the Amount features found in Org Plus. In this example, Org Plus maintains salary information at each position in the chart and then averages it for the entire work group. It maintains budget information and then consolidates it at each level of the organization. Flexible printing options allow the meaningful information for each level and position to be printed. You will refer to this example often throughout the first part of this chapter.

Note: The numeric capabilities of Org Plus allow extremely complex calculations. Foolproof guidelines are impossible and there is always the remote possibility of hardware or software error. Therefore, it is imperative that you verify your results to avoid incorrect conclusions.

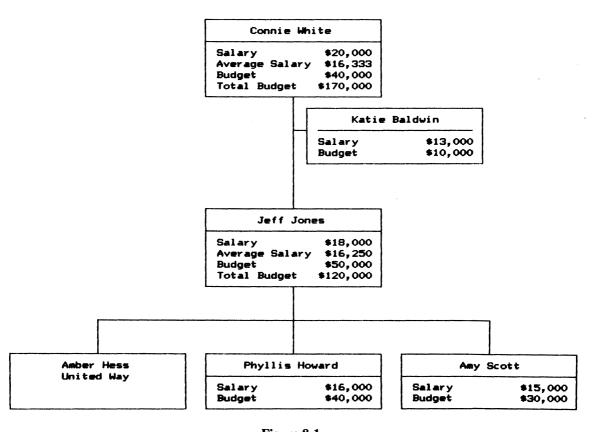


Figure 8-1

Amounts: Display Amounts

Ctrl - F1

Display Amounts expands the Current Position Box to show the Amount and Consolidated Amount Fields. You can then enter and edit values in the Amount Fields.

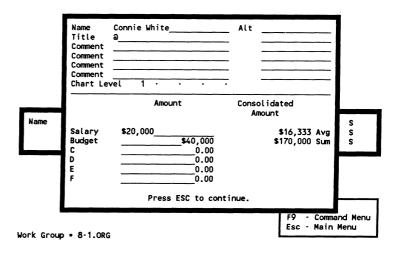


Figure 8-2. Work Group Display with Amounts

The Amounts are on the left. Org Plus labels them A-F. However, you can customize the labels with the "Options: Field Labels" command (as described in "Chapter 6: Advanced Chart-Making"), as shown in the first two Fields in Figure 8-2. The Consolidated Amounts Fields are on the right. Each is associated with an Amount Field. Usually, the consolidated amount is the sum of the values in the associated Amount Field for the position and all its subordinates. You cannot enter data in a consolidated field—Org Plus calculates it automatically.

An Amount Field can contain either a value or a formula. For a value, enter the number directly in the Amount Field. For a formula, use the Formula Setup command discussed later in this chapter.

To enter an amount:

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select **Amounts: Display Amounts**. Org Plus displays the Amount Fields for the Current Position.

3. Enter your numbers in the appropriate Amount Fields. You may enter numbers in regular form or in scientific notation (for example, 2.6E-5).

You can move around your chart while displaying amounts.

4. Press Esc to return to the Work Group Display with Text Fields only.

When you enter an amount in a field you can copy that amount to other positions in the chart. See "Edit Chart: Copy Information" in "Chapter 5: Editing Your Chart" for more information.

When you enter amounts in Org Plus:

- If you enter an invalid character in an Amount Field,
 Org Plus ignores everything following the invalid character.
 For example, if you enter t or t5, Org Plus changes it to 0.
 If you enter 5t Org Plus changes it to 5.
- If you enter a number that is too small to display in an Amount Field (more than 9 decimals), Org Plus displays 0 or -0. For example, if you enter 0.000000001, Org Plus displays a 0 in that Amount Field. The original number is stored internally and will be used in any calculations. (The number of decimals is preset to 2. You can change the number of decimals to 9 with the Number Format command.)
- If you enter a number that is too large to display in an Amount Field (more than 20 digits), Org Plus displays asterisks (****). For example, if you enter 1E25, Org Plus displays asterisks in that Amount Field. The original number is stored internally and will be used in any calculations.
- Precision in Org Plus is 15 digits. Therefore if you enter the number 12345678901234567890 in an Amount Field, Org Plus rounds the number and displays 12345678901234570000.

Amounts: Number Format

Ctrl - F5

For each Amount Field, you can specify if it is a money field, and how many decimal places to display. Org Plus uses this number format for displaying and printing the amount on a chart.

- 1. From the Work Group Display, press F9. Org Plus displays the Command Menu.
- 2. Select Amounts: Number Format.
- Org Plus asks if you want to use commas in the numbers. Select Yes and Org Plus inserts commas in numbers greater than 999. Select No if you do not want Org Plus to insert commas.
- 4. For each of the Amount Fields A-F, make selections as follows:

Money Field

Select **Yes** to display and print the amount with a money symbol (preset to a dollar sign). To change the money symbol for different currencies, refer to "Options: International" in "Chapter 6: Advanced Chart-Making."

Dec. Places

Specify 0 to 9 decimal places to the right of the decimal point. Org Plus displays numbers that are too small as 0 and numbers too large as asterisks.

5. Press Alt - F10 when you finish.

Amounts: Adjust Amount

Ctrl - F6

The Adjust Amounts command allows you to apply an adjustment amount or factor to all the amounts in a field within a specified range. For example, you can give a ten percent salary increase to all subordinates.

1. Find the position for which you want to adjust the amount. Make it the Current Position.

Make the manager the Current Position to adjust an amount for all members of a work group. Make the position at the top of the branch the Current Position to adjust an amount for a branch. To adjust an amount for siblings, a level, or all marked positions, make any member the Current Position.

- 2. Press F9. Org Plus displays the Command Menu.
- Select Amounts: Display Amounts. Org Plus displays the Amount Fields.
- 4. Place the cursor on the field you want to adjust.
- 5. Press F9. Org Plus displays the Command Menu.
- 6. Select Amounts: Adjust Amount.
- 7. Select an adjustment operation: Add, Subtract, Multiply or Divide. This tells Org Plus what you want to do to the amount—add to it, subtract from it, multiply it, or divide it.
- 8. Enter the amount of the adjustment. This can be a constant amount, or a multiplication or division factor (based on what you chose in step 7).
- 9. Press Alt F10 to continue.
- 10. Select the range to which the adjustment applies. (See "Selecting Ranges" in "Chapter 5: Editing Your Chart.")

 Press Alt F10.

Printing Amounts

Org Plus offers flexibility for printing amounts in your chart. This is important because sometimes an amount is meaningful and its consolidated amount is not (or vice versa). Sometimes an amount is meaningful but not at all chart positions.

Amount Print Control

Use the Amount Print Control settings to specify which Amount Fields (if any) should appear in your printed chart. You can choose whether or not to print each of the Amount and Consolidated Amount Fields A through F. You can also suppress the printing of Amount Fields at the lowest level (including Staff-Level positions at any level) or topmost position. This feature is useful when amounts are meaningless at the top or bottom of the chart.

See "F6 — Amount Fields In Each Box" under "Alternate Settings" in "Chapter 4: Printing Your Chart" for more information.

Suppress Amount Print

The Suppress Amount Print option prevents the printing of all Amount Fields for an individual or range of positions. Set this option with the Set Option command. See "Chapter 6: Advanced Chart-Making" for more information.

With Suppress Amount Print, blank spaces replace the Amounts on the printed chart. In the budget example at the beginning of this chapter, the Suppress Amount Print option prevents amounts from showing for Amber Hess (figure 8-1).

When you Suppress Amount Print, the Consolidated Amount column does not appear when you display amounts.

Exclude From Amount

The Exclude From Amount option excludes the six Amount Fields in designated positions from all calculations and consolidations. For example, in Figure 8-1, the Exclude From Amount option keeps the amounts for Amber Hess from being summed into the budget and salary totals. Use the Exclude From Amount option in positions for which amounts are meaningless. See "Options: Set Option" in "Chapter 6: Advanced Chart-Making" for more information.

When you Display Amounts for a position with this option set, the amounts do not appear. Instead Org Plus tells you that you set the Exclude From Amount option. If you print amounts with this option set for a position, the amounts appear as zero.

Org Plus still counts the position in any position counts.

If you set Suppress Amount Print and Exclude From Amount, Org Plus does not print amounts or include them in calculations.

Using Hidden Positions with Amounts

Org Plus does not let you enter or maintain amounts in hidden positions. When you hide a position already containing amounts, Org Plus clears them. If you later change that position so it is no longer hidden, all amounts are zero.

Consolidated Amounts

Consolidated Amounts are derived from pre-defined formulas. Org Plus calculates a Consolidated Amount by consolidating the values from the Current Position down all positions in the branch. For each Consolidated Amount Field (A-F), you can select one of five consolidation types: Sum, Average, Product, Derived, and None.

Consolidated Amounts do not include amounts at positions with the Exclude From Amount option set. Since Org Plus computes Consolidated Amounts, you cannot enter or edit them.

Org Plus provides six fields for consolidated amounts. To make good use of all the Amount Fields, enter values in the Amounts Fields. Then use the Consolidated Amounts Fields for consolidating those amounts.

Figure 8-3 shows a Sum consolidation of budgets and an average consolidation of salaries. The Total Budget amount at Connie White's position contains the sum of budgets for all positions below her, including her own budget. The Average Salary contains the average of salaries for positions below and including Connie. (In this chart, the labels "Total Budget" and "Average Salary" print because of a setting made with the Options: Field Labels command (as described in "Chapter 6: Advanced Chart-Making").

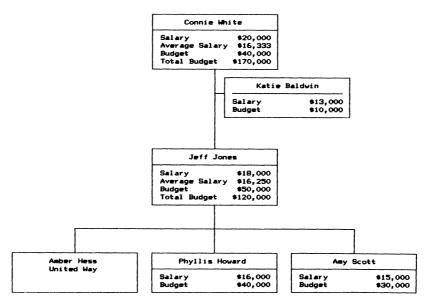


Figure 8-3

Setting the Consolidation Type

Select the consolidation type for each Consolidated Amount Field using the Formula Setup command. Until you change them, all six Consolidated Amount Fields are preset to Sum. When you set a consolidation type for a field, Org Plus uses it for that field in every position.

To set a consolidation type:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select Amounts: Formula Setup.
- 3. Move the cursor to the Consolidation field for the appropriate Amount Field.

4. Select the consolidation type you want. Org Plus uses this type for that Amount Field for all positions in your chart. Select from:

None — Does not consolidate this field.

Sum — Totals the amounts from the Current Position and all positions below in the same branch.

Avg — Computes the average value from the amounts in the Current Position plus all positions below in the same branch.

Product — Multiplies amounts from the topmost position down through the Current Position. Use this for yield and probability applications.

Derived — Uses the formula found in its Amount Field, but applies the formula to the Consolidated Amount Field. Use this for consolidating ratios and percentages calculated by Org Plus.

- 5. Press Alt F10 when you finish.
- 6. Verify that the consolidated results displayed by Org Plus are the results you expect.

The most commonly used consolidation methods are Sum and Avg. For most applications, such as budgeting, cost accumulations, and so on, these two are sufficient.

To print the Consolidated Amounts on your chart, use the Amount Print Control settings. See "F6 — Amount Fields In Each Box" under "Alternate Settings" in "Chapter 4: Printing Your Chart" for more information.

The Consolidation Types

Sum and Average Consolidations

Figure 8-3 illustrates typical uses of the Sum and Avg consolidations. The Sum consolidation is equivalent to the predefined formula @sum(brn,f). The Average consolidation is equivalent to the pre-defined formula @avg(brn,f). (See "Formulas" later in this chapter.)

In this chart, Salary and Budget are the amounts for each manager. Org Plus calculates Average Salary using the Avg consolidation on the Salary fields. It calculates Total Budget using the Sum consolidation on the Budget field.

Consolidation Type — None

Select this type when a consolidation of values for an Amount Field does not make sense, or is not needed. For example, the sum of all performance ratings is not a useful number.

The Product Consolidation

Use the Product consolidation for specialized applications. A typical use for a Product consolidation is to generate a probability or yield factor using fractional amounts.

A Product consolidation multiplies the values in an Amount Field, from the topmost position down through the Current Position. For example, you might start at the topmost level with a certain number of objects. At each subsequent level, a Product consolidation multiplies the number from the previous level by some factor. This factor may be a success rate or wastage factor, for example. The consolidation yields a new number after that level.

To use the Product consolidation:

- 1. Enter the starting value (number of items, for example) in the Amount Field at the topmost position. Let us say, Amount Field A in the topmost position contains 1000 (units).
- 2. For all lower positions in the chart, enter a multiplication factor for Org Plus to multiply against the result from the next higher level. Amount Field A for Product 1 contains .6 (60%), and for Product 2 contains .4. Thus the consolidated results are 600 and 400 respectively. At chart level 3 the values in Amount Field A are again percentages.

The Derived Consolidation

A Derived consolidation is used only when the Amount Field contains a formula. (See the discussion of formulas in the next section). Org Plus uses the formula, but applies it to the Consolidated Amount Fields instead of the Amount Fields. A typical use of a Derived consolidation is to calculate a ratio between sums of Budgets and Actuals as shown in Figure 8-4.

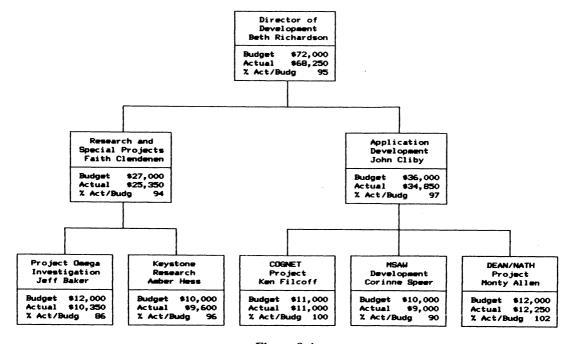


Figure 8-4

This chart displays three Consolidated Amounts: the sums for Budget and Actual, and a Derived consolidation for "% Act/Budg." (The latter is a percentage of actual expenses to budget). The Derived consolidation applies the formula for percent of budget (Actual/Budget times 100) to the Consolidated Amounts instead of the Amounts. It finds one sum as a percentage of the other sum.

If you used a Sum instead of a Derived consolidation, Org Plus sums the individual percentages. In this case, the sum for John Cliby is 100 + 90 + 102 = 292, a meaningless number.

Formulas

You may enter a formula instead of a value in any Amount Field. Using formulas in Org Plus is very similar to using formulas in spreadsheet applications. Uses include mathematical operations as well as "spreadsheet functions" (see "Available Functions" below).

Enter formulas for Amount Fields using the Formula Setup command. The formula for a given Amount Field applies to all the positions in the chart. For example, enter the formula A + B on the Amount Field C formula line. This displays the sum of the Amount Fields A and B in Amount Field C.

Amounts: Formula Setup

Ctrl - F3

Use the Formula Setup command to enter formulas in the Amount Fields, and to specify the consolidation type for each field. (See "Consolidated Amounts" in this chapter.)

Note: The numeric capabilities of Org Plus allow extremely complex calculations. Foolproof guidelines are impossible and there is always the remote possibility of hardware or software error. Therefore it is imperative that you verify your results to avoid incorrect conclusions.

Entering Formulas

The Formula Setup form provides a choice of consolidation methods and a formula line for each Amount Field. To enter a formula:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select **Amounts: Formula Setup**. Org Plus displays the Formula Setup form.
- 3. Move the cursor to the Formula line for the appropriate Amount Field.
- 4. Type the formula on the line.
- 5. Press Enter . Org Plus notifies you of any errors, such as unbalanced parentheses or illegal symbols.

- 6. Press Alt F10 when you finish.
- 7. Verify for a few positions that the results of the formula are what you expect.

Once you specify a formula for a particular Amount, you cannot enter data in that field. The absence of the underscore on the amount line indicates a formula and the cursor automatically skips over that line.

The format for Org Plus formulas is much the same as for formulas in Lotus 1-2-3°. You can use constants and the basic math operators (+, -, *, /). You can also use functions as defined below, and variables representing each of the Amounts fields (A, B, C, D, E, F). You cannot use scientific notation to enter a constant in a formula.

Errors in Entering Formulas

Org Plus can detect the following kinds of errors when you enter formulas. For these errors, Org Plus will not allow you to leave the field until you correct the problem.

- Unbalanced parentheses For example, 2*(A+B should be corrected to 2*(A+B).
- Invalid argument For example, @SUM(xyz,B) contains the invalid argument xyz, which should be a range (see "The Format for a Function" below).
- Improperly formed function For example, @SUM is missing the two arguments.
- Unknown characters, variables, or functions For example, @SUN(all,B) should be corrected to @SUM(all,B).
- Variable, operator, or function in the wrong place (syntax error) For example, 2(A+B) should be corrected to 2*(A+B).

Order of Calculation

Org Plus calculates in column order — first Amounts A through F in order, then Consolidated Amounts A through F. Be aware that circular references can occur when one calculation is dependent on the results of a later calculation and that calculation has not yet been done. The results of the calculation may then be erroneous since the data used was invalid or incomplete. Org Plus displays a warning message when you enter a formula containing a circular reference. If you continue, Org Plus displays a CIRC message on the upper right portion of the screen. This indicates that a circular reference exists in your formula definitions. Circular references can occur when:

- A formula is defined as itself. For example, Amount A is defined as 2.5*A*B.
- A field references a formula in a lower field. For example, Amount A is defined as @SUM(brn,B) where B is defined as @AVG(brn,C).
- A derived consolidation references a lower field. For example, Amount A is defined as @MAX(brn,B). In this case the derived consolidation for Amount A looks for the maximum value among the consolidated sums of Amount fields B, but the sums have not been consolidated yet.

Circular references can usually be fixed by changing the order of your equations.

Functions

You can use a function as part of a formula for an amount. Org Plus functions include several arithmetic functions, statistical functions, and counting functions. The counting functions include a classify function which lets you count members of a class you define. For example, you can define a class of all positions with a particular job code, or all female employees.

The Format for a Function

The format of an Org Plus function is very similar to functions in Lotus 1-2-3 and other similar programs.

The general format is: @function_name(rng,f)

where rng is the range of positions over which the function operates, and f is the field to use in the function. For example, @SUM(sub,A) sums the contents of Amount Field A for all subordinates of each position in the chart.

The range (rng) for a function can be:

sib — the Current Position's siblings (includes the Current Position)

sub — the Current Position's direct subordinates

lvl — all positions at the current level (includes the Current Position)

brn — all positions in the current branch (includes the Current Position)

all — all positions in the chart (includes the Current Position)

mgr — the Current Position's manager

top — the topmost position in the chart

The field (f) specified for a function may be any one of the Amount Fields A, B, C, D, E, or F. You must use the letter — not the descriptive field label — for the Amount Field in a function.

The function names, range names, and field letters can be uppercase, lowercase, or mixed. Org Plus ignores spaces.

Available Functions

The functions provided by Org Plus include:

Counting Functions:

@CNT(rng) — Count. Counts the number of positions in range (rng). (See also "# (Count)" in this chapter.)

@CMP(rng,f) — Compare. Counts each position in range (rng) where field (f) is not zero.

@CLS(rng,tf, "string") — Classify. Counts every position in range (rng) where the contents of Text Field (tf) match the text "string." Field (tf) must be one of the Text Fields 1-6 (i.e, 1, 2, 3, 4, 5, or 6) or the Alternate Text Fields A1-A6. The text for "string" must be in quotes.

Org Plus recognizes matches for text strings regardless of whether they are uppercase or lowercase. You may also use the wildcard characters * and ? (See wildcard characters under "Find & Mark" in "Chapter 5: Editing Your Chart"). If you need to search for a quotation mark within the string, precede the quotation mark with a backslash (\).

Note: If you use the Do Not Count option, Org Plus does not include the designated positions in these counting functions. (See "Options: Set Option" in "Chapter 6: Advanced Chart-Making" for more information about Do Not Count.)

Arithmetic/Statistical Functions:

@SUM(rng,f) — Gives the sum of values in field (f) within range (rng). The Sum Consolidated Amount gives the same result as @SUM(brn,f) without using up one of the six Amount Fields.

@AVG(rng,f) — Gives the average of values in field (f) within this range (rng). The Avg Consolidated Amount gives the same result as **@AVG(brn,f)** without using up one of the six Amount Fields.

@MAX(rng,f) — Returns the largest of the values in field (f) within range (rng), or 0 if the range is empty.

@MIN(rng,f) — Returns the smallest value in field (f) within range (rng), or 0 if the range is empty.

@STD(rng,f) — Calculates the standard deviation across range (rng) for field (f). Returns ERR if less than 2 positions in the range. The formula used for calculating the standard deviation is as follows:

$$\sqrt{\frac{n * \Sigma f^2 - (\Sigma f)^2}{n (n-1)}}$$

where n = @CNT(rng) (number of positions in range)

@VAR (rng,f) — Calculates the variance across range (rng) for field (f). Returns ERR if less than 2 positions in the range.

Miscellaneous:

@AMT(rng,f) — Returns the amount from field (f) for range (mg), which must be a single position. Rng must be either "top" or "mgr."

In the examples below, Amount Field A contains each person's Sales Quota and Amount Field B contains their actual Sales Performance. Some formulas you might use are:

@MIN(sub,B)/@AVG(sub,B) — This gives the ratio of the poorest performer among each manager's subordinates to the group's performance average.

A/@AMT(mgr,A) — This gives an individual quota as a percentage of the departmental quota (as represented by the next higher level's quota).

@MAX(all,B) — This returns the highest Sales Performance amount found anywhere in the organization.

An example of the classify function is:

@CLS(sub,A3,"Sec. II") — This counts every position among each manager's subordinates where the contents of Alternate Text Field 3 match the job title "Sec. II."

(Count Print-Time Code)

Org Plus can count the positions in a branch and print the result in a Text Field. To get this count, type # (number sign) as the first character in a text field. If you type #, Org Plus includes the position with the # in its count. If you want to exclude the Current Position from the count, type #S.

Org Plus precedes the count with a label if you follow the # with a colon (:) and the label you want.

Org Plus interprets the # as a Print-Time Code if the rest of the field is blank, is followed by "S," or a colon (:). Otherwise, it assumes you want to use the # as a regular character in the text.

If you do not want a position included in the count, set the Do Not Count option for that position. See "Options: Set Option" in "Chapter 6: Advanced Chart-Making" for more information about this option.

Amounts: Mode of Calculation

Alt - 6

With the Mode of Calculation command, you control whether Org Plus does amount calculations automatically or only when you request it.

Selecting Automatic recalculates all Amount and Consolidated Amount Fields each time you enter or modify data. This is the default mode, and is similar to automatic recalculation in a spreadsheet. Org Plus calculates Amounts A through F in order, then Consolidated Amounts A through F.

Selecting Manual calculates amounts only when you request them using the Calculate command (see below). Use Manual calculation if you intend to work with large charts. As the amount of data in your chart grows, calculations take increasingly more time. Selecting Manual speeds up Org Plus because it does not have to recalculate after every change. If you make a change requiring a recalculation, Org Plus displays a CALC message in the upper right corner of the screen.

To switch between Automatic and Manual mode of calculation:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu.
- 2. Select Amounts: Mode of Calculation.
- 3. Select Manual or Automatic and press Enter Org Plus switches the mode of calculation.

Note: Org Plus will take advantage of a math co-processor (8087 or 80287) if you have one installed in your computer. This will significantly increase the speed of any amount calculations you do.

Amounts: Calculate Alt - 1

Use the Calculate command to recalculate your Amount and Consolidated Amount Fields when the Mode of Calculation is Manual.

When your chart needs recalculation, Org Plus displays a CALC message in the upper right hand corner of the screen. The message disappears after you recalculate.

To calculate Amount and Consolidated Amount Fields:

- 1. From the Work Group Display, press [F9]. Org Plus displays the Command Menu
- 2. Select Amounts: Calculate. The CALC message flashes while Org Plus calculates the amounts.

Numeric Limits in Calculations

Org Plus may encounter the following numeric limits when calculating formulas or consolidations. Org Plus handles the results as described below.

- If a "divide by zero" calculation occurs, Org Plus displays ERR in the Amount Field. This could occur when using the formula @AVG(sub,A) at the lowest level of the chart. In that case, Org Plus tries to take the average of 0 subordinates.
- Org Plus maintains the precision of a number up to 15 digits. If Org Plus adds 123456789012345 to .0000001, the result remains 123456789012345.
- If the result is too small to display (more than 9 decimals),
 Org Plus displays a 0 or -0. However, the entire number is stored internally and will be used in dependent calculations.
- If the result is too large to display (more than 20 digits),
 Org Plus displays asterisks (****). However, the entire number is stored internally and will be used in dependent calculations.
- If the result is too small to store internally (+/-E-100), Org Plus converts the number to 0.
- If the result is too large to store internally (+/-E100), Org Plus displays ERR. Any calculations dependent on that result will also display ERR.

A Product Cost Accumulation Example Using Amounts

The most common use for Org Plus is for organization charts. However, you can use its tree-structured charts for many other applications. Its numerical capabilities make it well suited for doing cost accumulations based on a product structure breakdown.

The chart in Figure 8-5 is an example of a product costing chart. For each part of the product, you enter the material cost and the hours of labor. Org Plus calculates the manufacturing overhead and labor costs from the material cost and labor hours respectively. Org Plus also calculates the percentage each part contributes to the total cost. It divides the total cost of the node by the total cost of all nodes. This is the formula used: E/@SUM(TOP,E)*100 (Amount Field E accumulates the total cost.)

Figure 8-5 shows Consolidated Amounts printed for all fields. Thus, the amounts printed at each position represent the sum of all the components and labor subordinate to that position.

Note: For this chart, all cost information appears at the bottom level of each branch. Each higher level position displays the sum of the costs of the subordinate parts. As a general rule, you should not enter data in positions at higher levels of the chart for this type of structure. If the amounts for each assembly do not equal the sum of its parts, the chart does not make sense to the reader.

In the example, there is labor required to assemble the parts. This labor appears in a position called "Assembly Labor" as if it were a part itself. Thus, the costs for each assembly are the cost of its parts plus the labor to assemble them.

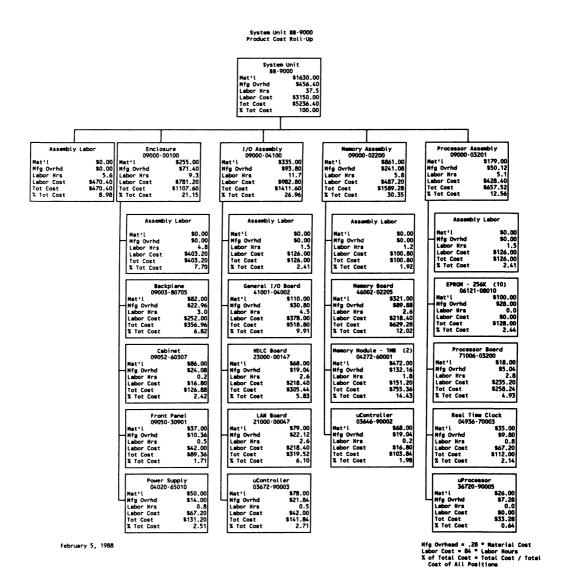


Figure 8-5. Product cost roll-up chart showing component costs.

With Org Plus' numeric capabilities, these costs are automatically summed up the branches of the chart.

9

Custom Drawing

The Drawing Board commands give you additional flexibility and control over your chart's appearance.

In the Drawing Board, you can add lines, boxes, or text. You can move parts of your drawing anywhere you want. You can also enhance text or make it larger (assuming your printer supports these features).

However, using the Drawing Board is a one-way street. Changes you make in the Drawing Board are not communicated back to your chart in the Work Group Display. Thus, if you change someone's title in a drawing, it remains unchanged in the chart.

This chapter covers:

- when to use the Drawing Board
- the Drawing Board display
- getting to the Drawing Board
- adding text anywhere in a drawing
- Drawing Board commands

When To Use the Drawing Board

When deciding whether to do something in the Work Group Display or the Drawing Board, consider their different advantages.

In the Work Group Display, Org Plus does the hard work of formatting, spacing, and drawing. Updating charts is a snap and revised charts can be printed in minutes.

In the Drawing Board, you can fine tune a chart created in the Work Group Display. You have control over positioning of all chart elements. On the other hand, a drawing is much more difficult to update because you do the hard work, not the computer.

For clarity, it is helpful to remember that you work on charts in the Work Group Display, and you work on drawings in the Drawing Board.

Experienced Org Plus users like to follow this formula:

- 1. Create all charts in the Work Group Display, letting Org Plus format and space your chart.
- 2. Then, make only those changes in the Drawing Board that can't be made in the Work Group Display.
- 3. When the chart needs to be updated, use the Work Group Display. This is where editing is the easiest. Let the computer do the hard work. This updates your chart, but not the drawing.
- 4. Make a new drawing from your revised chart. Use the Drawing Board to recreate the changes you previously made to the drawing.

Some good uses of the Drawing Board include:

- Manually drawing auxiliary lines to control their placement.
- Manually drawing a special layout that cannot be generated using the Work Group Display.
- Placing annotations at special locations on the drawing.
- Drawing box and line diagrams that are not in the shape of an organization chart or tree.

Drawing Board



You can get to the Drawing Board when you are working on a chart in the Work Group Display if you started the program with the command "Org". You can also get directly to the Drawing Board from DOS.

To get to the Drawing Board while you are working on a chart:

- 1. Press [9] from the Work Group Display. The Command Menu appears.
- 2. Select **Drawing Board** and press Enter . The Drawing Board menu appears.
- 3. Select one of the choices that appears. The three choices (explained in detail below) are:

Create Drawing — makes a drawing from the chart you are working on.

Retrieve Drawing — allows you to modify a drawing you created before.

Create Part — makes a drawing from a part of the chart you are working on.

Note: You can create a drawing if you start the program with the command "Chart" instead of with the command "Org." But you will have to quit Chart and start Draw to retrieve and to work on the drawing.

Create Drawing

Create Drawing makes a drawing from the chart you are working on. When you work in the Drawing Board, you make changes to the drawing only. Your chart remains unchanged.

- From the Drawing Board menu, select Create Drawing.
 Org Plus takes you through nearly the same sequence of
 screens as the Print command as it prepares a drawing for
 you. (See "Chapter 4: Printing Your Chart.")
- 2. Make selections as you would to print your chart. Org Plus displays the Name Drawing form and asks you to provide a drive (or path) and a file name.

- 3. To store your drawing on a drive (or path) different from the one displayed, press Tab \(\). Type the correct drive (or path). Then press Enter \(\).
- 4. Give your drawing a name. End the name with ".DWG" so you will always know that the file is a drawing. Org Plus adds this extension to the drawing name if you do not.
- 5. Press Enter . After a slight delay, the Drawing Board displays the top center of your drawing (approximately).

You can have a chart that is too big to make into a drawing. If your chart is too big, Org Plus tells you so. When this is the case, you can make a drawing of part of your chart with the Create Part command described below. Alternatively, you can try to make your chart smaller. See "How To Make Your Chart Fit on One Page" in "Chapter 6: Advanced Chart-Making" for suggestions about how to make your chart narrower and shorter.

Note 1: Org Plus can assign different pens or colors to individual auxiliary lines in a chart. However, when you make a drawing from a chart, you lose the auxiliary line colors. Solid auxiliary lines will be the same color as the lines and boxes. Dotted auxiliary lines will be the same color as the text.

Note 2: You cannot create, view, or modify a report in the Drawing Board.

Retrieve Drawing

Retrieve Drawing allows you to modify a drawing you made before.

- From the Drawing Board menu, select Retrieve Drawing.
 Org Plus displays the Retrieve Drawing form and asks you to select a file name.
- 2. To retrieve a drawing from a different drive (or path) than the one displayed, press Tab [4]. Type the correct drive (or path). Then press Enter 4.

- 3. Select the name of your drawing.
- 4. Press Enter . The Drawing Board displays your drawing.

Create Part

Create Part allows you to make a drawing from a part of the chart you are working on.

- 1. Move the Work Group Display until the position you want at the top of the drawing is the Current Position.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Drawing Board**.
- 4. Select Create Part. Org Plus asks you how many levels you want in the drawing.
- 5. Select the number of levels. If you want the drawing to include the bottom of the branch, select **All**.
- 6. Press Alt F10. Org Plus takes you through nearly the same sequence of screens as the Print command as it prepares the drawing for you to work on. (See "Chapter 4: Printing Your Chart.")
- 7. Make selections as you would to print your chart.
- 8. Press Alt F10 when you finish. Org Plus displays the Name Drawing form and asks you to provide a file name.
- 9. If you want to store your drawing file on a drive (or path) different from the one displayed, press Tab [5]. Type the correct drive (or path). Then press Enter [1].
- 10. Give your drawing a name.

End the name with ".DWG" so you will always know that the file is a drawing. Org Plus adds this extension to the drawing name if you do not. 11. Press Enter . After a slight delay, the Drawing Board displays the topmost position of your drawing (approximately).

Getting to the Drawing Board from DOS

If you want to edit an existing drawing or create a simple drawing from scratch, you can go to the Drawing Board from DOS. You do not need to go to the Work Group Display first.

To start the Drawing Board as a stand-alone program from a fixed disk, type DRAW at the DOS prompt. (You can use uppercase or lowercase letters as you type.)

You will see a Main Menu. Select from the following commands:

Work on Drawing — to edit a drawing already in the Drawing Board or to start one from scratch.

Retrieve Drawing — to modify a drawing you created before.

Save Drawing — to save the drawing currently in the Drawing Board, making it a file on disk.

Erase File — to permanently erase a drawing from a disk.

Clear Drawing — to erase the contents in the Drawing Board.

Printer/Setup — to give the Drawing Board necessary information about your printer.

Quit — to exit the Drawing Board and return to DOS.

The Drawing Board Display

The Drawing Board displays your drawing much as it appears when printed. You see part of your drawing at a time.

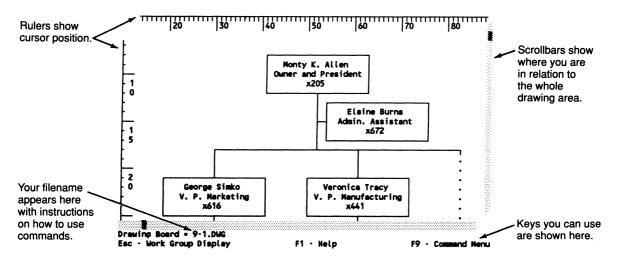


Figure 9-1. The Drawing Board Display

Due to limitations of the monitor and differences among printers, not all characters can be displayed on the screen exactly as they print. The lines may appear to connect to the box on the screen, however they may not connect when printed and vice versa. This is particularly true if you are trying to draw lines to connect to the exact corners of certain box styles.

Rulers

The rulers show the character row and column of the current cursor position. The horizontal ruler measures character spacing. The vertical ruler measures line spacing. Use the rulers to help you determine where to place text, lines, and boxes. If your drawing covers more than one page, a "P" on the ruler shows you where one page ends and another begins. If your printer prints on continuous form paper, P's do not appear on the ruler that represents that paper direction.

Each mark on the ruler measures a distance of one character row or column. If the drawing is set to 10 characters per inch spacing (10 cpi), each mark on the horizontal ruler represents .10 inch. If the drawing is set for 17.14 cpi, each mark represents .059 inch (ten marks equal about half an inch).

If the drawing is set to print 8 lines per inch, each mark on the vertical ruler represents .125 inch. If the line spacing is 6 lpi, each mark on the ruler represents .166 inch.

The length of each ruler depends on the number of pages the drawing covers.

You can turn off the display of the rulers with the Toggle Rulers command.

Scrollbars

The vertical scrollbar represents the height of your drawing area. The horizontal scrollbar represents the width of your drawing area. The indicator on the scrollbar shows where you are in relation to the whole drawing area. For example, when you are at the top-left corner of the drawing area, the horizontal scrollbar indicator is at the far left. The vertical scrollbar indicator is at the very top. When you are at the bottom-right corner of the drawing area, the horizontal scrollbar indicator is at the far right. The vertical scrollbar indicator is at the bottom.

Messages

Two lines at the bottom of the screen display messages as you work. On the first line you see "Drawing Board:" and your file name (or "Working Copy" if you have not yet saved your file). You also see text enhancement indicators when your cursor moves over enhanced text. The indicators are:

Bold — for bold text

Undl — for underlined text

Xpnd — for expanded text

Font — if the alternate font is set

Pen # — when a plotter pen/color is set

If you are using a command, Org Plus may print instructions on how to use the command on the first message line. On the second message line you see reminders of keys you can use.

Moving Around the Drawing

You can use different keys to move the cursor in your drawing and to shift the part of the drawing displayed. Choose keys from the following list to move around a drawing.

To move the cursor	one character	position:
--------------------	---------------	-----------

 $\uparrow \downarrow \leftarrow \rightarrow$

To move the cursor several positions at a time:

Tab 🔄 — right 10 characters

Reverse Tab Shift - Island — left 10 characters

Ctrl - A — beginning of the previous word

Ctrl - F — beginning of the next word

To scroll the drawing:

F6 — up one row

F7 — left one column

F8 — right one column

F10 — down one row

To move the window half a screen:

PgUp — up

PgDn — down

Home — left

End — right

To move the window a full screen:

Ctrl - PgUp — the window moves up

Ctrl - ← — the window moves left

Ctrl - → — the window moves right

Ctrl - PgDn — the window moves down

To move to a specific point:

Alt - F6 — top center of the drawing

Ctrl - Home one time — left column of the window

Ctrl - Home two times — leftmost column of the drawing area

Ctrl - Home three times — upper left corner of the drawing area

Ctrl - End one time - right column of the window

— rightmost column of the drawing area Ctrl - End two times

Ctrl - End three times — lower right corner of the drawing area

Note: Ctrl - Home three times and Ctrl - End three times moves the cursor to the corners of the drawing area, not of the drawing. For example, your drawing may be two pages wide. Pressing Ctrl - End three times moves the cursor to the bottom right-hand corner of the second page. You may not see any part of the drawing itself, since it may not extend to the lower right corner of the drawing area.

Adding Text Anywhere in a Drawing

You can add text anywhere in your drawing. Simply move the cursor to the place where the text should start, and type. You can type over, insert, or delete text.

Normally, inserting and deleting text rearranges the text to the right of the cursor. In the Drawing Board, insert and delete behave in a smarter fashion.

If you insert or delete text that is outside boxes, text inside boxes remains undisturbed. Text outside boxes that is more than ten spaces to the right also remains undisturbed. However, if you insert within ten spaces of that text, it will shift right.

When you insert text inside a box, characters shift right until they reach the edge of the box. The characters pushed right are deleted when they reach the edge. Only by placing the cursor directly on the side of the box can you type over the box. When you delete text inside a box, text outside the box is undisturbed.

The Drawing Board Commands

You can use the Drawing Board commands by accessing the Command Menu or by using the assigned keys. To access the Command Menu, press [79]. It works just like the Command Menu in the Work Group Display.

Print Drawing

Use these commands to print and reprint your drawing. Print Drawing uses the settings for character and line spacing from the Layout: Printer Settings command.

Print Drawing: Print F2

The Print command prints your drawing, based on printer settings found in the Layout: Printer Settings command and the printer setting from Printer/Setup.

- 1. From any place in the Drawing Board, press [F9]. Org Plus displays the Command Menu.
- 2. Select **Print Drawing: Print**. Org Plus then prints your drawing.

If you are printing to a disk file, the Drawing Board asks you to provide a file name. The Drawing Board then stores the print image of your drawing in the file.

Print Drawing: Reprint Ctrl - 2

Use Reprint when you want to print your drawing with exactly the same print selections you made previously. This command works just like the Print command and uses the choices previously set with the Layout: Printer Settings command.

Edit Drawing

Custom Drawing provides a set of editing commands that let you move, copy, or delete parts of your drawing. In addition, the Justify Text command lets you change the justification of text in boxes.

Edit Drawing: Move Block

Alt - F3

The Move Block command lets you "pick up" part of your drawing and place it in a different location. Together with the Draw Lines command, it lets you move positions to locations different from those drawn automatically in the Work Group Display. You can also use Move Block to move the entire drawing on the page. This allows you to adjust the margins of your drawing.

- 1. Place the cursor at a corner of the section you want to move.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Edit Drawing: Move Block.
- 4. Use the cursor keys and Tab (sq) to highlight the area you want to move. Or press (Alt) [F10] to recall the last block you used. (Everything within the highlighted area will move.)

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

- 5. Press Enter . The Drawing Board displays a dotted rectangle the block outline.
- 6. Use the cursor keys and Tab (square) to move the outline to the new location. The outline follows the cursor as you move it around the screen.

Edit Drawing: Copy Block

Ctrl - F9

The Copy Block command lets you duplicate a section of your drawing and place it in another location.

Copy Block works like the Move Block Command above. However, the marked section remains in place and a copy of it appears at the new location.

Edit Drawing: Delete Block

Alt - F4

The Delete Block command lets you mark and remove sections of your drawing.

- 1. Place the cursor on a corner of the section you want to delete.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Edit Drawing: Delete Block.
- 4. Use the cursor movement keys to highlight the area you want to delete. Or press Alt F10 to recall the last block you used. (Everything within the highlighted area will be deleted.)

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

- 5. Press Enter . Org Plus asks you to confirm that you want to delete the highlighted block.
- 6. Select **Yes** and the highlighted block disappears from your drawing.

Select No and the block remains in your drawing.

Edit Drawing: Justify Text

☐Shift - F3

The Justify Text command allows you to change the justification of text inside boxes.

To justify text:

- 1. Place the cursor on the text you want to justify.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Edit Drawing: Justify Text.
- 4. Select Left, Center, or Right.

Note: If there is a line across the inside of the box, the command justifies text on one side of the line only. Place your cursor on the side of the line where you want to justify the text.

Draw

In the Drawing Board you can draw solid or dotted lines anywhere in your drawing. You can erase existing lines and fill in small gaps in lines. You can also create boxes of any size and style.

Draw:

To draw a solid or dotted line in your drawing:

Solid Lines Ctrl - F7

and

Draw: Dotted Lines Ctrl - F6

- 1. Place the cursor where the line should start.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Draw: Solid Lines or Draw: Dotted Lines.
- 4. Use the cursor movement keys to move the cursor along the route the line should take. The cursor acts like a drawing pen. A line follows the cursor as it moves.

As soon as you start to draw, you can use a variety of drawing options. They let you change the behavior of the cursor. The second message line lists the options available. Type the corresponding character, and the function of the pen-point changes.

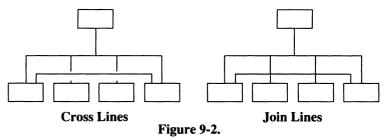
The options are:

Erase and Draw — type E and the pen-point changes to an eraser. The cursor shape changes to a blinking rectangle when it is an eraser. As an eraser, the pen-point erases any lines or text the cursor travels along. (Selecting a Draw command and then using the Erase option is the same as using the Erase Lines command.) Type D to continue drawing.

Spacebar-Skip — press the spacebar to move the cursor one space in the direction it was last moving, without drawing a line segment. This lets you skip spaces (or leave out dots) in your line.

Pen Up/Down — type P to temporarily stop the cursor pen-point from drawing. The Drawing Board displays a reminder in the message line that your pen-point is up. While the pen-point is up, you can move the cursor to another location without drawing a line. This lets you start and stop as many lines as you like. Type P again to put the pen-point down and resume drawing.

Cross Mode and Join Mode — type C or J to set the style of intersecting lines. These two options appear only when you are drawing a solid line. They specify how the intersection should look when you draw one line at right angles across another.



The Drawing Board is preset to join lines. Type C to cross lines. Type J to join lines.

Other Symbols — To place an arrowhead on a line, press F4 and select the direction for the arrowhead.

5. Press Esc to end the Draw command.

Draw:

To erase lines and text:

Erase Lines Ctrl - F8

- 1. Place the cursor where you want to start erasing.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select **Draw: Erase Lines**. The cursor changes to a blinking rectangle.
- 4. Use the cursor keys ↑ ↓ → ← and Tab ≒ to move the cursor along the line or text you want to erase. The cursor acts like an eraser: lines and text disappear under the cursor.

As soon as you start the Erase command, you can use a variety of drawing options. They let you change the behavior of the cursor pen-point. The second message line lists the options available. Type the corresponding character, and the function of the pen-point changes. (See "Draw: Draw Solid Lines and Draw: Draw Dotted Lines" earlier in this chapter for a description of the options.)

5. Press Esc to end the Erase command.

Draw: Cleanup Lines/Boxes

F5

This command helps you easily repair your drawing. It connects lines and joins lines to boxes. It also restores box corners and eliminates line stubs. Use this command when you erase or type over part of your drawing. For example, use Cleanup Lines/Boxes to restore the side of a box if you accidentally type over it.

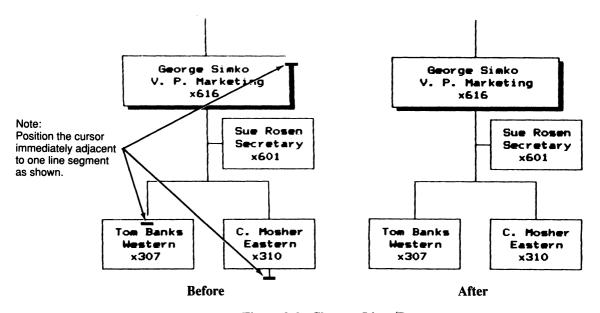


Figure 9-3. Cleanup Lines/Boxes

- 1. Place the cursor where you want to repair your drawing. The cursor must be immediately adjacent to at least one existing line or box segment.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Draw: Cleanup Lines/Boxes.
- 4. Use the cursor keys \uparrow \downarrow \leftarrow \rightarrow to move the cursor to each gap and Org Plus repairs the gap as you move over it.
- 5. Press Esc to end the Cleanup Lines/Boxes command.

While using the Cleanup Lines/Boxes command, you can use the Undo option. Type U to restore the character that was there before. This works one character at a time, backward from the cursor. Continue to type U to retrace your steps.

If the damage is to a shadow or perspective box, Org Plus asks you to identify the box style.

Note 1: Due to limitations of the monitor and differences among printers, not all characters can be displayed on the screen exactly as they print.

Note 2: Cleanup Lines/Boxes will not work with dotted lines or with broken and asterisk style boxes. Simply type the appropriate character to repair these.

Draw: Boxes F3

You can create boxes anywhere in your drawing with the Draw Boxes command. As you draw, the message line displays the height and width of your box.

To draw a box:

- 1. Place the cursor where a corner of the box should be.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Draw: Boxes.
- 4. Use the cursor keys $\uparrow \downarrow \rightarrow \leftarrow$ and Tab \hookrightarrow to specify the dimensions of the box. As you move the cursor, you create a rectangle that expands and contracts with your cursor movements. When the rectangle is the size you want, press Enter .
- 5. Select the box style you want.
- 6. Press Enter . A box in the style you select replaces the dotted rectangle.

Note: You can also use the Copy Block command to create a new box. This is the best way to ensure that boxes are the same size.

Draw: Other Symbols F4

You can print arrowheads that face up, down, left, or right. You can place the arrowheads anywhere in the drawing.

- 1. Place the cursor where you want the arrowhead.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Draw: Other Symbols.
- 4. Select Up, Down, Left, or Right.

You can also press [4] to select Other Symbols while you are drawing lines.

Options

These commands let you enhance the text and titles in your drawing. You can specify bold, underline, or an alternate font (if available on your printer). You can expand text to large size characters. You can also specify pens or colors for different sections of text if you are using a plotter.

When the cursor moves over enhanced or expanded text, indicators on the first message line show the option set. The indicators are:

Bold — for bold text

Undl — for underlined text

Xpnd — for expanded text

Font — if the alternate font is set

Pen # — if a plotter pen/color is set

These indicators appear and disappear as the cursor moves in and out of enhanced text. On a monochrome monitor, text that is enhanced or expanded is made double intensity. On a color monitor, enhanced or expanded text changes color.

Options: Enhance Text

Alt - F7

The Enhance Text command lets you make text bold, underlined, an alternate font, or a combination of the three.

The effects of this command depend on the capabilities of your printer. If your printer does not support an alternate font, you will not see an alternate font when you print your drawing. Some printers support italic as an alternate font, others do not.

If you are using a plotter, the Enhance Text command will not make text bold. Use the Plotter Pen/Color command instead. Set a different pen where you want bold text. Then use a wider pen in that location. Plotters cannot underline text.

To enhance text:

- 1. Place the cursor at the beginning of the text you want to enhance.
- 2. Press [9]. Org Plus displays the Command Menu.
- 3. Select Options: Enhance Text.
- 4. Use the cursor keys ↑ ↓ → ← and Tab ≒ to highlight the text you want to enhance and press Enter ←...

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

You can enhance text in the middle of a line or a word. The Drawing Board enhances only the characters you highlight.

- 5. Select the enhancement you want to use. (You can select one enhancement at a time.)
- 6. Press Enter . The Drawing Board enhances the highlighted text.

To combine enhancements on one section of text (such as bold and underline together), repeat the Enhance Text command. The effects of combined enhancements depends on your printer. If your printer cannot combine the enhancements in the way you have asked, it decides which enhancement has precedence.

Options: Clear Enhancements

Alt - F8

The Clear Enhancements command removes enhancements you place in your text. You can remove the enhancement from part of the text, character by character. You can also remove one enhancement but leave another. For example, you can remove bold from text you made bold and underlined.

To clear an enhancement:

- 1. Place the cursor at the beginning of the enhanced text.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Options: Clear Enhancements.
- 4. Use the cursor keys ↑ ↓ → ← and Tab 🔄 to highlight the text you want to clear and press Enter ←...

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

- 5. Select the enhancement you want to clear. (You can select one enhancement at a time.)
- 6. Press Enter . The Drawing Board clears the enhancement from the highlighted text.

Options: Xpanded Text

☆Shift - F4

This command lets you make text larger. Unlike the text enhancements described above, expanded text affects the entire line of text (across the full width of the drawing area). Use expanded text for titles, subtitles, and annotations. Org Plus will not allow you to expand text on a row that contains a box, line, or symbols.

When Org Plus expands text, it tries to keep the same relative position of the text in your drawing. If you expand text, make sure there is room to expand it. (It takes up more space.) If there is not enough room, the expanded text may extend beyond the right edge of the drawing area. When you print the drawing, characters may be missing.

If you select the largest size text your printer supports (for example, 10 cpi) with the Layout: Printer Settings command (form 3 of 4), this command has no effect.

To expand text:

- 1. Place the cursor anywhere on the line.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Options: Xpanded Text. The Drawing Board expands the text on that line when it prints the drawing. An indicator "Xpnd" on the first message line shows that the line is expanded.

Options: Clear Xpanded Text

☆Shift - F5

This command lets you return expanded text to the size text you selected with the Layout: Printer Settings command.

To clear expanded text:

- 1. Place the cursor anywhere on the line of expanded text.
- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Options: Clear Xpanded Text. The Drawing Board returns the text on that line to the size selected with the Layout: Printer Settings command.

Options: Plotter Pen/Color

☆Shift - F7

If you print your drawing on a plotter, you can specify different pens/colors for different sections of text.

To set a plotter pen/color for text:

- 1. Place the cursor at the beginning of the text you want to enhance.
- 2. Press [F9]. Org Plus displays the Command Menu.
- 3. Select Options: Plotter Pen/Color.
- 4. Use the cursor keys ↑ ↓ → ← and Tab ➡ to highlight the text you want to make a different color and press Enter ← .

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

You can change pens in the middle of a line or a word. Only the characters you highlight will use the pen you select.

- 5. Select the pen you want to use. (You can select one pen at a time.)
- 6. Press Enter ____. The Drawing Board sets the pen for the highlighted text. This pen overrides any pen you may have previously set for the text. An indicator on the first message line shows which pen is set.

Options: Clear Pen/Color

☆Shift - F8

The Clear Pen/Color command removes pen/color settings you place in your text. You can remove the pen/color setting from your text, character by character. Or you can remove it from a section of text.

To clear a pen/color setting:

1. Place the cursor at the beginning of the text from which you want to clear the pen/color setting.

- 2. Press F9. Org Plus displays the Command Menu.
- 3. Select Options: Clear Pen/Color.
- 4. Use the cursor keys ↑ ↓ → ← and Tab ≒ to highlight the text you want to clear and press Enter ←.

Pressing any keyboard character makes the cursor move ahead to the next occurrence of the key you press. This may help you move the cursor across the drawing more quickly.

- 5. Select the pen/color you want to clear.
- 6. Press Enter . The Drawing Board clears the pen/color setting from the highlighted text.

If you select the wrong pen/color, the command has no effect. The pen indicator on the message line shows which pen/color is set.

Layout: Printer Settings

Alt - F2

The Layout: Printer Settings command lets you tell Org Plus what printer settings to use to print your drawing. The four forms that make up this command are substantially the same as the ones under "F7 — Orientation And Other Printer Settings" in "Chapter 4: Printing Your Chart," with the addition of one setting: "Make All Text Bold".

Make All Text Bold appears on the form labeled "Printer 3 of 4 — Other Settings" under Layout: Printer Settings. Select **Yes** to make all text in your drawing print in bold face text.

About Characters Per Inch

Select the character spacing for text (non-expanded) in your drawing. If your printer supports them, you can choose to print the entire drawing in a small, medium or expanded character size. The entire drawing— lines, boxes, and text—will be scaled to fit the character size you choose.

Changing the size of text impacts the size of your drawing. A drawing with 5 cpi is larger and covers more pages in the drawing area than the same drawing with 10 cpi. If you change the size of your text from 10 cpi to 5 cpi, the characters are larger, therefore fewer of them fit on a page. (See Figure 9-4.) If you do not increase the number of pages in the drawing area, you may lose columns on the right side of the drawing.

You can have Org Plus adjust your drawing area, you can adjust it, or you can restore your old settings.

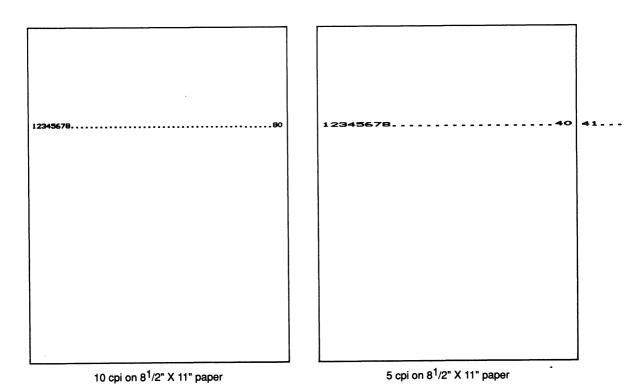


Figure 9-4. Impact of Changing Character Size of Your Drawing

About Lines Per Inch

Select the lines per inch (most often 6 or 8) for vertical line spacing. Selecting a smaller number makes your drawing taller. (See Figure 9-5.) You may lose rows on the bottom unless you also increase the number of pages in the drawing area.

You can have Org Plus adjust your drawing area, you can adjust it, or you can restore your old settings. (See "Effects of Changing Settings" later in this chapter.)

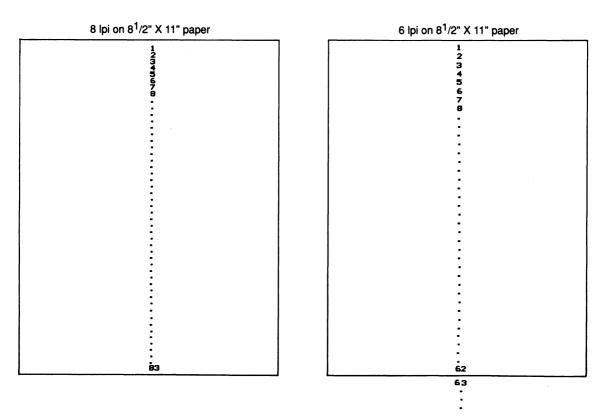


Figure 9-5. Impact of Changing the Line Spacing of Your Drawing

Layout: Drawing Area

☆Shift - F1

The Layout: Drawing Area command lets you tell Org Plus what the dimensions of the drawing area should be. As you make selections, a box at the bottom of the form tells you the total area in which you can draw.

- 1. From any place in the Drawing Board, press [79]. Org Plus displays the Command Menu.
- 2. Select **Layout: Drawing Area**. The Drawing Board displays the Drawing Area form.
- 3. Make selections as follows:

Width

Select how many pages wide the drawing area should be.

Height

Select how many pages high the drawing area should be.

Top Margin (inches)

Select how much space (if any) to add to the top of the drawing. This top margin is in addition to the margin already displayed. The default top margin is 0 inches (which in reality will be anywhere up to one-half inch, depending on the printer).

If you add space for a top margin, you reduce the page length that your drawing can be printed on. You may need to adjust your drawing area. You can have Org Plus adjust it, you can adjust it, or you can go back to your old settings.

Note: Many printers cannot print to the very top of the paper, so they, in effect, create a top margin. You cannot control this margin with the Layout: Drawing Area command.

Overlap Printing of Pages

If you select **Yes** for this setting, Org Plus duplicates part of the end of one page on the start of the next in the printing process. This makes it easier to join the pages together to give the appearance of a seamless drawing.

Caution: You can also reduce the number of pages in the drawing area. However, you will get a warning message if your drawing extends beyond the number of pages you select. The message explains that parts of your drawing may be permanently lost. Select No to change the number of pages so that your drawing will fit. Then, if you want to make the drawing fit on fewer pages, use the Drawing Board commands to modify the drawing. Use the rulers to be sure the drawing fits on the pages you specified. Then change the width and height settings with this command.

Effects of Changing Settings

Changing Characters Per Inch, Lines Per Inch, and Top Margin impact the size of your drawing. For example, if you change the text setting from 10 cpi to 5 cpi (larger text), your drawing becomes larger. You may lose columns on the right side unless you also increase the number of pages in the drawing area. If the changes you make reduce the number of character rows or columns that will fit on one page, Org Plus will present you with two choices: Adjust and Restore.

Select **Adjust** to have Org Plus increase the number of pages in the drawing area so none of your drawing is lost. When it is finished adjusting the number of pages in the Drawing Area, Org Plus returns you to the Drawing Board.

Select **Restore** to restore your original settings. Org Plus returns you to the form called "Printer 1 of 4 — Orientation"; you can make new selections, or keep the ones that are already set. When you are finished making selections, press Alt - F10 and Org Plus displays the Drawing Area form.

Layout: View Drawing Status

Alt - F1

The Layout: View Drawing Status command presents information about the program and your drawing. Information about the program includes the version number and date, the amount of RAM available for your drawing, and the manufacturer and model of the printer you are using. Information about your drawing includes whether you are using the Enhanced Text or Expanded Text options.

Window Control

The Window Control commands allow you to split the Drawing Board display in two. You can then work on one part of your drawing and see another part at the same time. You can move the cursor from one window to another. You can also set the windows so that they move in the same direction at the same time. In addition, you can turn the ruler display on and off.

Window Control: Toggle Rulers

Ctrl - F5

This command alternately turns on and off the display of the rulers. You can see more of your drawing if you turn off the display of rulers.

- 1. From any place in the Drawing Board, press F9. Org Plus displays the Command Menu.
- 2. Select **Window Control: Toggle Rulers**. Org Plus turns on or off the display of the rulers.

Window Control: Open Window

Ctrl - F1

The Open Window command splits the Drawing Board display in two. Your drawing appears in both halves. With two windows, you can then work on one part of your drawing and see another part at the same time.

You can split the display vertically or horizontally.

When you create two vertical windows, they move in the same direction vertically at the same time. However, they move independently horizontally. If you turn off synchronization with the Window Synchronization command, the windows move independently in all directions.

When you create two horizontal windows, they move in the same direction horizontally at the same time. However, they move independently vertically. If you turn off synchronization with the Window Synchronization command, the windows move independently in all directions.

To split the display:

- 1. From any place in the Drawing Board, press [79]. Org Plus displays the Command Menu.
- 2. Select Window Control: Open Window.
- 3. Select Vertical or Horizontal.

Window Control: Close Window

Ctrl - F2

Select this command to close the second window you created with the Open Window command.

- 1. From any place in the Drawing Board, press F9. Org Plus displays the Command Menu.
- 2. Select **Window Control: Close Window**. One Drawing Board window remains.

Window Control: Jump Between Windows

Ctrl - F3

Select this command to move the cursor to the other window you created with the Open Window command. You can move the cursor between the two windows as many times as you want.

- 1. From any place in the Drawing Board, press [F9]. Org Plus displays the Command Menu.
- 2. Select **Window Control: Jump Between Windows**. The cursor moves to the other window.

Window Control: Window Synchronization

Ctrl - F4

Synchronization makes the two windows move in the same direction when you use any of the cursor movement keys. Vertical windows move up and down together. Horizontal windows move side to side together.

When you split the display into two windows, they are synchronized. You can cancel synchronization with this command.

To make two windows move together or to cancel synchronization:

- 1. From any place in the Drawing Board window, press F9. Org Plus displays the Command Menu.
- 2. Select Window Control: Window Synchronization.
- 3. Select **Yes** to synchronize the movement of the two windows. Select **No** to make the window without the cursor remain stationary.

These commands allow you to save or clear a drawing while you are working in the Drawing Board.

File: Save Drawing

The Save Drawing command allows you to save a drawing.

Alt - 8

- 1. From any place in the Drawing Board, press [F9]. Org Plus displays the Command Menu.
- 2. Select **File: Save Drawing**. Org Plus displays the Save Drawing form.
- 3. If you want to store your drawing on a drive (or path) different from the one displayed, press Tab [5]. Type the correct drive (or path). Then press Enter [1].
- 4. Select or type a name for your drawing and press Enter . The Drawing Board saves your drawing as a file on disk.

End the name with ".DWG" so you will always know that the file is a drawing. Org Plus adds this extension to the drawing name if you do not.

5. Press any key to continue working in the Drawing Board.

File: **Clear Drawing**

Alt - 9

The Clear Drawing command allows you to clear a drawing from the drawing board. You can then begin a drawing from scratch. If you do not save a drawing before clearing it, the drawing will be lost permanently.

- 1. From any place in the Drawing Board, press [F9]. Org Plus displays the Command Menu.
- 2. Select File: Clear Drawing. Org Plus asks you to confirm that you want to clear the drawing.
- 3. Select Yes to clear the drawing from the Drawing Board.
- 4. Press any key to continue.

Appendix A Key Assignments

Editing Text in a Field

- Cursor left ← and cursor right → to move character by character without erasing.
- Backspace ← to back up and erase the previous character.
- Home to move to the beginning of the field.
- End to move to the space after the last text in the field.
- Ins to turn on insert mode for squeezing characters between those already there. (The cursor changes to a small block to let you know you are in insert mode.) Press Ins again to turn insert mode off.
- Dell to delete characters to the right, one by one.
- CapsLock and NumLock work in the normal fashion.
- Ctrl T to delete the word to the right of the cursor.
- Ctrl Y to clear the field. If the field has information in it, pressing Ctrl Y once clears the field. In the Current Position Box, pressing Ctrl Y a second time deletes the field.
- Ctrl A to move to the previous word.
- Ctrl F to move to the next word.
- Ctrl N to insert a blank field in the Current Position Box at the line the cursor is on. The fields following move down one line.

Selecting Menu Items

- Spacebar to move to the next selection.
- Cursor keys ↑ ↓ to move one selection.
- Home and End to move to the first or last selection.
- Press the first letter of a selection to move to that selection.

Selecting Items on a Form

- Cursor up ↑ to move up.
- Cursor down ↓ to move down.
- Cursor right \rightarrow to move to the next selection on the right.
- Cursor left \leftarrow to move to the next selection on the left.
- Ctrl Home to move to the top selection.
- Ctrl End to move to the bottom selection.
- Press the first letter of a selection to move to that selection on that line.

Moving Between Fields

For moving between fields in the Work Group Display.

- Tab \(\square\) to move one field to the right until at the rightmost field; then move down and to the left-most field.
- Reverse tab Shift to move one field to the left until at the leftmost field; then move up and to the right-most field.
- Cursor up \uparrow and cursor down \downarrow to move to the field immediately above or below the current field.
- Ctrl Home and Ctrl End to move to the extremes of the current box and, if pressed again, to move to the next box above or below on the screen if there is one.
- Enter to move down and to the left. (Exception: Enter adds additional fields when at the bottom row of a work group.)

Note: All keys for moving among data entry fields, except Enter , Ctrl - Home, and Ctrl - End wrap from the top to the bottom of the screen and vice versa.

Moving Around a Chart

- Alt F6 to make the topmost position the Current Position.
- Ctrl PgDn or F10 to move down one level in the chart.
- Ctrl PgUp or F6 to move up one level in the chart.
- Ctrl \rightarrow or F8 to move to the right one work group (at the same level).
- [Ctrl] ← or F7 to move to the left one work group (at the same level).

Moving Around a Drawing

To move the cursor one character position:

 $\uparrow \quad \downarrow \quad \leftarrow \quad \rightarrow$

To move the cursor several positions at a time:

■ Tab 🔄 — right 10 characters

■ Ctrl - A — beginning of the previous word

■ Ctrl - F — beginning of the next word

To scroll the drawing:

■ F6 — up one row

■ F7 — left one column

■ F8 — right one column

■ F10 — down one row

To move the window half a screen:

■ PgUp — up

■ PgDn — down

■ Home — left

■ End — right

To move the window a full screen:

■ Ctrl - PgDn — the window moves down

■ Ctrl - PgUp — the window moves up

■ Ctrl - ← — the window moves left

■ Ctrl - → — the window moves right

To move to a specific point:

■ Alt - F6 — top center of the drawing

■ Ctrl - Home one time — left column of the window

■ Ctrl - Home two times — leftmost column of the drawing area

- Ctrl Home three times upper left corner of the drawing area
- Ctrl End one time right column of window
- Ctrl End two times rightmost column of the drawing area
- Ctrl End three times lower right corner of the drawing area

Note: Ctrl - Home three times and Ctrl - End three times moves the cursor to the corners of the drawing area, not of the drawing. For example, your drawing area may be two pages wide. Pressing Ctrl - End three times moves the cursor to the bottom right-hand corner of the second page. You may not see any part of the drawing itself, since it may not extend to the corner of the drawing area.

Using WordStar® Commands

Org Plus supports many of the WordStar keyboard editing commands for those who are familiar with them. The WordStar commands Org Plus supports are:

- Ctrl S for cursor left ←
 - Ctrl D for cursor right →
 - Ctrl E for cursor up 1
 - Ctrl X for cursor down ↓
- | Ctrl | H | for | ←
- Ctrl V for Ins
 - Ctrl G for Del
- Ctrl 1 for 🔄
- Ctrl M for Enter —
- Ctrl T to delete word to right
 - Ctrl A move to previous word
 - Ctrl F move to next word
 - Ctrl N to insert line
 - Ctrl Y to clear/delete line (not identical to WordStar command see above)

Note: You can use all these WordStar commands in the Work Group Display. The commands also work in the Drawing Board, with the exception of Ctrl - T, Ctrl - N, and Ctrl - Y.

Figure A-1 Chart Menu Tree

(printed on multiple pages and photo-reduced)

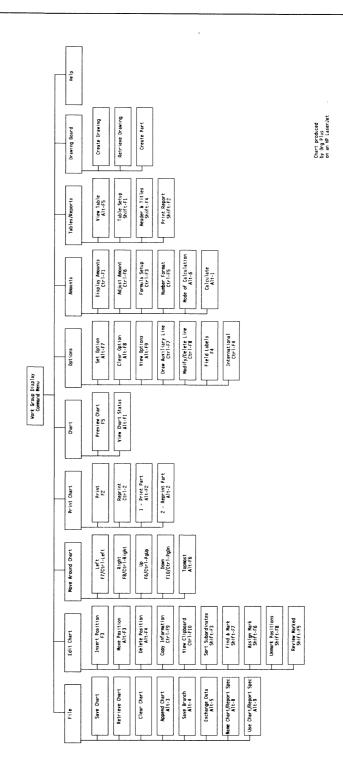
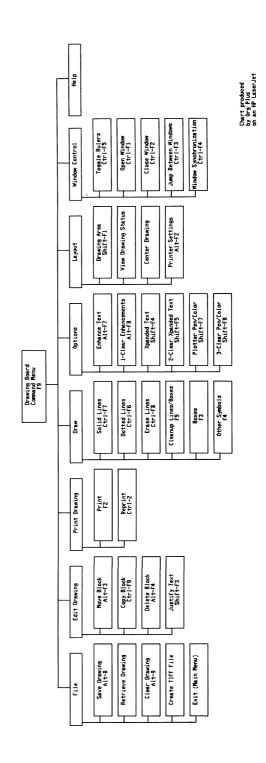


Figure A-2 Draw Menu Tree

(printed on multiple pages and photo-reduced)



Appendix B **Troubleshooting**

This appendix covers some of the most common problems that you may have using Org Plus.

Most problems relate to printing the chart. Refer to "Chapter 2: Getting Started" for further information on setting up your printer correctly. Refer to "Chapter 4: Printing Your Chart" for more information on making the correct selections when printing.

This appendix covers:

- text that prints out of boxes
- charts that wrap
- charts that are not centered on the page
- printers that print garbage
- plotter problems
- print spoolers and switch boxes
- charts that do not print correctly with the Sideways™ program
- a few common error messages

Text Is Out of Boxes

Sometimes other software can leave the printer in a state that Org Plus cannot override. Reset the printer (turn the power off, then on) and try printing again.

 If text still prints out of boxes, the problem may be caused by the printer driver you selected in Printer/Setup. The character spacing your printer uses must match the character spacing of the printer driver selected in Printer/Setup. If they do not match, text prints outside the boxes. Follow the steps in "When You Are Not Sure What Printer Setting To Use" in "Appendix D: More on Printers."

If your printer is an HP LaserJet (Standard or Plus/500 Plus), make sure you have the font cartridge specified correctly in Printer/Setup. See "Printer Setup" in "Chapter 2: Getting Started." If you change your font cartridge, reset the printer (turn the power off, then on).

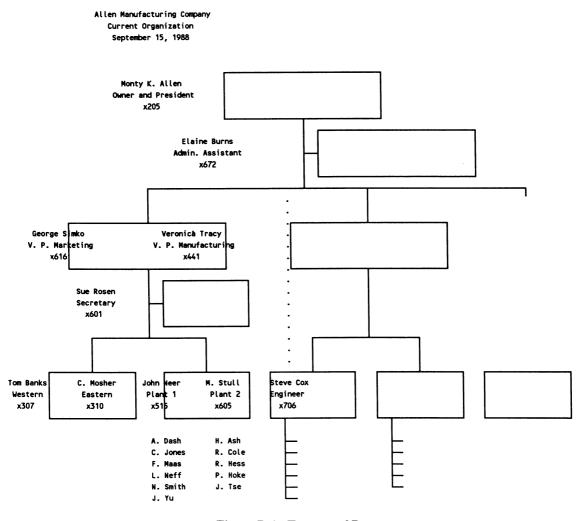


Figure B-1. Text out of Boxes

Chart Is Wrapping

The right edge of the chart wraps around and prints at the left edge of the paper.

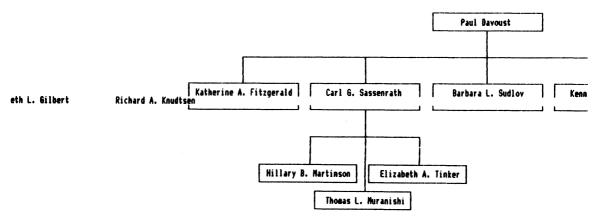


Figure B-2. Chart Wrapping

This symptom indicates that the page size that you specified (either in Printer/Setup or during the printing process) is larger than the maximum size that the printer can handle. Most wide carriage printers can only handle paper that is 14 inches wide. If you select a larger page size, the chart wraps. In some cases, this problem also appears to cause extra vertical spaces between lines of the chart.

- Use a ruler to check the actual width of your paper. Then make sure the width you select in Printer/Setup is not greater than this.
- Make sure the characters per inch that your printer is set for matches the characters per inch of the setting selected in Printer/Setup and on "Print Control 3 of 4" under [7] on the Alternate Settings form when printing with Manual.

Chart Is Not Centered on the Page

If your chart prints off the page or is not centered on the page, there are several possible causes:

- Be sure the top of your page is set correctly on your printer.
- You selected Manual when you printed, and your chart is too wide to fit on one page. As a result, Org Plus prints the chart on multiple pages. The first page includes only the left part of the chart and does not look centered. Continue printing and the rest of your chart prints on pages that follow. (See also "How To Make Your Chart Fit on One Page" in "Chapter 6: Advanced Chart-Making.")
- The page size you specified in Printer/Setup does not match the actual size of the paper in your printer. Org Plus uses the dimensions you select in Printer/Setup to center the chart on the page.
 - If your chart is too far to the right on the page, the paper width may be set too wide. Conversely, if the chart is too far to the left, the paper width may be set too narrow. If the chart starts too far down the page, the length may be set too long. Use a ruler to measure the actual size of your paper, then adjust the settings in Printer/Setup.
- If your chart is not centering top to bottom, make sure the lines per inch that your printer is set for matches the lines per inch of the setting selected in Printer/Setup.
- If your chart is not centering left to right, make sure the characters per inch that your printer is set for matches the characters per inch of the setting selected in Printer/Setup.

Printer Prints Garbage

Usually, a printer prints garbage characters instead of lines, boxes, or text because you selected the wrong printer driver in Printer/Setup.

- Make sure you select the correct printer type in Printer/Setup. (You can use the Chart Status command to see what printer you selected.)
- If you are using a printer that has several printer emulations, make sure you select the correct setting in Printer/Setup. For example, if you have an Okidata printer with the IBM option, you must select the IBM Graphics setting in Printer/Setup.

- If your printer is connected to a serial port (COM1, COM2, etc.), make sure you specify the same baud rate, parity, and data bits in Printer/Setup that your printer uses.
- Make sure you do not have a bad cable. Try using another cable.

Plotter Problems

"Printing ..." Message But Plotter Does Not Print

If the screen continues to flash the "Printing ..." message, but nothing is happening on the plotter, press Ctrl - Break. If plotting starts, the problem is caused by having a ",p" in the mode command. Check the mode command (usually located in your AUTOEXEC.BAT file) and confirm that this is the case. You then have the choice of removing the ",p" (plotters generally don't require ",p" at the end of the mode command) or pressing Ctrl - Break each time you print a chart.

General Plotter Diagnostics

Some of the more common error conditions while using a plotter include:

- "Your printer or plotter is not responding" error message
- plots garbage
- "I/O Buffer Overflow" error message on an HP 7550 plotter

If you experience any of these problems, please use the following check list:

- Reset the plotter (turn the power off, then on).
- Check the port you selected in Printer/Setup and make sure it matches the port the plotter connects to on your computer.
- Check the settings for Baud Rate, Parity, Data Bits, and Stop Bits in Printer/Setup to make sure they coincide with the settings on your plotter.
- Check the handshake setting on your plotter. Org Plus uses hardwire handshaking.

 Check the cable. You may have a damaged cable. (Try swapping the cable.) Or, you may be using the wrong model of cable for your plotter. (Check the following table.)

	All Plotters	HP7550
IBM PC, XT, and compatibles (25 pin connectors)	HP 17255D	HP 17255F
IBM AT (9 pin connectors)	HP 24542G	HP 24542H

Print Spoolers and Switch Boxes

Org Plus (and other graphics programs) might not work with some print spoolers and switch boxes. If your charts do not print, try the following:

- Try printing without the spooler or switch box.
- Try a Plain Vanilla setting in Printer/Setup. This often works when a printer setting that uses graphics does not.

Not Printing Correctly with Sideways

There are several reasons your chart may not print correctly with the Sideways program.

If you get a string of characters all typed on the same line that starts with "ORG499..." it is because the file you printed is in Org Plus format, not Sideways format. Sideways can only print an Org Plus chart if it is first converted to Sideways format. This is accomplished by printing the chart to a disk file, then choosing that file in Sideways. See "Printing Through Sideways" in "Chapter 4: Printing Your Chart" for directions on printing to a disk file.

If you did print your chart to a disk file in the Sideways format, make sure that you selected the correct file name in Sideways. Also, make sure you did not inadvertently save your chart over the print-to-disk file. (Use different file names for printing to a disk file than you use for saving a chart.)

If there are gaps and sections out of place on the chart, you may not have set the Glue Lines properly. See the section on printing with Sideways in "Chapter 4: Printing Your Chart." See also the Sideways manual for information on setting Glue Lines.

Error Messages

"There is insufficient memory to perform this action."

This may mean your chart used all the memory available, or it may mean your chart has reached the maximum allowable number of positions. See "Appendix C: Memory Utilization and Other Org Plus Limits" for information on the maximum number of allowable positions.

- Use the Chart Status command to determine how many positions are still available and to determine how much memory is available to Org Plus. If you have a network or any other memory-resident software loaded, you can make more memory available to Org Plus. Re-start your computer without loading the memory-resident programs or the network shells.
- If your system has limited memory (less than 640KB), the chart capacity will be larger if Chart and Draw are started stand-alone. See "Starting Org Plus Stand-Alone" in "Chapter 2: Getting Started" for instructions.

Appendix C

Memory Utilization and Other Org Plus Limits

Memory

With DOS 3.0 or higher Org Plus Advanced will run in a system with 512KB of memory. To reach the maximum chart size of 600 positions requires approximately 640KB of memory.

If you have a system with less than 640KB of memory, you can increase capacity by approximately 50 positions if you start Chart stand-alone. If you start Chart stand-alone, you must use Draw to print in landscape. See "Starting Org Plus Stand-alone" in "Chapter 2: Getting Started."

Other programs can affect the memory available to Org Plus. Programs that stay hidden until you want them (memoryresident programs or TSRs) reduce the amount of memory available. Calculators that pop-up and print spoolers also fall into this category. Org Plus may hold fewer positions if these programs are resident in memory. If you do not load these hidden programs, Org Plus may be able to handle more positions.

Note to users with MS-DOS or PC-DOS Version 2.0, 2.1, and 2.2

The DOS 2 family contains a bug, or error, that keeps Org Plus from efficiently using the computer's memory.

If you have one of these versions of DOS, you must run Org Plus stand-alone unless you have 640KB of memory in your computer. You can correct this problem by upgrading to MS-DOS or PC-DOS 3.0 or higher.

Limits Org Plus has the following limits:

Positions per Chart—600 (your actual maximum depends on available memory)

Chart Levels—99

Subordinates per Manager—100

Maximum Fields per Box—24 (6 Text, 6 Alternate Text, 6 Amount, and 6 Consolidated Amount Fields)

Characters per Field—25 for Text Fields, 15 for Alternate Text Fields (39 total when combining Text and Alternate Text Fields with the Append Alt Field Print-Time Code)

Chart Titles—3 fields with 39 characters each

Annotations—16 fields with 39 characters each

Drawings in the Drawing Board—700 character columns wide, 320 character rows tall. Cannot go beyond 12 pages wide or 12 pages tall in any character size.

Appendix D More on Printers

This appendix presents special printer information. It covers the following areas:

- what to do when you are not sure what printer to use
- information specific to Epson and Epson LQ, Okidata, and the HP LaserJet series of printers
- how to set up large format plotters
- printing international characters

For more general information, see "Chapter 2: Getting Started."

When You Are Not Sure **What Printer Setting** To Use

If you do not find your printer manufacturer listed on the form called "Installing the Printer — Step 1 of 3," it may still work correctly with Org Plus. You need to know the following:

- 1. Can your printer emulate another printer? If so, which one?
- 2. What character spacing does your printer use for normal and compressed fonts, in characters per inch (cpi)?

You should be able to determine this information from your printer manual.

Org Plus must make assumptions about the character spacing each printer uses in order to place the text properly inside the boxes when it prints your chart.

Figure D-1 shows the character spacing that Org Plus assumes for the printers most commonly emulated.

Built-in Fonts		
Normal Font	Compressed Font	
12 cpi	17.14 cpi	
10 cpi	17.14 cpi	
12 cpi	17.14 cpi	
12 cpi	17.14 cpi	
10 cpi	16.67 cpi	
12 cpi	17.14 cpi	
10 cpi	17.14 cpi	
10 cpi	17.14 cpi	
	Normal Font 12 cpi 10 cpi 12 cpi 12 cpi 10 cpi 10 cpi 11 cpi 11 cpi	

Figure D-1. Character spacing

For your printer to work correctly with Org Plus, it must emulate one of these printers. It must also be able to use the same character spacing for its normal and compressed fonts.

If this is the case, you can select the compatible printer in Printer/Setup, and it should print without problems.

If the character spacing your printer uses does not match that of the printer it emulates, you have several options.

1. If your printer emulates an Epson, try the setting Epson Compatible. If your printer emulates an IBM Proprinter or IBM Graphics printer, try the setting IBM Compatible.

These settings print 10 cpi only when you select Portrait orientation, but they print a compressed font in Landscape orientation.

2. If the first option doesn't work, select the Manufacturer called Other. Then select one of the Plain Vanilla settings that matches the cpi your printer uses.

Plain Vanilla printer settings work with almost any printer. They use regular underscore and vertical dashed lines (rather than graphics characters) to draw boxes; so your output will appear as shown in Figure D-2.

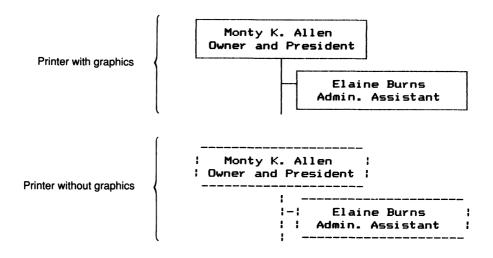


Figure D-2

Even if your printer is listed by name in Printer/Setup, there may be situations when selecting Plain Vanilla is appropriate. These settings print much faster if you have a dot matrix printer. They are ideal if you are printing "what if" charts for your own use.

All Plain Vanilla settings assume the printer prints 6 lines per inch (lpi). If your printer is set for 8 lpi, set page size in Printer/Setup to a value longer than the actual paper measurement. For example, if your paper is 11 inches long, set page size to Legal (8.5 x 14 inches).

Note: IBM printers do not print italic characters. If you select an Epson printer setting and your printer actually emulates an IBM printer, the commands to control the italics in a drawing will shift text to the left relative to lines and boxes.

Specific Printer Models

This section contains information specific to certain printer models: Epson and Epson LQ, Okidata, and the HP LaserJet series.

Epson and Epson LQ: The EX, FX, JX and LX Series and the LQ Series settings print 12 or 17 characters per inch (cpi). The Tiny Font and LQ Tiny Font settings use the 20 cpi font (super/subscript) on Epson printers.

Okidata: Many Okidata printers have electronics that make them behave like the IBM Graphics printer. If you have one, choose IBM Graphics instead of Okidata.

HP LaserJet: Be sure the HP LaserJet model you select matches your printer. If they do not match, your chart will not print properly.

Downloaded ("Soft") Fonts

In addition to the HP LaserJet Cartridge settings that you can select, you can also select downloaded fonts. These "soft" fonts are included on disk with Org Plus. (See "Appendix E: Laser Printer Soft Fonts" for a list.) You can use these downloaded fonts with the HP LaserJet Plus or the LaserJet Series II. (They are not available for the HP LaserJet standard model.)

Large Format Plotters

This section gives instructions for using Hewlett-Packard 7580B, 7585B, 7586B, DraftPro, and DraftMaster drafting plotters.

Paper Size

You must use D-size 22 x 34" (or A1-size 594 x 841mm) or larger paper. If you use smaller paper your chart will print out of limits.

Configuring the Plotter

The methods for configuring the various plotters differ.

For the 7580B, 7585B, and 7586B, set switches as follows:

Switch name	Setting
Interface Mode	RS-232
Emulate/Normal	Normal
Expand/Normal	Normal
Stand-alone/Eavesdrop	Stand-alone
Monitor Mode/Normal	Normal
Local/Normal	Normal
Parity On/Off	Off
Even/Odd	Odd
Duplex	Full
Hardwire/Modem	Hardwire
DTR-Bypass	Normal
Baud Rate	9600

For the HP DraftPro, set switches as follows:

Switch name	Switch #	Setting
Eavesdrop	6	Off (Stand-alone)
Odd	5	Off (Even)
Parity	4	Off
Baud	3	On (9600)
	2	Off
	1	On
	0	Off

For the HP DraftMaster, use the front panel menu to configure the plotter. Press the Next Display button until you see the Group/Sort/HP-IB/Serial menu; then select Serial and make sure the four selections are set as follows:

Dataflow

REMOTE and STAND-ALONE

Baud Rate

9600

Parity

0

Hardwire

ON

Configuring Org Plus Printer/Setup

Choose Printer/Setup from the main menu. Then as the various screens appear, use the following settings:

Manufacturer: HP Plotter

Model:

specific model number or Other HPGL Plotter

Port:

COM (as appropriate)

Baud rate: 9600 Data bits: eight Stop bits: one Parity: none

Page size:

D or E (as appropriate)

Set the remaining choices as appropriate.

Org Plus assumes that the plotter uses hardwire hand-shaking.

You can also choose to plot your chart in large type (either 2.8 or 4.7 characters per inch) that is useful for flip-chart presentations. Select Any HP Plotter 3 cpi on "Installing The Printer — Step 2 of 3."

Plotting

To plot a chart, follow the standard instructions for printing a chart with Org Plus Advanced.

Note: On large charts you may receive the message, "Your printer or plotter is not responding." This is not a cause for concern. Select Yes to resume plotting.

Resetting the Printer

Sometimes you need to reset your printer. For example, certain programs send special control codes to a printer to let it take better advantage of all the program's features. If another program might have sent special control codes to your printer since the last time you turned it off and on, reset the printer before you use Org Plus.

To have Org Plus reset your printer for you every time you print:

- 1. Go to the Org Plus Main Menu.
- 2. Press Ctrl F7.
- 3. Answer Yes when Org Plus asks if it should reset your printer.

Printing International Characters

Org Plus normally uses the IBM International Character Set to print international characters.

To use the Roman-8 character set common on many Hewlett-Packard printers:

- 1. Go to the Org Plus Main Menu.
- 2. Press Ctrl F8.
- 3. Answer Yes when Org Plus asks if it should use Roman 8.

Org Plus now also supports most international characters on plotters. There is no need to make any special settings.

You can enter European and other non-English characters included in the IBM character set (decimal 32 to 175, 225, and 230) directly from the keyboard; use the Alt key and the numeric keypad to do it. For example, press and hold the Alt key while typing the decimal equivalent of the character.

To print these characters, you need a printer that recognizes Standard IBM Character Set 2. All IBM printers (except the IBM Matrix Printer) will work without adjustment, as will most other major printer brands. Check your printer manual for any appropriate switch settings.

You can customize Org Plus for output in languages other than American English. You can change the currency symbol, change the decimal symbol from a period to a comma, and make other necessary changes. (See "Options: International" in "Chapter 6: Advanced Chart-Making.")

Laser Printer Soft Fonts Appendix E

Org Plus provides the following soft fonts for the IBM Laser Printer, Hewlett Packard LaserJets, and HP compatible printers. To choose your font, select **Printer/Setup** from the Main Menu, and then proceed to the Installing the Printer - Step 2 of 3 form. The font choices are outlined below, with available sizes listed for each one.

When you select:

- No cartridge req'd Letr Gothic Many (for HP LaserJet Plus, II, III)
- No cartridge req'd Quick Print Many (for HP LaserJet Plus, II, III)
- No card req'd Letr Gothic Many (for IBM Laser Printer)
- No card req'd Quick Print Many (for IBM Laser Printer)

the following fonts are available in Letter Gothic typeface:

Width (CPI)	Height (Points)	Face	Make Fit Size
37.5	4	Normal	Very Small
37.5	4	Bold	Very Small
30	5	Normal	Small
30	5	Bold	Small
23	6	Normal	Normal
23	6	Bold	Normal
23	6	Outline	Normal
20	6	Normal	Large
20	6	Bold	Large
20	6	Outline	Large
18.8	8	Normal	*

Width	Height	Face	Make Fit Size
(CPI)	(Points)		
16.7	8.5	Normal	Very Large
16.7	8.5	Bold	Very Large
16.7	8.5	Outline	Very Large
15	10	Normal	*
11.6	12	Normal	*
10	12	Normal	*
8.3	17	Normal	*

^{*} Fonts used only for expanded text.

When you select:

- No cartridge req'd Times 12/12 (for HP LaserJet Plus, II, III)
- No cartridge req'd Qck Prnt Tm 12/12 (for HP LaserJet Plus, II, III)
- No card req'd Times 12/12 (for IBM Laser Printer)
- No card req'd Qck Prnt Tm 12/12 (for IBM Laser Printer)

the following fonts are available in Times Roman typeface:

Width	Height	Face	Make Fit Size
(CPI)	(Points)		
12	10	Normal	Normal
12	10	Bold	Normal

When you select:

- No cartridge req'd Times Italc 12/12 (for HP LaserJet Plus, II, III)
- No cartridge req'd Qck Prnt It 12/12 (for HP LaserJet Plus, II, III)
- No card req'd Times Italc 12/12 (for IBM Laser Printer)
- No card req'd Qck Prnt It 12/12 (for IBM Laser Printer)

the following fonts are available in Times Roman Italic typeface:

Width (CPI)	Height (Points)	Face	Make Fit Size
12	10	Normal	Normal
12	10	Bold	Normal

Org Plus also supports the Canon LBP-8 III printer. To choose your font, select Printer/Setup from the Main Menu, and then proceed to the Installing the Printer - Step 2 of 3 form. Select "No font card req'd - Quick Print Many" and the following fonts are available in Letter Gothic typeface:

Width (CPI)	Height (Points)	Face	Make Fit Size
37.5	4	Normal	Small
30	5	Normal	Normal
23	6	Normal	Large

All fonts are available in both portrait and landscape orientation. The Make Fit Size is specified through the Font Size list on the Make Fit — Step 3 of 3 form (F9) on the Alternate Settings form) or the Printer — Step 4 of 5 — Make Fit form (Layout: Printer Settings command). See "F9 — Make Fit Options" and "Layout: Printer Settings" in "Chapter N: What's New in Version 6.0" for more information.

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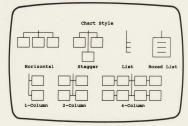
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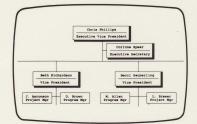
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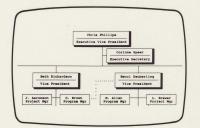
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- IBM PC/XT/AT, PS/2 or 100% compatible
- DOS version 3.0 or higher
- Any 80 column display (monochrome, color, CGA, EGA, VGA, Hercules)
- Minimum of 512 KB of RAM
- Hard disk drive
- Microsoft mouse or compatible (optional)
- Supports any dot matrix printer; Hewlett-Packard, Canon, and compatible laser printers; and Hewlett-Packard and compatible plotters



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