KNOWLEDGE WORKER SYSTEM

Version 3.6 Reference Guide

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# Knowledge Worker System Version 3.6 Reference Guide

The Knowledge Worker System (KWS) is an automated tool that enables an organization to define the tasks, information resources, and computer applications required to perform its business processes. Essentially, the information within KWS is an on-line process model for an organization. KWS represents process information in a temporal hierarchical task structure. This structure contains information about the tasks that need to be done and when. Anywhere within this structure, procedural details, information resources, and computer applications can be associated with an individual task via steps, attachments, and Do Its, respectively. These components provide an organization with help in executing tasks and in some cases with automatic task execution.

This reference guide describes KWS functionality and provides KWS users with detailed instructions on using KWS Version 3.6.
Foreword

This document was developed for the Office of the Secretary of Defense (OSD), Command, Control, Communications and Intelligence (C3I) under Military Interdepartmental Purchase Request 95168DEA-13. The technical monitor was Harriet Riofrio, OSD, C3I.

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OVERVIEW

To get the most from the Knowledge Worker System (KWS) you must understand the main window, known as the KWS Program Window. All KWS operations are accessible from this window. This chapter provides a description of the KWS Program Window as well as the options and commands within it. In addition, this chapter describes general capabilities provided by KWS. These capabilities include selecting multiple window items, searching for text strings in windows, sending messages to other KWS users, writing quick notes while in KWS, and logging in to KWS.

THE KWS PROGRAM WINDOW

The KWS Program Window is the primary graphical interface between the user and KWS. The Program Window is the first screen that appears after you log in to KWS (Figure 1-1: KWS Program Window).

The KWS Program Window has a Title Bar across the top that displays the User ID of the person currently logged into KWS. The Menu Bar appears just below the Title Bar. It contains several pull-down menus that offer system features and operations relevant to the active window. The Button Bar appears just below the Menu Bar. Each button within the Button Bar will activate a single operation. The available operations depend on which window is active within the Workspace Area directly below the Button Bar. The Workspace Area is the largest display area in the KWS Program Window. The contents of the Workspace Area depend on the selections made from the Menu and Button Bars. By default, the ToDo Calendar...
Window is displayed in the Workspace Area when you first open KWS. Directly below the Workspace Area is the Status Bar, which is divided into four regions. The leftmost region displays short descriptions of pull-down menu items. The second region displays the name of the current database connection. The third region displays a number that indicates the position of the currently selected item in the active window, as well as the total number of items listed. The rightmost region displays the number of new notifications.

Menu Bar Options

The Menu Bar contains several pull-down menus that offer system features and operations for the active window. Clicking once on the title of any menu item will cause that menu’s options to appear. Clicking elsewhere on the screen will close the menu.

The File Menu

The File Menu contains options that enable you to view KWS-related messages from other users, login to the KWS Database, print the contents of a window, and set preferences for customizing KWS.

Notifications

This option opens the Notifications Window, which contains system-generated messages that tell you that another user has assigned a new task to you, deleted an assigned task, or performed some similar action. The Notifications Window may also contain user-generated messages. See The Notifications Option in this chapter for more detail on this option.

Login...

This option opens the Login Dialog Box, which enables you to log into any KWS database that you have setup via the Admin Menu, Database, Setup Database Connections option. See Logging in to KWS in this chapter for more detail on this option.

Print

This option is a single action command that sends the contents of the active window to the default printer specified in the Windows Control Panel. KWS will format the pages using the current page formatting setup.
Preferences

This option opens a submenu containing further options for customizing the appearance of the KWS Program Window, setting font and print options, and defining information for manipulating attachments. See Chapter 7, Customizing KWS, for more detail on setting preferences.

System Options

This option allows you to specify prompts for non-working days and notifications. The default action for a task due on a non-working day is set here. See Chapter 3, Tasks and Steps, for more on non-working days. Additionally, if the Notifications check box is marked the Notifications Window will be opened at KWS startup when the user has new notifications. See the Notifications section later in this chapter for more details on this option.

Show Status Bar

This option allows you to specify whether the Status Bar will be displayed in the KWS Program Window. If the Show Status Bar option has a check mark next to it, the Status Bar will be displayed. If not checked, it will not be displayed.

Show Button Bar

This option allows you to specify whether the Button Bar will be displayed in the KWS Program Window. If the Show Button Bar option has a check mark next to it, the Button Bar will be displayed. If not checked, it will not be displayed.

Save Window Configuration

This option allows you to save the current window configuration within KWS. When checked, this action will save the current size and location of all windows in the KWS workspace. These windows will then be displayed each time you log in to KWS until you save a new configuration. The contents of a Graphical Task Manager Window, attachment query windows, and Do It search windows are not saved.

Display Font...

This option allows you to select the font, font style, and font size displayed in your KWS windows.

Printer Font...

This option allows you to select the font, font style, and font size in which the content of text-based KWS windows will be printed.

Printer Page Setup...
This option allows you to set some standard Windows page setup options such as page width and length, margins, headers, and footers.

**Applications List**

This option enables you to define the information KWS requires before it can launch the application program used to create or edit an attachment. See Chapter 7, Customizing KWS, for more detail on this option.

**Associations**

This option enables you to define Windows File Manager association information. When importing attachment files, KWS uses this information to determine the associated application. See Chapter 7, Customizing KWS, for more detail on this option.

**File Viewer**

This option allows you to specify the file viewer that KWS will use to view attachments. A File Viewer is a software package that displays the contents of a file as it would normally be displayed in the application that created it. If a File Viewer is not specified, you will not be able to view an attachment without the application package used to create it. See Chapter 7, Customizing KWS, for more detail on this option.

**WWW Browser**

This option allows you to specify the WWW browser that KWS will use to view WWW attachments. If a WWW Browser is not specified, you will not be able to view a WWW attachment without the application package used to create it. See Chapter 7, Customizing KWS for more detail on this option.

**Fax**

This option allows you to specify the Fax program that KWS will use to fax an attachment. If a Fax program is not specified, you will not be able to send attachments as faxes. See Chapter 7, Customizing KWS, for more detail on this option.

**Exit KWS**

This option is a single action command that closes the KWS application. It has the same effect as double-clicking on the File Menu Box in the upper-left corner of the KWS Program Window.
The Edit Menu

The Edit Menu contains options that enable you to copy and paste text from KWS windows and to select items within KWS windows.

Copy
This option will copy the selected items to the clipboard.

Paste
This option will insert the contents of the clipboard into the current window.

Select All
This option is a single-action command that causes all items in the active window to be highlighted. Select All is used to perform an operation such as moving or deleting all of the items in a window. Multiple items in a window can be selected by using Select All, and then deselecting specific items by clicking on them.

The Query Menu

The Query Menu contains options that enable you to search attachments, Do Its, tasks, and window text.

Attachments
This option displays a submenu containing options for searching Attachments. See Searching Attachments in Chapter 4, Attachments, for detail on this option.

Attachment Search
This option opens the Attachment Search Dialog Box, which provides options that enable you to locate attachments by specifying search criteria.

Last 20 Attachments Accessed
This option opens an Attachment window listing the last 20 attachments accessed by the user.

Do Its
This option displays a submenu containing options for searching Do Its and Time-Contingent Do Its. See Do Its in Chapter 5, Do Its, for detail on this option.

Do It Search
This option opens the Do It Search Dialog Box, which enables you to locate Do Its by specifying search criteria.
Time-Contingent Do Its

This option will start the KWS TimeAgent program. See Time Agents in Chapter 5, Do Its, for more detail on this program.

Tasks

This option displays a submenu containing all of the predefined and custom database queries available within KWS. Selecting a specific query will cause it to execute against the KWS database. The results of the query are displayed in a Task Window.

Standard Queries

This option displays a submenu containing all of the standard queries defined in KWS.

Custom Queries

This option displays a submenu containing all of the database queries defined by the KWS administrator that are available within KWS.

Search Text in Windows

This option opens a submenu containing options to search for text strings within the active window. See Searching Windows for Text Strings in this chapter for more detail on using this option.

Search

This option opens a Search Dialog Box where you can enter text that you would like to find within the active window.

Search Next

This option searches for the next occurrence of the text string you last entered in the Search Dialog Box.

Search Previous

This option searches for the previous occurrence of the text string you last entered in the Search Dialog Box.

The Task Menu

The Task Menu contains options that enable you to view the processes and milestones defined for your organization in a textual or graphical format.

Task Manager

This option displays the processes defined for your organization in a split-screen window, or Multiple Document Interface (MDI). The MDI enables
you to browse through a textual representation of the entire task hierarchy by moving between the different levels. See The Task Manager in Chapter 3, Tasks and Steps, for more detail on using this window.

**Task Palette Manager**

This option opens the Task Palette Manager window that allows you to edit the palette processes defined for your organization. See Task Palette Manager in Chapter 6, Task Palette, for more detail on this option.

(1) **Graphical Task Manager**

This option displays the processes defined for your organization in a graphical format. See the Graphical Task Manager in Chapter 3, Tasks and Steps, for more detail on this option.

**Milestones**

This option opens the Milestones List Box. See Milestones in Chapter 3, Tasks and Steps, for more detail on this option.

### The ToDo Menu

<table>
<thead>
<tr>
<th>ToDo</th>
<th>The <strong>ToDo</strong> Menu options enable you to list the tasks assigned to you that meet specific criteria. See Options for Viewing the ToDo List in Chapter 2 for more details on these options.</th>
</tr>
</thead>
</table>
| ToDo | **ToDo**
|      | This option opens a **ToDo** Window that lists tasks that have not been marked as **Finished** and that have been assigned to you and any work group(s) of which you are a member. |
|      | **ToDo: Completed Items**
|      | This option opens a **ToDo: Completed Items** Window that lists tasks that have been marked as either **Finished** or **Overcome by Events (OBE)** and that have been assigned to you and any work group(s) of which you are a member. |
|      | **ToDo: Ongoing Items**
|      | This option opens a **ToDo: Ongoing Items** Window that lists tasks that have not been assigned a due date. This type of task is also called an "**Ongoing Item**" and is displayed with a blank line in the **Date Due** field. |
|      | **ToDo Calendar**
|      | This option opens a **ToDo Calendar** Window that unites your **ToDo List** and Appointment List with an interactive calendar. The **ToDo** and Appointment... |
List contents are dependent on the date(s) selected on the calendar. The tasks and appointments with a start date prior to or on the same day as the current date will appear in the ToDo List. In addition, any tasks with a due date earlier than the current date that have not been marked Finished or OBE will be displayed in red, which indicates that the tasks are late.

**ToDo Graph**

This option opens a ToDo Graph (TDG) Window that displays the tasks in your To Do List in a graphical Gantt chart format.

**ToDo Context Graph**

This option opens a ToDo Context Graph Window that displays the tasks in your To Do List and the processes that contain these tasks in a graphical Gantt chart format.

**ToDo Browser**

This option opens a ToDo Browser Window that lists all tasks assigned to you. This window displays the task information in an MDI format.

**Workload**

This option opens the Workload Dialog Box that graphically displays your workload level.

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**The Admin Menu**

The **Admin** Menu contains several options that enable you to view and update information about the knowledge workers and work groups in your organization, modify your KWS database setup, setup the Master Application List, and generate a file that lists a selected task or the entire KWS Database. If you have System Administration Access rights, other options will also be available.

**Knowledge Workers**

This option opens a Knowledge Worker Window that displays a list of all KWS User IDs in an organization. From this window, User IDs can be added, deleted, and modified; Information Profiles can be viewed and updated; and a list of work groups containing a specific User ID can be generated. See Knowledge Workers and Work Groups in Chapter 7, Customizing KWS, for more detail on using this option.

**Work Groups**

This option opens a Work Groups Window. In the upper workspace, a list of organizations in the KWS Database is displayed. In the lower workspace, the Work Groups List for a selected organization is displayed. Work groups
can be viewed, edited, and deleted from this window. See Knowledge Workers and Work Groups in Chapter 7, Customizing KWS, for more detail on using this option.

**Database Connections**

This option creates the KWS Databases Window which is used for setting up a user's database and attachment connections. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on using this option.

**Master Applications List**

This option enables a user with System Administrator access rights to set up the Master Application List used for accessing attachments within KWS.

**Custom ToDo Queries**

This option opens the Queries: ToDo Window used to define and edit custom queries for the organization. See Creating Queries in Chapter 7, Customizing KWS, for more information on this option.

**Archive Attachments**

This option starts the attachment archive function. This operation will search the database and archive or delete any attachments that meet the criteria you specify pertaining to the disposition of your attachments. See Archiving Attachments in Chapter 7, Customizing KWS, for more information.

**Database Export/Import**

This option displays a submenu which contains options for exporting and importing portions of the KWS database. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on using this option.

**Database Maintenance**

This option displays a submenu which contains options which can be used by a system administrator to perform maintenance operations on the KWS database. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on using this option.

**Database Setup**

This option displays a submenu which contains options for setting attributes of the current database or for creating a new database. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on using this option.
Listing of Entire Database
This option prints a hierarchical list of all public tasks for your organization. This list includes all processes, their subordinate tasks, and any steps, attachments, and Do Its associated with each task in this list.

Listing of Selected Task
This option prints a hierarchical list of a specific task that you have selected in the task window. This list includes all the subordinate tasks and any steps, attachments, and Do Its associated with each task.

Reconcile Remote Changes
This option reconciles all remote changes that have been made by the current user. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on using this option.

The Notes Command
This command opens a Windows Notes file that has been created by KWS. It provides a quick scratch pad for recording information. See The Notes Command in this chapter for more detail on this command.

The Tools Menu
The Tools Menu contains options that enable you to access KWS-related applications. The Tools Menu always includes four options: Task Palette, the TimeAgent, DoltBase, and the Converter. In addition, you may add items to the menu. See Adding Items to the Tools Menu in Chapter 7, Customizing KWS, for more detail.

Task Palette
This option opens the KWS Task Palette application. See Chapter 6, The Task Palette, for more detail on this option.

TimeAgent
This option opens the KWS TimeAgent application. See Time Agents in Chapter 5, Do Its, for more detail on this option.

DoltBase
This option opens the KWS DoltBase application. See DoIt Base in Chapter 5, Do Its, for more detail on this option.

Converter
This option opens the KWS Converter application. See KWS Converter in Chapter 7 for more detail on this option.
The Window Menu

The Window Menu contains several options that enable you to change the arrangement of the open windows on the screen, customize data field arrangement, refresh the screen, and view a list of open KWS windows.

**Cascade**
This option rearranges all open KWS windows in overlapping order, starting from the top-left corner of the KWS Program Window workspace, with the Title Bar of each window visible.

**Tile**
This option rearranges all open KWS windows in a side-by-side, grid-like pattern, adjusting the size of each window accordingly.

**Arrange Icons**
This option arranges all KWS icons present in the workspace along the bottom edge of the workspace area.

**Close**
This option closes the currently active window.

**Close All**
This option closes all open windows in KWS and exits the program.

**Options**
This option displays a submenu that enables the user to set preferences for displaying information in the active window.

**Display Field Setup**
This option enables you to choose which data is displayed within the active window, the order of the data displayed, the width of the data displayed, and whether the text in a data field should wrap around to the next line. See Display Field Setup in Chapter 7, Customizing KWS, for more detail.

**Printer Field Setup**
This option enables you to decide which data is printed from the active window, the order of the data printed, the width of the data printed, and whether the text in a data field should wrap around to the next line. See Display Field Setup in Chapter 7, Customizing KWS, for more detail.
Refresh
This option refreshes the contents of the active window. This action may be necessary for updating the contents of a window when you return to it after you have made changes to the KWS database in another active window.

Save Changes
This option saves any task modifications that have been made within a graphical task window. Because the graphical view does not immediately post data modifications to the database, it is necessary to manually instruct the system to save your work periodically. This option is only available when the active window is a graphical task window—the Graphical Task Manager or ToDo Graph.

List of Open Windows
A list of all the windows open within KWS is shown at the bottom of the Window Menu options. A check mark is displayed next to the active window. You can change the active window by clicking on the desired window title in this list.

The Help Menu
The Help Menu contains several options that enable the user to access on-line information about KWS and its operating environment.

Contents
This option displays a table of contents for on-line KWS help information. The user can click on a specific item within the table of contents to access more detailed information on that item.

Search for Help on...
This option opens a Search window that enables you to search for on-line KWS help information by entering a text string.

How To Use Help
This option provides information on how to use the KWS help feature.

About KWS...
This option is a single-action command that displays the About KWS Message Box, which contains information about the KWS developers, the KWS contract number, and the current version number.
Button Bar Options

The Button Bar provides quick access to the KWS functions that are available for the active window. The options available in the Button Bar depend on the type of window that is active.

Task Window Button Options

When the active window is a Task Window, a button bar is displayed with buttons titled: Insert, Delete, Modify, Steps, Attach, Do It, Pred, and Succ. See Chapter 3, Tasks and Steps, for more detail on these options.

Insert
This button opens a Task Dialog Box, which enables you to add a new task to the KWS Database.

Delete
This button enables you to remove a task from the KWS Database.

```
Remember that deleting a task deletes all of its children, Attachments, Steps and Do Its. Use this command with caution.
```

Modify
This button opens the Task Dialog Box, which enables you to edit task information.

Steps
This button opens a Steps Window, which enables you to access the steps you should complete in order to perform the selected task.

Attach
This button opens the Attachment Window and enables you to access attachments linked to the selected task.

Do It
This button opens a Do Its Window and enables you to access Do Its linked to the selected task.

Pred
This button opens a Predecessor Window and enables you to access the tasks that must be completed before the selected task may be started.

Succ
This button opens a Successor Window and enables you to access the tasks that may not be started until the selected task has been completed.
Notifications Window Button Options

When the active window is a Notifications Window, a Button Bar is displayed with buttons titled: **Send**, **Delete**, **Modify**, and **Received**. See The Notifications Option in this chapter for more detail.

**Send**

This button opens the Notification Dialog Box, which enables you to send a KWS-related message to another KWS user.

This option is not intended to replace E-mail messaging. It should only be used for KWS-specific messages.

**Delete**

This button enables you to remove a message from the Notifications Window.

**Modify**

This button opens the Notification Dialog Box, which enables you to edit an existing message.

**Received**

This button enables you to mark a message received, which changes the display color of the message.

Attachments Window Button Options

When the active window is an Attachments Window, a button bar is displayed with buttons titled: **Insert**, **Delete**, **Profile**, **View**, **Edit**, **Export**, **Copy**, **Version**, **Check Out**, and **Check In**. See Chapter 4, Attachments, for more detail on these options.

**Insert**

This button opens the Attachment Insert Dialog Box, which enables you to create or import an attachment.

**Delete**

This button enables you to remove the selected attachment from the Attachment Window.

**Profile**

This button opens an Attachment Profile Window for the selected attachment, which enables you to view or update information for an attachment.
View
This option enables you to view the contents of a selected attachment by launching your file viewer application with the attachment file.

Edit
This button enables you to edit the contents of a selected attachment by launching the application defined in the attachment’s profile with the attachment file.

Export
This button opens a File Save Dialog Box, which enables you to save the attachment to a user-specified file name and location.

Copy
This button enables you to make a new copy of the selected attachment and link it to the selected task within the active Attachment Window.

Version
This button enables you to make a new copy of the selected attachment with the same name and link it to the selected task.

Check Out
This button opens the Check Out Attachment Dialog Box, which enables you to check out an attachment document.

Check In
This button opens the Check In Attachment Dialog Box, which enables you to check in a previously checked out attachment document.

Do Its Window Button Options
When the active window is a Do Its Window, a button bar is displayed with buttons titled: Insert, Delete, Modify, and Execute. See Chapter 5, Do Its, for more detail on these options.

Insert
This button opens the Do It Dialog Box, which enables you to link a Do It to the selected task.

Delete
This button enables you to remove the selected Do It from the active Do It Window.
Modify
This button opens a Do It Dialog Box, which enables you to edit information pertaining to the selected Do It.

Execute
This button launches the selected Do It.

Knowledge Worker Window Button Options

When the active window is a Knowledge Worker Window, a button bar is displayed with buttons titled: Insert, Delete, Modify, and Work Groups. See Knowledge Workers and Work Groups in Chapter 7, Customizing KWS, for more detail on these options.

Insert
This button opens a Knowledge Worker Dialog Box, which allows you to add a new User ID to the KWS Database. This option is only available to users with System Administrator privileges.

Delete
This button will remove the selected User ID from the KWS Database. This option is only available to users with System Administrator privileges.

Modify
This button opens a Knowledge Worker Dialog Box, which enables you to view and edit User ID information. Only a user with System Administrator privileges can modify all User ID information.

Work Groups
This button opens a Work Groups Window that displays a list of all the work groups to which the selected User ID has been assigned.

ToDo
This button opens the ToDo list for the selected User ID.

Reassign
This button opens the Reassign Dialog Box, which enables you to reassign all of a user’s tasks. This option is available only to KWS Administrators.

Use the ToDo list available through the Knowledge Worker Window when reassigning tasks.
KWS Database Window Button Options

When the active window is a KWS Database Window, a button bar is displayed with buttons titled: **Insert**, **Delete**, and **Modify**. See KWS Database and File Storage Setup in Chapter 7, Customizing KWS, for more detail on these options.

**Insert**

This button opens the KWS Database Setup Dialog Box, which enables you to insert a new KWS database definition.

**Delete**

This button enables you to remove the selected KWS database definition from the KWS Database Window.

**Modify**

This button opens the KWS Database Setup Dialog Box, which enables you to edit the selected KWS database definition.

The Available Options Menu

The **Available Option** Menu is a pull-down menu enables you to access the KWS functions available for the active window. Most options in the **Available Options** Menu duplicate options in the Button Bar. Occasionally, however, additional options may be included in the **Available Options** Menu that are not in the Button Bar. These exceptions are made based on display space constraints.

The **Available Options** Menu is accessible from the Task, Task Manager, Steps, Attachment, Do It, Milestone, Appointment, and Messages windows in KWS. The options included in the menu are dependent on the window type.

**Opening the Available Options Menu**

To open the **Available Options Menu**:

Select an item in the window and click once on the right mouse button.

**or...**

Select an item in the window and press the [Enter] key.
Task Window Available Options

The options in the Available Options Menu for a Task Window include Steps, Attachment..., Do It..., Predecessors, Successors, Parent, Siblings, Description, Modify, Delete, and Graph. Parent, Siblings, Description, and Graph are additional options not included in the Button Bar for the Task Window. The Attachment... and Do It... options also provide the capability to search Attachments and Do Its.

Steps

This option opens a Steps Window and enables the user to access Steps associated with performing the selected task. See Steps in Chapter 3, Tasks and Steps, for more detail on this option.

Attachment...

This option displays a pull-down menu that lists the options: Attachment Manager, Search Attachments, and Workflow.

Attachment Manager

This option opens the Attachments Window, which enables you to access Attachments associated with the selected task.

Search Attachments

This option opens the Attachment Search Window, which enables you to enter search criteria for locating attachments. This option is also available from the Query Menu, Attachment Search option. See Searching Attachments in Chapter 4, Attachments, for more detail.

Workflow

This option displays the Workflow pull-down menu where you can select a graphical view of workflow between attachments. See Chapter 4, Attachments, for more information on this option.

Do It...

This option displays a pull-down menu with the options: Edit Do It List, and Search Do Its.

Edit Do It List

This option opens the Do It Window, which enables you to access Do Its associated with the selected task.
Search Do Its
This option opens the Do It Search Window, which enables you to locate Do Its by entering search criteria. This option is also available from the Query Menu, Do It Search option. See Chapter 5, Do Its, for more detail on this option.

Predecessors
This option opens a Predecessor Window, which enables you to access Predecessor tasks associated with the selected task.

Successors
This option opens a Successor Window, which enables you to access successor tasks associated with the selected task.

Parent
This option opens a Task Window that contains the task’s parent and the parent’s sibling tasks. The parent task will be highlighted.

Siblings
This option opens a Task Window that contains a list that includes the task and its siblings.

Description
This option displays the Description Dialog Box and enables you to view, enter, or edit a short description of the selected task.

Reassign
This option displays the Reassign Tasks Dialog Box and enables you to reassign the selected task.

Modify
This option opens the Task Dialog Box, which enables you to edit task information.

Delete
This option enables you to remove a task from the KWS Database.

Remember that deleting a task deletes all its children, attachments, steps, and Do Its. Use this command with caution.

Graph
This option opens a Graphical Task Manager Window with the selected task displayed.
Attachment Window Available Options

The options in the Available Options Menu for an Attachment Window include View, Edit, Export, Copy, Version, Check Out/Check In, Links, Profile, Delete, and Define Workflow. The Define Workflow option is the only additional option not included in the Button Bar for the Attachment Window. See Chapter 4, Attachments, for more details on these options.

**View**
This option enables you to view the contents of a selected attachment by launching your file viewer application with the attachment file.

**Edit**
This option enables you to edit the contents of a selected attachment by launching the application defined in the attachment’s profile with the Attachment file.

**Export**
This option opens a File Save Dialog Box, which enables you to save the attachment to your specified filename and location.

**Copy**
This option enables you to make a new copy of the selected attachment and link it to the selected task.

**Version**
This option enables you to make a new copy of the selected attachment with the same title, link it to the selected task, and increment the version number by one.

**Check Out**
This option opens the Check Out Attachment Dialog Box, which enables you to register an attachment document as “checked out.”

**Check In**
This option opens the Check In Attachment Dialog Box, which enables you to register a previously checked out attachment document as “checked in.”

**Links**
This option opens the Attachment Links Dialog Box, which lists all tasks that have attachment links to the currently selected attachment. It also allows you to move directly to the tasks in which the document is linked.
Profile
This option opens an Attachment Profile Window for the selected task, which enables you to view or update information for the attachment.

Delete
This option enables you to remove the selected attachment from the Attachment Window.

Define Workflow
This option opens the Workflow Definition Dialog Box and enables you to setup a workflow path for the selected attachment.

SELECTING MULTIPLE WINDOW ITEMS

At times you may want to perform an action (e.g., Move, Copy, Delete) on more than one item in a window. KWS provides this capability through the Multiple Item Select Feature.

To select multiple items in a window:

1. Open the window from which you want to select multiple items.

2. While holding the [Ctrl] key down, click on each item that you want to select. As you select each item, it will be highlighted. Alternatively, holding down the [Shift] key and clicking on an item will select a contiguous block of items from the last item selected to the current item.

To select all items in a window:

1. Open the window from which you want to select all items.

2. Select the Edit Menu and then the Select All option. All items in the window will be highlighted.

To deselect items in a window:

While holding the [Shift] key down, click on the item that you want to deselect. The item will no longer be highlighted.

Performing Actions on Multiple Items in a Window

When multiple items are selected, the Multiple Item Indicator, a small red square, appears in the upper left corner of the active window.

To perform actions on multiple items in a window:

1. Select the multiple items to which you want to perform an action.

2. Select the action you want to perform.
To drag multiple items to another window:

1. Select the multiple items that you want to drag.

2. Click on the Multiple Item Indicator and while holding the mouse button down drag it to the desired location.

When performing a multiple-item delete, KWS will warn you that multiple items are selected and will ask for confirmation of the deletion. Multiple-item deletes are available in all windows except the Organization window and the Knowledge Worker window. Use cautiously!

SEARCING WINDOWS FOR TEXT STRINGS

KWS enables you to search for text strings contained within the active window. This capability is useful when you need to find a specific item or items in a window quickly without having to scroll through the window to locate it.

Searching for Text Strings in a Window

To search for text strings in a window:

1. From the Query Menu, select the Search Text in Window option. A pull-down menu will display with the options Search..., Search Next, and Search Previous.

2. To begin your search, select the Search... option. The Search Dialog Box will display (Figure 1-2).

Figure 1-2: Search Window
3. Enter the text string for which you want to search in the **Search For** data field.

4. Select the data fields from which you want to search by clicking on the field name in the **Search Fields** list. To search all fields click within the **All Fields** checkbox.

5. Limit your search by selecting your desired option in the **Find** area of the Dialog Box where the options are defined as follows:

- **Next Match**: Search those items listed after a selected task.
- **Previous Match**: Search those items listed prior to a selected task.
- **All Matches in Window**: Search all items in the window that contain the text string.

6. (Optional) Specify whether you want to select the item(s) that contain matching text strings by checking the **Select Items With Match** checkbox.

7. (Optional) Specify whether you want to clear all previous searches within the window by checking the **Clear Previous Searches** checkbox.

8. (Optional) Specify whether the search is to be case-sensitive by checking the **Match Case** checkbox.

9. Click **OK**. Search results will display in the current window by highlighting the specified text string within the item's title. If you checked the **Select Items With Match** option, each item with a match will be selected.

**THE NOTIFICATIONS OPTION**

KWS automatically notifies you through the Notifications option when there has been a change to the database that may affect you. These system-generated messages let you know when another user has assigned a task to you, deleted an assigned task, or performed some similar action. In addition, you may use the Notifications option to send KWS-related messages to another user.

Each time you log in to KWS, the system checks your message list. If you have new notifications, the Notifications Window will open (Figure 1-3).

**Accessing Notifications**

To access Notifications:

1. Select File from the KWS Menu Bar.
2. In the File Menu, select **Notifications**. The Notifications Window will display (Figure 1-3) along with its associated button bar (Figure 1-4).

<table>
<thead>
<tr>
<th>Date Sent</th>
<th>From</th>
<th>To</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>16Mar98</td>
<td>THOMAS_B</td>
<td>KAPPE_S</td>
<td>Task Reassignment</td>
</tr>
<tr>
<td>16Mar98</td>
<td>THOMAS_B</td>
<td>KAPPE_S</td>
<td>Revised Due Date</td>
</tr>
</tbody>
</table>

![Figure 1-3: The Notifications Window](image)

The Notifications Window contains the following data fields.

- **Date Sent**: The date the message was generated.
- **From**: The KWS User ID that generated the message.
- **To**: The KWS User ID to receive the message.
- **Subject**: A short description of the message contents.
- **Message**: The text of the message.

Unread messages are listed in the order of **Date Sent** and are displayed in red. Notifications that have been marked **Received** are at the bottom of the list in the order of **Date Sent** and are displayed in black.

![Figure 1-4: The Notifications Window Button Bar](image)

The Notifications Window button bar contains the options **Send**, **Delete**, **Modify**, and **Received**. These options are available whenever the Notifications Window is active.

The Notifications Window also has an associated **Available Options** Menu, which can be accessed by clicking the right mouse button. The menu options are **Modify** and **Delete**.

**Reading Notifications**

**To read Notifications:**

1. Select the message you want to read.
2. Click the **Modify** button. The Notification Dialog Box will be displayed.
3. Click **OK**.

**Marking a Notification**

**Received**

**To mark a Notification received:**
Select the notification to be marked received and click the Received button.

or...

While reading the message, check the Received box in the upper left area of the Notification Dialog Box and click OK.

* MODIFYING A NOTIFICATION*

To modify a Notification:

1. Select the notification to be modified.
2. Click the Modify button. The Notification Dialog Box will display.
3. Enter your desired modifications.
4. Click OK to save.

* DELETING A NOTIFICATION*

To delete a Notification:

1. Select the notification to be deleted.
2. Click the Delete button. The Delete? Dialog Box will display.
3. Click Yes. The Notification will be removed from the Notifications Window.
Sending a Notification

To send a Notification:

1. Select File, Notifications from the KWS Menu Bar to open the Notifications Window.

2. Click the Send button. The Notifications Dialog Box will be displayed.

   ![Notifications Dialog Box](image)

   **Figure 1-5: The Notifications Dialog Box**

3. Enter values for the To, Subject, and Message data fields into the Notifications Dialog Box.

4. Click OK.

Sending a Notification as E-mail

To send a Notification as email:

1. Select File, Notifications from the KWS Menu Bar to open the Notifications Window.

2. Click the Send button. The Notifications Dialog Box will display.

3. Enter values for the To, Subject, and Message data fields into the Notifications Dialog Box.
4. Click the **Send as Email** check box.

5. Click **OK**.

To send a notification as email, two conditions are required: you must have (1) a MAPI compliant email program currently running, and (2) an email address for the knowledge worker defined through the Knowledge Worker Admin menu. Check with your KWS Administrator for help in setting up this option.

| This option is not intended to replace email messaging. It should only be used for KWS-specific messages. |

**Sending a Notification to Multiple Recipients**

The Notifications dialog box allows multiple knowledge workers, workgroups, and email addresses to be specified as recipients.

**To send a Notification to multiple recipients:**

1. In the **Notifications** dialog box, press **Ctrl** and click on each knowledge worker in the **Knowledge Workers** list who is to receive the Notification.

2. Press **Ctrl-Click** to select each workgroup in the **Groups** list to receive the Notification.

3. Enter one or more email addresses in the **Email Addresses** edit box.

4. Enter your subject and text.

5. Click **OK**.

**Attaching Files to a Notification**

One or more files can be attached to a Notification being sent to an email address or to a knowledge worker who receives Notifications as email. Files cannot be attached to Notifications sent strictly within KWS.

**To attach one or more files to a Notification:**

1. In the **Notifications** dialog box, enter a full path and file name in the **Attachments** edit box. Multiple file names can be entered if a comma separates each. A file can be selected by clicking on the File Selection button to the right of the edit box.

2. Complete the remaining fields of the Notification and click **OK**.
Selecting Email Recipients Using the Address Book

Clicking the Addr Book button on the Notifications Dialog box allows you to use the Address Book feature of your email system to select email recipients. This feature is only available if your email system is MAPI compliant.

To select email recipients using the Address Book:

1. In the Notifications dialog box, click the Addr Book button. The address book window for your email system will appear.

2. After specifying the list of recipients using the address book, click OK.

3. The list of recipients will appear in the Email Addresses box of the Notifications dialog box.

THE NOTES COMMAND

KWS provides quick access to a Windows Notepad document via the Notes command. This feature is useful when you need a quick scratchpad to record information while working within KWS. This document will not be linked to a specific task; the Attachment option is available for that purpose.

Accessing Notes

To access the Notes option:

Select Notes from the KWS Menu Bar. Windows Notepad will open.

If this is the first time you selected the Notes command, a new file will be created for you and given a name generated from your KWS User ID. Otherwise, your previously created file will be displayed. This file is stored on your workstation and is only accessible from that workstation when you log in using your KWS User ID.

Because the Notes command uses the Windows Notepad, if you have a Notes file open and then click any KWS window, your Notes file will be placed behind the KWS Program Window but will remain open. If you select the Notes command in KWS again while your Notes file is still open, Notepad will open your last saved version of your Notes file. So be careful not to open multiple instances of Notepad with the Notes command. To determine if you already have Notepad open, you can use the standard Windows key sequence [CTRL-ESC] to view a list of open applications.

Modifying Notes

You may enter and edit text into your Notes file using the Windows Notepad commands and features. When you want to exit, save your information by using the File, Save command within Notepad and exit by using the File, Exit command. If you attempt to exit Notepad without saving your file, Notepad will display a message that asks if you want to save your text.
LOGGING IN TO KWS

Starting KWS

To start KWS:

Double-click the KWS icon in your Windows Program Manager. The KWS application will open with the Knowledge Worker System Login Dialog Box displayed in the KWS Program Window.

Logging in to KWS

You must have a KWS User ID and password before you can log in to KWS. If you do not have these, see your KWS System Administrator.

To login to KWS:

1. Start KWS. The KWS Login Dialog Box will be displayed.

2. Select the KWS database to which you want to log in by clicking the small right arrow to the left of the Database field and selecting from the list provided.

3. Enter your User ID and Password.

4. Click OK.

Your System Administrator can enable you to automatically log in to KWS when you start the application. For security reasons, this is generally not recommended since anyone will be able to log in with your User ID by starting KWS from your workstation.

Letting Another User Login to KWS

You may let someone else log in to KWS from your workstation without exiting KWS. By doing this, you will no longer be logged in, but you may log in again in the same manner.

When you are logged in to KWS and you then let another user log in, all of the KWS windows that you have open will remain open after the new login. Any windows opened by the new log in User ID will be associated with the new User ID. However, your remaining windows will still be associated with your User ID. If the new user accesses your open windows, the information retrieved in them will be the same as if you were logged in. For example, suppose you are logged in with your User ID and have your ToDo Calendar Window open. If you let another user log in and they open their ToDo Calendar window, the ToDo items assigned to them will be listed. If the new user then opens a Task Window; assigns a task to your ID; accesses your open ToDo Calendar; and refreshes the list, the new task will appear in your ToDo list. This capability is very useful when building process models. However, at any other time it is recommended that you close all of your open windows before allowing another user to login.
To log in as another user while KWS is open:

1. Select **File** from the KWS Menu Bar.
2. Select **Login** from the **File** Menu. The KWS Login Dialog Box will display.
3. Select the KWS database to which you want to log in by clicking the small right arrow to the left of the **Database** field and selecting from the list provided.
4. Enter your **User ID** and **Password**. Click **OK**.

**REFRESHING INFORMATION IN KWS WINDOWS**

At times, you may need to update the information displayed in an open KWS window. For example, if you assign a new task to yourself in the Task Manager and then return to your ToDo List, the new task will not be displayed until you update the information. This update is referred to as "refreshing" information.

* Refreshing Windows

To refresh information in an active KWS window:

1. Select the Window Menu in the KWS Menu Bar.
2. Select **Refresh** from the **Window** Menu.

**PRINTING FROM KWS**

You can print from any window within KWS. You may also change your print font, the data fields to be printed, and your page setup. See Chapter 7, Customizing KWS, for more details on setting these options.

* Printing Text From a KWS Window

To print text from a KWS window:

1. Select the window from which you want to print.
2. Select **File** from the KWS Menu Bar.
3. Select **Print** from the **File** Menu. The contents of the active window will be printed on the default printer specified in the Windows Control Panel.

* Printing the Graphical Task Manager Window

The contents of the Graphical Task Manager window can be printed by selecting **Print** from the **File** menu. The printout will conform to the page formatting defined for the current user.
To print contents of the Graphical Task Manager window:

1. Open the Graphical Task Manager window and scroll the tasks to be printed into view.

2. Adjust the date scale by clicking on the date bar at the top of the window and dragging the cursor left or right.

3. Adjust the size and shape of the window so the portion of the graph to be printed is in view. Note that whatever appears in the window will be stretched to fit the page when printed.

4. Select Print from the File menu. The Print dialog box will appear. Click OK.

LISTING THE CONTENTS OF THE KWS DATABASE

You may print a hierarchical list of all the tasks in your database or a selected task. This list includes all the subordinate tasks and any steps, attachments and Do Its associated with each task. The list is printed using the current KWS page format settings.

❖ Listing All Tasks in the KWS Database

To list all the tasks in your KWS database:

1. Select Admin from the KWS Menu Bar.

2. Select Listing of the Entire Database from the Admin Menu. A message box will warn you that, if you have a large database, this action might take a long time and ask you if you want to continue.

3. Click Yes. The Print Dialog Box will display. Click OK.

❖ Listing a Selected Task in the KWS Database

To list a selected task in the KWS database:

1. Select the task that you want to list.

2. Select Admin from the KWS Menu Bar

3. Select Listing of a Selected Task from the Admin Menu. The Print Dialog Box will display. Click OK.
CHAPTER 2  THE TODO LIST

Overview 2-2
The ToDo List Window 2-2
Manipulating Tasks in the ToDo List 2-5
Options for Viewing the ToDo List 2-7
OVERVIEW

The window used most often within KWS is the ToDo List Window. This window provides a personalized list of all the tasks you need to perform. The tasks listed in your ToDo List are entered into KWS via the Task Manager as part of your organization's process model. The tasks displayed in your ToDo List depict the subset of your organization's process model assigned to you. The ToDo List is dynamic, with the contents changing as tasks are completed, time progresses, and new tasks are added.

This chapter describes the features of the ToDo List window, how to manipulate tasks in the ToDo List, and the various methods for displaying your ToDo List.

TODO WINDOW

The tasks assigned to you are displayed in a ToDo Window (Figure 2-1: ToDo Window).

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>26Jan98</td>
<td>Midpoint Tapes objectives review</td>
</tr>
<tr>
<td>05Feb98</td>
<td>Insurance review</td>
</tr>
<tr>
<td>14Feb98</td>
<td>Attachments Review</td>
</tr>
<tr>
<td>27Feb98</td>
<td>Complete TAPES for GS9</td>
</tr>
<tr>
<td>27Feb98</td>
<td>Prepare for Midpoint TAPES objectives review</td>
</tr>
<tr>
<td>03Mar98</td>
<td>Do Its Review</td>
</tr>
<tr>
<td>06Mar98</td>
<td>Write Proposal</td>
</tr>
<tr>
<td>12Mar98</td>
<td>Budget Report</td>
</tr>
<tr>
<td>22Mar98</td>
<td>Write Cover Letter</td>
</tr>
</tbody>
</table>

Figure 2-1: ToDo Window

By default, the tasks in the ToDo Window are organized by their Date Due value, with the earliest dates listed first. The order of the tasks can be changed by selecting Sort... from the Window Options menu. They are also color-coded to indicate tasks that are late or of critical priority. Critical priority tasks are red. High priority tasks are blue. All other tasks are black.

The ToDo Window displays information also about each task's type and status via the Symbol Fields. Access to the resources required to perform the tasks is provided through icons in the Indicator Columns or buttons in the ToDo Window button bar. These features are described in the following sections.
The Symbol Fields

On the left side of the ToDo List Window are five Symbol Field columns that indicate the Task Completion Status, Task Type, Predecessor Waiting Status, and Start Status of each task.

Task Completion Status Symbols

The Task Completion Status Symbols indicate the completion status of a task: Started, Finished, or OBE. If none of these symbols appears, the task status is, by default, Not Started.

- **S** Started
- **✓** Finished
- **O** Overcome By Events

A grayed S, ✓, or O can appear next to a task. When a Task Completion Status Symbol appears in gray, it indicates that the task is a Work Group task (one assigned to more than one User ID). A grayed symbol will appear next to the task if at least one group member, but not all, have marked the task status. If all User IDs in the Work Group mark the task with the same status, the symbol will appear in black.

Task Type Symbols

The Task Type Symbols indicate special categories of a task as follows:

- **P** Private Tasks
- **Φ** Cyclic Tasks
- **T** Tasks Transferred to me by another User ID
- **τ** Tasks Transferred by me to another User ID

Predecessor Waiting Symbol

W is the Predecessor Waiting Status symbol and indicates that the task cannot be started because it is waiting for a predecessor to be completed.

Start Status Symbols

The Start Status Symbols indicate how soon the task needs to be started.
Indicator Columns

On the right side of the ToDo Window, four Indicator Columns may contain icons. These icons are graphical references that, when present, indicate that a task has additional resources associated with it. You may click on the icon to access the resource. These additional resources are child tasks, attachments, Do Its, and steps. The icons that represent these resources are as follows:

- Task has one or more child Tasks
- Task has one or more Attachments
- Task has one or more Do Its
- Task has Steps

The Symbol Menu

This pull-down menu enables you to change task completion status directly from the ToDo Window.

To open the Status Symbol Menu:

1. Select the desired task and place your cursor in the Status Symbol column on the left side of the ToDo List.

2. Click the left mouse button. The Symbol Menu will appear with the options Not Started, Started, Finished, OBE, and Percent Complete.

3. Select the desired option or click anywhere outside of the Status Symbol Menu to exit without setting the Task Completion Status.
MANIPULATING TASKS IN THE TODO WINDOW

You should execute all of your tasks from the ToDo Window. Even though it is possible to access the same information from the Task Managers, these should only be used for building and updating the organization's process model. From the ToDo Window, you can change task status, access task resources, add tasks, and modify task information.

**Accessing Child Tasks, Steps, Attachments, and Do Its**

To access child tasks, steps, attachments, and Do Its:

Click the right mouse button on the desired resource icon in the Indicator Column of the ToDo Window.

or...

Select the desired task and click the appropriate button from the ToDo Window Button Bar.

With either method, the window for the desired resource will be displayed.

**Modifying Tasks**

A user may change task information for the tasks in their ToDo List. However, the information that can be changed depends on the task permissions assigned to the user.

To modify a task from the ToDo Window:

1. Select the desired task and click the **Modify** button from the ToDo Window Button Bar. The Task Dialog Box for the task will be displayed.

2. Make the desired changes in the Task Dialog Box and click the **OK** button.

**Changing Task Status**

Two methods change Task Status from the ToDo Window. The quickest method uses the Status Symbol Menu. The other uses the Task Dialog Box.

To change Task Status using the Status Symbol Menu:

1. Select the desired task and place the cursor over the Status Symbol Column on the left side of the ToDo List.

2. Click the left mouse button once, and the Status Symbol Menu will be displayed with the options **Not Started**, **Started**, **Finished**, or **OBE**.

3. While holding the mouse button down, move the cursor over the appropriate status option and release the mouse.

When changing status using the Status Symbol Menu, the current date will automatically be entered into the applicable date field (**Date Started** and/or **Date Finished**).
To change Task Status using the Task Dialog Box:

1. Selecting the desired task and click the Modify button from the ToDo List Window Button Bar. The Task Dialog Box for the task will be displayed.

2. Mark the appropriate status option in the Status area of the dialog box, and then click the OK button.

Modify the Percent Complete Value of a Task using the Status Symbol Menu

Change the Percent Complete value for a task by selecting Percent Complete from the Status Symbol Menu for the task. This action displays a dialog box, which contains a slider bar that can be used to set the Percent Complete value.

To modify the Percent Complete value of a task using the Status Symbol Menu:

a) In any task window, position the mouse pointer within the left margin next to a task and click the left mouse button. The Status Symbol Menu will appear.

b) Select Percent Complete. The Percent Complete Dialog Box appears, including a slider bar that indicates the current Percent Complete value for the task.

c) Click the slider button and drag it left or right to the desired Percent Complete value.

d) Click OK.

Adding Private Tasks

Private tasks exist only in your ToDo List and are not included in your organization's KWS process model. Only the user who creates a private task can access it.

To add a private task from the ToDo Window:

1. Click the Insert button. A Task Dialog Box will appear.

2. Enter the information for the task into the Task Dialog Box.

3. Click OK. The new task will be displayed in your ToDo List with a P in the Symbol Column to the left of the task.

Adding Public Tasks From the ToDo Window

Public tasks are those tasks that are part of the organization's KWS process model. Any task that is inserted via a Task, Task Manager or Graphical Task Manager Window is automatically a public task. A task inserted from within the ToDo Window is public only if it is inserted as a child of a public task. Otherwise, it is a private task.
To add a public task from the ToDo Window:

1. Select the public task under which you want to insert children and double-click the mouse button. A Task Window will be displayed with its associated button bar.

2. Click the **Insert** button. A Task Dialog Box will be displayed.

3. Enter the information for the task into the Task Dialog Box.

4. Click **OK**.

Deleting a task from your ToDo List also deletes it from the KWS database. You may delete a task only if you have been given Delete permission for the task by the task owner.

To delete a task from the ToDo Window:

1. Select the desired task and click the **Delete** button. The Delete? Dialog Box will be displayed.

2. Click **Yes** to delete the task, or click **No** to cancel.

Remember that deleting a task deletes all its children, attachments, steps, and Do Its. Use this command with caution.

OPTIONS FOR VIEWING THE TODO LIST

Several options are available for viewing your ToDo List in KWS. These options are accessed from the **ToDo** Menu in the KWS Menu Bar. The options are: **ToDo**, **ToDo: Completed Items**, **ToDo: Ongoing Items**, **ToDo Calendar**, **ToDo Graph**, **ToDo Context Graph**, and **ToDo Browser**. The contents of the ToDo List depend on which option you have chosen. Each option is described further in the following sections.

**ToDo**

The **ToDo** option displays all tasks assigned to you that have not been marked **Finished** or **OBE** (Figure 2-2). Tasks that have been marked **Finished** or **OBE** with a due date later than the current date will also be displayed on the ToDo List until the due date is later than the current date.
The **ToDo: Completed Items** option displays an archived list of all tasks assigned to you that have been marked **Finished** or **OBE** (Figure 2-3). Tasks with a due date later than the current date will not be displayed on the **ToDo: Completed Items List** until the current date is later than the due date.

A date range can be specified for the **ToDo: Completed** window. Only tasks due within this date range will be displayed.

**ToDo: Completed Window Date Ranges**

**To specify a date range for the ToDo: Completed window:**

1. Select **ToDo: Completed Items** from the **ToDo** menu.

2. The **Select Date Range** dialog box will appear. Enter a date in the **Start Date** field. Only tasks due on or after this date will be selected.

3. Enter a date in the **End Date** field. Only tasks due on or before this date will be selected.

4. Click **OK**.
ToDo: Ongoing Items

The **ToDo: Ongoing Items** option displays all tasks assigned to you that have not been assigned a **Date Due** value (Figure 2-4).

![ToDo: Ongoing Items](image)

**Figure 2-4: ToDo Ongoing Items Window**

It is recommended that you assign a **Date Due** value to every task. The Ongoing Task option was originally provided in KWS to enable users to quickly access repetitive tasks that are difficult to assign a specific due date. A better method for defining these tasks is now available. See Chapter 6, Task Palette, for more detail on this method.

ToDo Calendar

The **ToDo Calendar** option unites an interactive Calendar with a ToDo Window and an Appointment Window (Figure 2-5). The Calendar displays the months across the top section of the window. The ToDo Window is below the Calendar on the left side, and the Appointment Window is below the Calendar on the right side.
Opening the ToDo Calendar Window

To open the ToDo Calendar Window:

1. Select the ToDo Menu in the KWS Menu Bar.
2. Click on the ToDo Calendar option.

The ToDo Calendar Window typically is displayed in the KWS workspace when a user first logs in.

Resizing the ToDo List and Appointment List Windows

The ToDo Window can be expanded to cover the Appointment Window, or the Appointment Window can be expanded to cover the ToDo Window. This capability gives you a large window in which to view the information. Either of these expanded windows can be contracted to display both windows again.

To expand the ToDo or Appointment Window:

Double-click on the Title Bar of the window to be expanded. The expanded window will cover the other window.

To contract an expanded ToDo or Appointment Window:

Double-click on the Title Bar of the expanded window. Both windows will be displayed at their original size.
The Calendar

When the ToDo Calendar Window initially opens, the Calendar displays the months starting with the current month on the left side with the current date selected. You can scroll through the months displayed in the Calendar by using the scroll bar located immediately below the Calendar.

The Calendar interacts directly with the ToDo List and Appointment List. The tasks displayed in the ToDo List or appointments in the Appointment List are determined by the date(s) selected in the Calendar. Dates marked in red indicate that a task is due or an appointment is scheduled for that date. Dates marked in gray indicate that the day is a non-working day.

You can select any day, week, or month from the Calendar to view your ToDo List items for the selected period.

To select a specific day in the Calendar:

1. Move the cursor over the date to be selected. A red box will surround the date.
2. Click the mouse button. A black box will surround the selected date.

To select an entire month in the calendar:

1. Move the cursor over the title of the month to be selected. A red box will surround the dates for the month.
2. Click the mouse button. A black box will surround the selected month.

To select an entire week in the calendar:

1. Move the cursor over any date in the week to be selected. A red box will surround the dates for the selected week.
2. Press the [Ctrl] key while clicking the mouse button. A black box will surround the selected week.

To select multiple days, weeks or months:

1. Select the first day, week, or month.
2. While holding the shift-key down, select the second day, week or month. Both selections will now have a black box surrounding the dates. Repeat to include any additional dates you wish to select.

Days when a knowledge worker is not working are denoted in KWS as non-working days. KWS automatically denotes weekends to be non-working days. Note: Holidays are not automatically marked as non-working.
To make a date a non-working day:

1. Move the cursor over the date to be designated as non-working.

2. Click the right mouse button. The background of the day will change to light gray.

To change a date from non-working to working:

1. Move the cursor over the date to be made working.

2. Click the right mouse button. The background of the day will change from light gray to gray.

**ToDo List**

The ToDo window displays a ToDo List that contains all the tasks assigned to you that should be started by the selected date and have not been marked Finished or OBE. KWS calculates that a task should be started by the selected date when the Date Due value for that task minus the Duration equals that selected date. Tasks that have been marked Finished or OBE with a due date later than the current date will also be displayed on the ToDo List until the due date is later than the current date.

**The Appointment List**

The Appointment Window enables the user to enter appointments within KWS. The appointments entered for the date(s) currently selected in the Calendar will be displayed in the Appointment List. The following data fields are used by KWS to describe Appointments:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment</td>
<td>A textual description of the appointment</td>
</tr>
<tr>
<td>Date</td>
<td>The date of the appointment entered in DDMMYY format. The default value is the currently selected date in the Calendar.</td>
</tr>
<tr>
<td>Start Time</td>
<td>The time when the appointment is scheduled to begin entered in the 12-hr-clock format: e.g., 02:15PM.</td>
</tr>
<tr>
<td>End Time</td>
<td>The time when the appointment is scheduled to end entered in the 12-hr-clock format as above.</td>
</tr>
</tbody>
</table>

**Entering Appointments**

To enter an appointment:

1. Activate the Appointment Window by clicking on it anywhere.
2. Press the **Insert** button on the Button Bar. The Appointment Dialog Box will appear (Figure 2-6).

3. Enter the information into each field of the dialog box and click **OK** to save the appointment. Note that the date and time fields can be entered by clicking the arrows next to the data fields.

![Appointment Dialog Box](image)

Figure 2-6: Appointment Dialog Box

*Modifying Appointments*

To modify an appointment:

1. Activate the Appointment Window by clicking on it anywhere.

2. Select the appointment to be modified from the Appointment List and press the **Modify** button on the Button Bar. The Appointment Dialog Box will appear.

3. Enter the desired changes to each field in the dialog box and click **OK**.

*Deleting Appointments*

To delete an appointment:

1. Make the Appointment Window active by clicking on it anywhere.

2. Select the appointment to be deleted from the Appointment List and press the **Delete** button. The Delete? Dialog Box will be displayed (Figure 2-7).

3. Click **Yes** to delete the appointment, or click **No** to cancel.

![Delete? Dialog Box](image)

Figure 2-7: Delete? Dialog Box
To link an attachment to an appointment:

1. Activate the Appointment Window by clicking on it anywhere.

2. Select the appointment to be linked to an attachment from the Appointment List and press the Attach button in the Button Bar. An Attachment Window will appear.

3. Link the attachment in the usual manner. See Chapter 4, Attachments, for detail on linking Attachments. See Chapter 5, Do Its, for details on linking Do Its.

**ToDo Context Graph**

The **ToDo Context Graph** option displays the complete process hierarchies to which the ToDo items belongs in a Graphical Task Manager Window. Your ToDo items are indicated in bold type. Tasks that have been marked Finished or OBE and Ongoing Tasks are not displayed. See The Graphical Task Manager in Chapter 3, Tasks and Steps, for more details on using the Graphical Task Manager Window.

**ToDo Graph**

The **ToDo Graph** option displays your ToDo list in a Graphical Task Manager Window. Your ToDo items are indicated in bold type. Tasks that have been marked Finished or OBE and Ongoing Tasks are not displayed. If you modify a ToDo item in this window, the entire task hierarchy containing the ToDo item will be loaded. See The Graphical Task Manager in Chapter 3, Tasks and Steps, for more details on using the Graphical Task Manager Window.
**ToDo Browser**

The ToDo Browser option displays all the tasks assigned to you within a split-screen window (Figure 2-8). This browser allows you to view two levels of the task hierarchy simultaneously. Using this option, you can access all the levels of the ToDo List without opening multiple task windows.

![ToDo Browser: KAPPES_S](image)

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Title</th>
<th>ToDo</th>
</tr>
</thead>
<tbody>
<tr>
<td>22Mar98</td>
<td>Write Cover Letter</td>
<td></td>
</tr>
<tr>
<td>25Mar98</td>
<td>Cyclic Review</td>
<td></td>
</tr>
<tr>
<td>25Mar98</td>
<td>KWS Testing, ver 3.0</td>
<td></td>
</tr>
<tr>
<td>26Mar98</td>
<td>Identify SMEs to decompose tasks</td>
<td></td>
</tr>
</tbody>
</table>

![Tasks for: KWS Testing, ver 3.0](image)

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Title</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14Feb98</td>
<td>Attachments Review</td>
<td>kws</td>
</tr>
<tr>
<td>03Mar98</td>
<td>Do Its Review</td>
<td>kws</td>
</tr>
<tr>
<td>25Mar98</td>
<td>Cyclic Review</td>
<td>kws</td>
</tr>
</tbody>
</table>

Figure 2-8: ToDo Browser Window
CHAPTER 3  TASKS AND STEPS

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The Task Manager 3-22

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OVERVIEW

Tasks are the basic building blocks of a KWS process model. KWS provides the ability to build process models via the Task Manager and Graphical Task Manager. In addition, users may add to the KWS process model by inserting tasks within Task Windows accessed from their ToDo Lists.

This chapter describes how to define tasks within KWS, manipulate tasks for building process models, define cyclic tasks, create predecessor and successor relationships between tasks, use the Graphical Task Manager, and define steps.

TASK DEFINITION

Each task has a specific set of information or data fields associated with it. To build a KWS process model, it is necessary to enter the information that defines each task into KWS. The following sections describe the information required for defining tasks within the KWS database.

The Task Dialog Box

Tasks are entered into the KWS database through the Task Dialog Box (Figure 3-1: The Task Dialog Box). The Task Dialog Box contains a set of data fields that capture user-specified values for defining tasks within KWS. In addition, the Task Dialog Box contains buttons used to access dialog boxes for capturing or viewing additional task information. The following sections describe the data fields contained within the Task Dialog Box as well as the data fields accessed from the Task Dialog Box.
**Task Dialog Box Data Fields**

The following data fields in the Task Dialog Box are entered by the user when defining tasks within KWS.

**Milestone**

*Designating a Milestone*  
To designate a task as a Milestone: Check the Milestone box by clicking on it. If the box is already checked, clicking on it will uncheck it and vice versa.

Description: Indicates whether an item is a milestone.

Type: An option-box field that indicates the tasks is actually a milestone.

Default Value: Unchecked

Usage: When building KWS process models, it is useful to have milestone tasks to provide an absolute division between task structures.

**ToDo**

*Designating a ToDo Item*  
To designate a task as a ToDo item: Check the ToDo box by clicking on it. If the box is already checked, clicking on it will uncheck it and vice versa.

Description: Indicates whether a task should be displayed in the ToDo List.
Type: An option-box field that indicates a task should appear in the ToDo List when the box is checked and should not appear in the ToDo List when the box is not checked.

Default Value: Checked

Usage: When building KWS process models, some higher-level tasks are defined to provide organizational structure to the task hierarchy. It may not be appropriate for these tasks to appear as ToDo items. Typically, ToDo items are the lower-level tasks that are actually performed by a knowledge worker.

Title

Entering Task Title

To enter Task Title: Type the desired value into the Title field.

Description: The name of the task.

Type: A 240-character text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols. It is a required field.

Default Value: Blank

Usage: The Title value should contain an abbreviated description of the central activity that defines the task. It is recommended that a task be named with an active verb phrase (Verb + Noun Phrase). For example: Conduct Meeting. The KWS convention is to capitalize each key word in the task name, just as you would the title of a book.

ID

Entering the Task ID

To enter the task ID: Type the value into the ID field.

Description: An identifier used to classify tasks.

Type: A 20-character text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols. It is a required field.

Default Value: The ID value of the parent task.

Usage: The ID value should contain information that enables you to quickly associate the task with a specific project or assignment. For example, an ID field containing the project number 001CS4 for the task Conduct Status Review Meeting reminds the user which project the task pertains to without the user having to include the project name in the Title field. Also, marking
tasks with ID values ensures they will be found when a user makes a database query to retrieve all the tasks that contain that specific ID value.

**Date Due**

*Entering Date Due*  
To enter Date Due: Type the value into the Date Due field using the DDMMYY format, or set the value by clicking on the ... button to the right of the field and select the date from the calendar.

**Description:** The scheduled date of completion for a task.

**Type:** A date field entered using the format DDMMYY, where DD is the 2-character number for the day of the month, MMM is the first three letters of the name of the month, and YY is the 2-character number for the year. For example, August 3, 1999 is entered as 03aug99.

**Default Value:** The Date Due value of the parent task. If the task does not have a parent, the default value is the current date. If the task is being entered as a private task from the ToDo List in the ToDo Calendar Window, the default value is the date selected in the calendar.

**Usage:** The Date Due value of a task is based on the Date Due values of its children. If a task has children, its Date Due value is set to the Date Due of its earliest child. If a task does not have children, its Date Due value is set by the user. Therefore, you cannot change the Date Due value of a parent task; you can only change the Date Due value of leaf-level tasks. Because a parent task inherits its Date Due value from its children, when you are building a task structure it is often simpler to accept the default value until you reach the leaf level of the hierarchy. At the leaf level, assign Date Due values, and the parent task's values will be set automatically.

It is recommended that all tasks be assigned a Date Due. If the Date Due field is deleted and left blank, the task is designated as an Ongoing Task within KWS. The Ongoing Task option was originally provided in KWS to enable the user to have quick access to tasks of a repetitive nature that are difficult to assign a specific due date. A better method for defining these tasks is now available. See Chapter 6, Task Palette, for detail on this method.

**Include Weekends**

*Setting Include Weekends*  
To select Include Weekends: Select this option by clicking the Include Weekends checkbox.

**Description:** Specifies whether weekends are included as working days when calculating the late start date of a task.
Type: An option box field that indicates that weekends are working days for this task.

Default Value: Unchecked

Usage: KWS uses this information to compute the **Late Start Date** for a Task (See Late Start Date, this section). If the option is checked, weekends are considered to be working days and are included as part of the task duration when calculating the **Late Start Date**. Also, if this option is checked, the user is allowed to drag the duedate to a weekend day in the GTM.

### Duration

**Entering Duration**

To enter Duration: Type the value into the **Duration** field, or set the value by clicking on the up and down arrows to the right of the field.

Description: An estimate of the number of work days and hours it will take to complete the task.

Type: A numeric field that is divided into days and hours.

Default Value: 0 days, 0 hours

Usage: KWS uses the information stored in the **Duration** field to compute the **Late Start Date** for a Task (See Late Start Date, this section). Work days are formulated as 8 hours, and exclude Saturdays and Sundays.

The **Duration** value of a parent task is equal to the difference between the latest **Date Due** value and earliest **Start Date** value of its children. If a task does not have children, its **Duration** value is set by the user. Therefore, you cannot change the **Duration** value of a parent task; you can only change the **Duration** value of leaf-level tasks. Because a parent task inherits a **Duration** value from its children, when you are building a task structure, it is often simpler to accept the default value until you reach the leaf level of the hierarchy. At the leaf level, assign **Duration** values and the parent task’s values will be set automatically.

### Date Started

**Entering Date Started**

To enter **Date Started**: Type the value into the date field using the DDMMYY format, or set the value by clicking on the ... button to the right of the field and select the date from the calendar.

Description: The date that work on a task is initiated.

Type: A date field entered using the format DDMMYY, where DD is the 2-character number for the day of the month, MMM is the first three letters
of the name of the month, and YY is the 2-character number for the year. For example, August 3, 1999 is entered as 03aug99.

Default Value: Current date

Usage: The Date Started field indicates that a task is in progress. This information is valuable for users who need to know the status of a task. Also, it can be used in conjunction with the Date Finished field value to compute the actual completion time for a task.

Date Started is set to the current date when the user marks a task Started from the Status Symbol Menu. The user may change this value from the Task Dialog Box if, for some reason, the Task Status was not set on the actual start date. If a task is not marked Started before it is marked Finished, the Date Started is set to the current date.

Date Finished

To enter Date Finished: Type the value into the date field using the DDMMMYY format, or set the value by clicking on the ... button to the right of the field and select the date from the calendar.

Description: The date that work on a task is completed.

Type: A date field entered using the format DDMMMYY, where DD is the 2-character number for the day of the month, MMM is the first three letters of the name of the month, and YY is the 2-character number for the year. For example, August 3, 1999 is entered as 03aug99.

Default Value: Current date

Usage: The Date Finished field is used to indicate that a task is completed. A completed task will be displayed on your ToDo List (with a check mark next to it) until the Date Due value is less than the current date. This value is also used in conjunction with the Date Started value to compute the actual completion time for a task. Date Finished is set to the current date when the user marks a task Finished from the Status Symbol Menu. You may change this value from the Task Dialog Box if, for some reason, the Task Status was not set on the actual completion date.

% Effort

To enter % Effort: Type the value into the % Effort field or select the value by clicking on the up and down arrows to the right of the field.

Description: An estimate of the percentage of effort a user will spend on completing a task.
Type: Integer with a maximum value of 100.

Default Value: 100

Usage: The % Effort field gives users an estimate of how much of their total effort should be spent on a task.

% Complete

Entering % Complete

To enter % Complete: Type the value into the % Complete field or select the value by clicking on the up and down arrows to the right of the field.

Description: An estimate of what percentage of the task has been completed.

Type: Integer with a maximum value of 100.

Default Value: 0

Usage: The % Complete field provides users with a measure of the progress that has been made on a task.

Assigned To

Entering Assigned To

To enter Assigned To: Type any valid KWS User ID in the Assigned To field, or click the small arrow located to the right of the field and select the desired value from the list provided. You may also enter the beginning characters of the User ID into the field to quickly locate a value in the list. For example, entering the value "ka" will automatically place you at the first User ID in the list beginning with "ka."

Description: The KWS User ID of the user (or Work Group) responsible for completing the task.

Type: A 20-character text field. The value must be a valid KWS User ID or Work Group. It is a required field.

Default Value: The KWS User ID of the user entering the task.

Usage: All tasks indicated as ToDo items and assigned to your KWS User ID or any Work Groups containing your User ID are displayed in your ToDo List.

Defining New Workgroups When Assigning Tasks

A new workgroup can easily be defined when assigning a task. If multiple knowledge workers are selected when assigning a task, KWS prompts the user for the ID of a new workgroup and creates it automatically.
To define a new workgroup when assigning a task:

1. Open the Task Dialog Box.

2. Select the ... button next to the Assigned To, Performed By, Assigned By, or Task Owner field. The Knowledge Worker/ Workgroup Selection dialog box appears (Figure 3-2).

3. Select multiple knowledge workers from the KW list by holding down the Ctrl key and clicking on items in the list.

4. Click OK. A Workgroup Dialog Box appears.

5. Enter the ID and Title of a new workgroup.

6. Click OK. The name of the new workgroup appears in the appropriate Assigned To, Performed By, Assigned By, and/or Task Owner field(s).

**Performed By**

*Entering Performed By*  
To enter Performed By: Type any valid KWS User ID in the Performed By field, or click the small arrow located to the right of the field and select the desired value from the list provided. You may also enter the beginning characters of the User ID into the field to quickly locate a value in the list. For example, entering the value “ka” will automatically place you at the first User ID in the list beginning with “ka.”

Description: The KWS User ID of the user (or Work Group) who will perform the task.
Type: A 20-character text field. The value must be a valid KWS User ID or Work Group. It is a required field.

Default Value: The KWS User ID of the user entering the task.

Usage: The Performed By field enables a user to reassign a task to another user for actual completion, while still maintaining the responsibility for ensuring it is completed. When the Performed By value is different than the Assigned To value, the task will appear in the ToDo Lists of both User IDs. The task will appear in the ToDo List of the User ID contained in the Assigned By field with the transferred symbol next to it.

Whenever the Assigned To value is changed, Performed By is set to the same value as Assigned To. The Performed By field can then be set to a value different than the Assigned To value.

Assigned By

Entering Assigned By

To enter Assigned By: Type any valid KWS User ID in the Assigned By field, or click the small arrow located to the right of the field and select the desired value from the list provided. You may also enter the beginning characters of the User ID into the field to quickly locate a value in the list. For example, entering the value “ka” will automatically place you at the first User ID in the list beginning with “ka.”

Description: The KWS User ID of the user who assigned the task.

Type: A 20-character text field. The value must be a valid KWS User ID (not a Work Group). It is a required field.

Default Value: The KWS User ID of the user entering the task.

Usage: The Assigned By value should contain the User ID of the person within the organization responsible for assigning the task. Typically, this person would be the supervisor of the user specified in the Assigned To field.

Task Owner

Entering Task Owner

To enter Task Owner: Type any valid KWS User ID in the Task Owner field, or click the small arrow located to the right of the field and select the desired value from the list provided. You may also enter the beginning characters of the User ID into the field to quickly locate a value in the list. For example, entering the value “ka” will automatically place you at the first User ID in the list beginning with “ka.”
Description: The KWS User ID of the user who owns the task (i.e., the knowledge worker with administrative rights for managing the task.

Type: A 20-character text field. The value must be a valid KWS User ID (not a Work Group). It is a required field.

Default Value: The KWS User ID of the user entering the task.

Usage: The Task Owner is considered to be the owner of the task and has full security rights for the task. Hence, the Task Owner value should be set to the User ID of the knowledge worker who should have ultimate authority on any modifications made to the task’s definition. In many cases, this value is the same as the Assigned By value.

Status Change

To enter Status Change: Click the small arrow to the right of the field and select the desired value from the list provided.

Description: The User ID within the Work Group assigned a task that has ultimate responsibility for indicating when a task is finished.

Type: A text field selected from a list containing the values All Members, Any Member, and all User IDs of the members of the Work Group to which the task is assigned.

The Status Change field is only active when the Assigned To value is set to a Work Group.

Default Value: Any Member

Usage: When a task is assigned to a Work Group, the final Task Status value is determined by the completion status of each member of the Work Group. As each member of the Work Group completes a task, they set their individual Task Status value. The final Task Status is set by KWS depending on the value of the Status Change field as follows:

- **All Members**: Only when all members of the Work Group have set their individual Task Status values to Finished, KWS sets the final Task Status to Finished.

- **Any Member**: When any member of the Work Group sets their Task Status value to Finished, KWS sets the final Task Status to Finished.

- **User ID**: Only when the specified User ID within the Work Group marks their individual Task Status value to Finished, KWS sets the final Task Status to Finished.
**Status**

*Entering Task Status*

**To enter Status:** Click on the box next to the desired value within the **Status** box. If one box is already checked, clicking on another box will uncheck it and set the new value.

**Description:** An indicator of the progress made towards task completion.

**Type:** A text field selected from the values **Not Started, Started, Finished** or **OBE**.

**Default Value:** Not Started

**Usage:** The task **Status** value should always reflect the current status of the task. The user should set **Status** to one of the following values as the status changes:

- **Not Started**
  - The task has not been started.

- **Started**
  - The task has been started.

- **Finished**
  - The task has been completed.

- **OBE**
  - The task has been overcome by events.

Setting the **Status** to any value other than **Not Started** will automatically cause the current date to be entered into the **Date Started** or **Date Finished** fields as appropriate.

**Cyclic**

*Marking a Task as Cyclic*

**To mark a task cyclic:** Click on the **Cyclic** box to change the value. If the box is already checked, clicking on it will uncheck it and vice versa. If the task has previously been saved with the **Cyclic** box checked, the value cannot be unchecked.

**Description:** Indicates that a task is repeated at regular intervals.

**Type:** An option box field that indicates a task is **Cyclic** when the box is checked and **Not Cyclic** when the box is not checked.

**Default Value:** Unchecked

**Usage:** See Cyclic Tasks, in this section, for more detail.
Cycle Type

To enter Cycle Type: Click on the box next to the desired value within the Cyclic area. If one box is already checked, clicking on another box will uncheck it and set the new value.

Description: An indicator of how often a cyclic task occurs.

Type: A checkbox field selected from the values Weekly, Monthly, Quarterly, and Yearly.

Default Value: Weekly

Usage: The value assigned to this field indicates to KWS how often the task should be repeated in the database. For example, if a cyclic task is assigned a Cycle Type of Weekly, then KWS will create an instance of the task that is due every week. This field is tied directly with the Last Cycle field, which indicates to KWS the last date to create an instance of the task.

This field is active only if the Cyclic option box is checked.

Last Cycle

To enter Last Cycle: Increment or decrement the value using the arrow box to the right of the Last Cycle field. KWS increments the date based on the due date and the number of days in the selected cycle.

Description: The due date of the last instance of a cyclic task.

Type: A date field of the format DDMMYY, where DD is the 2-character number for the day of the month, MMM is the first three letters of the name of the month and YY is the 2-character number for the year. For example, August 3, 1999 is entered as 03aug99.

Default Value: None

Usage: Assigning a value to this field indicates to KWS that the task should be repeated in the database until the date specified. For example, if a weekly task with a Date Due value of 05jan99 is assigned a Last Cycle Date of 19jan99, three instances of the task would be added to the KWS database with due dates of 05jan99, 12jan99, and 19jan99. You must enter a Last Cycle value or the task will not be projected.

This field is active only if the Cyclic option box is checked.
## Priority

<table>
<thead>
<tr>
<th>Enter Priority</th>
<th>To enter Priority: Click on the box next to the desired value within the Priority area. If one box is already checked, clicking on another box will uncheck it and set the new value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Indicates the importance of the task.</td>
</tr>
<tr>
<td>Type:</td>
<td>A text field selected from the values Normal, High, or Critical.</td>
</tr>
<tr>
<td>Default Value</td>
<td>Normal</td>
</tr>
<tr>
<td>Usage:</td>
<td>The color of a task in the ToDo List is determined by the value of the Priority field. Critical tasks are displayed in blue, and high priority and normal tasks are in black. Assigning a value to this field quickly indicates which task(s) to work on first.</td>
</tr>
</tbody>
</table>

### Changing the priority of a task and all of its descendants

If the priority of a task is changed, the user is given the option of changing the priority of all descendants of the task.

### To change the priority of a task and all of its descendants:

1. Modify the priority of the task in the Task Dialog box. Click OK. After clicking OK, if the task has subtasks you will be asked whether you wish to modify the priority of the subtasks.
2. Select Yes to change all descendants of the task to the new priority.
3. Select No to retain the current priority for all descendants of the task.

## Task Dialog Box Security Button

The Security... button on the Task Dialog Box is used to access the dialog box for assigning user access rights for modifying task data field values. Clicking the Security... button displays the Task Security Dialog Box (Figure 3-3).
Figure 3-3: Task Security Dialog Box

The following values may be assigned by Knowledge Worker and Work Group within the Task Security Dialog Box.

**Org**

*Selecting an Organization*

To select the **Org**: Click on the desired Organization in the drop down list provided in the **Org** box.

**Description**: The Organization of the User ID or Work Group being assigned security rights for a task.

**Type**: A 20-character text field containing a valid KWS Organization.

**Default Value**: Current organization.

**Usage**: Access rights are assigned by first selecting an organization and then selecting the User IDs and Work Groups in the selected organization. This options allows you to grant permissions to workers in other organizations.

**KW/Group**

*Selecting KW/Group*

To select the **KW/Group**: Click on the desired User ID or Work Group in the list provided in the **KW/Group** box.
**Description:** The User ID or Work Group being assigned security rights for a task.

**Type:** A 20-character text field containing a valid KWS User ID or Work Group.

**Default Value:** PUBLIC

PUBLIC is a KWS generated Work Group that contains all KWS users within your organization.

**Usage:** Access rights are assigned by selecting from the list of User IDs and Work Groups. The currently assigned rights for the selected user are displayed in the fields to the right of the **KW/Group** box.

### Delete

**Assigning Task Delete Permission**

**To assign task delete permission:** Click on the box next to the **Delete** field. If the box is already checked, clicking on it will uncheck it and vice versa.

**Description:** Indicates whether a user has permission to delete the task.

**Type:** An option-box field that indicates a user has delete rights when the box is checked and does not have delete rights when the box is not checked.

**Default Value:** Checked for the task owner’s User ID and unchecked for all other users.

**Usage:** Enables a user to delete a task from the KWS database. Only the task owner can assign delete permission on a task. This option safeguards against the erroneous deletion of tasks from the KWS database.

### Update

**Assigning Task Update Permission**

**To assign task update permission:**

1. Click on the box next to the **Update** field. If the box is already checked, clicking on it will uncheck it and vice versa.

2. Set the scope of the update permission by clicking on the box next to the specific permissions available in the area below the **Update** box (Assignment, Due Date/Duration, Status, All Other Attributes).

**Description:** Indicates whether a user has permission to modify the Task Data field values.
Type: An option-box field that indicates a user has update rights when the box is checked and does not have update rights when the box is not checked.

Default Value: Update rights for Status field

Usage: Users with update permission can be assigned specific permissions for each data field they may update. When the Update checkbox is checked, one or more of the following Update Permissions may be assigned:

- **Assignment**: The user may change the Assigned To and Performed By fields of the task.
- **Due Date/Duration**: The user may modify the Date Due and Duration of the task.
- **Status**: The user may modify the Task Status.
- **All Other Attributes**: The user may modify all the other attributes of the task.

**Task Dialog Box Status Button**

Use the Status... button on the Task Dialog Box to obtain the individual user status of a task assigned to a Work Group. Clicking the Status... button displays the Task Group Status Window (Figure 3-4), which displays the individual Task Status values for each member of the Work Group.
Figure 3-4: Task Group Status Window

The **Status...** button is only available when the value in the **Assigned To** field is a Work Group.

**Task Group Status**

**Description:** Provides a list of User IDs within the Work Group and their individual task status values.

**Type:** List of valid Work Group members and associated **Task Status** values.

**Default Value:** None

**Usage:** The **Task Group Status** List enables you to determine the overall status of a task by displaying the status of the individual members of the group.

**Task Dialog Box Description Button**

The **Description...** button on the Task Dialog Box is used to access a textual description of a task. Clicking the **Description...** button displays the Task Description Dialog Box (Figure 3-5), which contains the **Task Description** data field.
Task Description

Entering the Task Description

To enter a task description:

1. Click the Description... button on the Task Dialog Box. The Task Description dialog box will appear.

2. Enter text into the Task Description field.

3. Click OK.

Description: A textual description of a task.

Type: A 32,000-character text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

Default Value: Blank

Usage: Enables the task owner to enter or modify a textual description that provides more detail about the task. Users with Update, All Other Attributes permission may also modify the Task Description. Other users may only view the Task Description.

KWS-Generated Data Fields

When a user defines a task, KWS generates some additional data field values. With the exception of Org ID, these values do not appear in the Task Dialog Box but do appear in the task listings within the ToDo, Task, and Task Manager Windows.
Org ID

**Description:** Indicates the user’s organization.

**Type:** 20-character text field assigned by the KWS administrator.

**Default Value:** The organization of the user inserting the task.

**Usage:** KWS allows more than one organization to share a database. The KWS System Administrator assigns an Org ID to every User ID. Only those tasks assigned to the user’s Org ID will be displayed within the Task Manager.

Task Type

**Description:** Indicates whether a task is part of the organization’s task hierarchy or is a user’s personal task.

**Type:** A text field containing the value Private or Public.

**Default Value:** Public if the task is inserted in a Task Manager, Graphical Task Manager, or Task Window; Private if entered in a ToDo Window.

**Usage:** Public tasks are official activities performed by an organization. Private tasks are activities that are not official and, therefore, not necessary to include in the organization’s process model. Most tasks within KWS should be public.

Level

**Description:** Indicates the position of a task within the task hierarchy.

**Type:** Integer

**Default Value:** Not applicable

**Usage:** The value in the Level data field provides the user with an indication of where a task occurs in the organization’s process model. A top-level task (or process) is assigned Level 1, children of a process are assigned Level 2, and so on.

Attachments

**Description:** Indicates the number of attachments associated with a task.

**Type:** Integer

**Default Value:** None
Usage: This value quickly indicates how many attachments are associated with a task without having to open the Attachment Window. When the value of the Attachments data field is greater than zero, then an attachment icon will appear in the Indicator Column on the right-hand side of the ToDo List, Task, Task Manager, Steps, Attachments, Do Its, Appointment, and Milestone windows.

Do Its

Description: Indicates the number of Do Its associated with a task.

Type: Integer

Default Value: None

Usage: This value quickly indicates how many Do Its are associated with a task without having to open the Do Its Window. When the value of the Do Its data field is greater than zero, then a Do It icon will appear in the Indicator Column on the right-hand side of the ToDo List, Task, Task Manager, Steps, Attachments, Do Its, Appointment, and Milestone Windows.

Task Number

Description: A unique number assigned to each task within the KWS database.

Type: Integer

Default Value: None

Usage: The Task Number is assigned sequentially by KWS when a task is inserted into the database. This value is used primarily by the KWS System Scheduler to differentiate between items that may have the same Title or ID value. Typically, the Task Number has no significance for the user but may be useful for the System Administrator should task record corruption occur within the database.

Late Start Date

Description: The latest date on which a task can be started to complete the task by the scheduled due date.

Type: A date field entered using the format DDMMMYY, where DD is the 2-character number for the day of the month, MMM is the first three letters of the name of the month, and YY is the 2-character number for the year. For example, August 3, 1999 is entered as 03aug99.
Default Value: Not applicable

Usage: The KWS Scheduler computes this date by subtracting the number of days entered in the Duration field from the date listed in the Date Due field. In the calculations, KWS excludes Saturdays and Sundays and rounds any hours up to 1 day. If a task's status is not set to Started by the end of the Late Start Date, then it is considered “In Danger of Becoming Late.”

THE TASK WINDOW

The Task Window (Figure 3-6) displays a list of tasks. The contents of the Task Window depend on the method used to open the window. When you request to view child tasks by double-clicking on a task in your ToDo List or another Task Window (or by clicking on the task icon in the Indicator Column), the Task Window contains a list of the selected task’s child tasks.

When you execute a task query from the Query/ Tasks menu option, the Task Window contains a list of the tasks matching the selected query.

The functionality of the Task Window is exactly the same as the ToDo Window. They differ in that the Task Window contains more than just the tasks assigned to you. See Chapter 2, The ToDo List, for details on using the Task Window.

Figure 3-6: Task Window

THE TASK MANAGER

The Task Manager displays the public tasks defined for an organization within a Multiple document Interface (MDI) Window (Figure 3-7). The split-screen MDI Window allows you to view two levels of the task hierarchy simultaneously. Using this option, you can access all the levels of the task hierarchy without opening multiple Task Windows. The task information contained in each of the levels within the Task Manager Window is the same as that displayed in the Task Window and the ToDo Window. See The ToDo Window for detail on the task information displayed.
Manipulating Tasks

Tasks can be manipulated within the Task Manager, Graphical Task Manager, ToDo, and Task Windows. Both the Task Manager and Graphical Task Manager are used when building or modifying the organization’s process model. The ToDo Window is used by individual knowledge workers for executing their tasks. Tasks within the ToDo Window may be decomposed through the Task Window. See Adding Public Tasks From the ToDo List for more detail.

The following sections describe how to manipulate tasks within the Task Manager. Detail on manipulating tasks within the Graphical Task Manager may be found in the section describing the Graphical Task Manager. Further detail on manipulating tasks within the ToDo Window may be found in Chapter 2, The ToDo List.

Opening the Task Manager

To open the Task Manager:

1. Click on the Task option in the KWS Menu Bar.

2. Select Task Manager from the list of options. The Task Manager Window will be displayed with your organization’s processes in the top level.

Viewing the Task Tree in the Task Manager

To view the task tree in the Task Manager:

![Task Manager Window](image-url)
View the children of any task in the Task Manager by double-clicking on the task or clicking the task icon in the Indicator Column. The child tasks will be displayed in the lower workspace. You may continue moving down the hierarchy by clicking on a task to display its child tasks. You can move between the different levels of the Task Manager by clicking the browser arrow buttons located on the leftmost edge of the windows. If the browser arrow is gray, then the next level has no items.

- **Task Window Sort Options**

  A set of sort options is available in the Options dialog box of all task windows. Task windows can be sorted by Date Due or Late Start Date (chronological or reverse), alphabetically by Title, or by order of creation.

  To set sort options for a task window:

  1. Select Sort... from the options menu on the Window menu.
  2. The Task Sort Options dialog box appears. Select a sort option from the Sort Order group box.
  3. To retain the selected sort option as the default for new task windows, check the Save Options as Default checkbox.
  4. Click OK.

- **Accessing Child Tasks, Steps, Attachments, and Do Its**

  To access child tasks, steps, attachments, and Do Its:

  Click on the left mouse button the desired resource icon in the Indicator Column of the Task Manager Window.

  or...

  Select the desired task and click the appropriate button from the Task Manager Window Button Bar.

  With either method, the window for the desired resource will be displayed.

- **Accessing Sibling and Parent Tasks**

  To access sibling or parent tasks:

  1. Select the task for which you want to view the sibling or parent task.
  2. Click the right mouse button to open the Available Options Menu.
  3. Select the desired option, Siblings or Parent, from the menu. A task window will be displayed that contains the related tasks.

- **Inserting Public Tasks**

  Public tasks are a part of the organization's KWS process model. Any task inserted within the Task Manager is a public task.
To add a public task from the Task Manager:

1. Move to the location in the task tree where you want to add the task.

2. Click the **Insert** button from the Task Window Button Bar to open the Task Dialog Box.

3. Enter the information for the task and click **OK**.

**Modifying Tasks**

A user may change task information for the tasks in the Task Manager. However, the information that can be changed depends on the task permissions assigned to the user.

To modify a task from the Task Manager:

1. Select the desired task and click the **Modify** button from the Task Manager Window Button Bar. The Task Dialog Box for the task will appear.

2. Make the desired changes in the Task Dialog Box and click the **OK** button.

**Deleting Tasks**

You may delete a task in the Task Manager only if you have been given delete permission for the task.

To delete a task from the Task Manager:

1. Select the task to be deleted.

2. Click on the **Delete** button from the Task Manager Window Button Bar. The Delete? Dialog Box will appear.

3. Click **Yes** to delete the task or **No** to cancel.

   **Remember that deleting a task deletes all its children, attachments, steps, and Do Its. Use this command with caution.**

**Moving and Copying Tasks**

Tasks can be copied or moved to new locations within the task hierarchy. When a task is moved, all its child tasks, attachments, and Do Its are moved along with it.

When a task is copied, all its child tasks are copied and links are made between the copied tasks to the original task’s attachments and Do Its. It is important to remember that the attachments and Do Its are not copied. They are the same attachments and Do Its as those linked to the original task structure; any changes made to them from either task structure will be reflected in the other.
Tasks can be copied or moved between any of the task windows: Task, Task Manager, and ToDo. To copy or move tasks between Task Managers, it is necessary to open two Task Manager Windows.

Tip: Use Window/Tile to facilitate copying or moving.

To copy or move a task:

1. In the Task Manager Window, go to the location in the task hierarchy to which you want to move or copy the task.

2. Open a second Task Manager Window and select the task to be copied or moved.

3. Hold down the left mouse button and drag the selected task to the desired location in the other Task Manager.

4. Release the mouse button. The Confirm Move or Copy Dialog Box will appear.

5. Select Move or Copy as desired.

 Tasks Spanning Organizations

There may be projects that include workers from multiple organizations. KWS allows a task or milestone to be assigned to users or workgroups from multiple organizations.

To set the Assigned To, Performed By, Assigned By, or Task Owner fields to a user or workgroup from a different organization:

1. Select the ... button to the right of the field. The Select KW or Group window will appear.

2. Select a different organization from the list by clicking the small arrow to the right of the Organization field.

3. To choose a User ID, select from the KWs list. To choose a workgroup, select from the Groups list.

4. Click OK.

 Converting a Private Task to a Public Task

Private tasks can be made a part of your organization's public task hierarchy by copying the task from your ToDo List to the desired location in the Task Manager.
To convert a private task to a public task:

1. In the Task Manager Window, go to the location in the task hierarchy where you want to include the private task.

2. In your ToDo List, select the private task that you want to convert to a public task.

3. Hold down the left mouse button and drag the selected task to the desired location in the Task Manager Window.

4. Release the mouse button. The Confirm Move or Copy Dialog Box will appear.

5. Select Move.

Converting a Public Task to a Private Task

Public tasks can be made a part of your personal task hierarchy by copying the task from the Task Manager to your ToDo List. However, the location you select in your ToDo hierarchy cannot be at the top level, it must be at Level 2 or greater.

To convert a public task to a private task:

1. In your ToDo Window, go to the location in the task hierarchy where you want to include the public task.

2. In the Task Manager, select the public task that you want to convert to a private task. Do not select a Level 1 task (process level).

3. Hold down the left mouse button and drag the selected task to the desired location in the ToDo Window.

4. Release the mouse button. The Confirm Move or Copy Dialog Box will appear.

5. Select Move.

Changing Task Status

Two methods change Task Status from the Task Manager Window. The quickest method uses the Status Symbol Menu. The other uses the Task Dialog Box.

Task Status should normally be updated within the ToDo List as the task is being executed. It should only be changed within the Task Manager as required for database maintenance.
To change Task Status using the Status Symbol Menu:

1. Select the desired task and place the cursor over the Status Symbol Column on the left side of the Task Manager.

2. Click the left mouse button once, and the Status Symbol Menu will be displayed with the options Not Started, Started, Finished, or OBE.

3. While holding the mouse button down, move the cursor over the appropriate status option and release the mouse.

To change Task Status using the Task Dialog Box:

1. Select the desired task and click the Modify button from the Task Manager Window Button Bar. The Task Dialog Box for the task will be displayed.

2. Mark the appropriate status option in the Status area of the dialog box, and then click OK.

Assigning Task Permissions

If you are the task owner, you can assign permissions to other users to allow them to perform actions on tasks you have inserted into the KWS database.

To assign Task Security:

1. If the Task Dialog Box is not already open, select the task for which you want to assign permissions.

2. Click the Security button on the Task Dialog Box. The Task Security Window will open (Figure 3-8).
### Task Security

#### User/Group: PUBLIC

<table>
<thead>
<tr>
<th>Assigned Permissions</th>
<th>Permission To Update:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete</td>
<td>Assignment</td>
</tr>
<tr>
<td>Update</td>
<td>Status</td>
</tr>
<tr>
<td></td>
<td>All Other Attributes</td>
</tr>
<tr>
<td></td>
<td>DateDue/Duration</td>
</tr>
<tr>
<td></td>
<td>Steps</td>
</tr>
</tbody>
</table>

- **Save as my default PUBLIC permissions for new task**

#### Organization:
- Children inherit permissions

#### Permissions To Update:
- **Delete**
- **Update**
- **Assignment**
- **Status**
- **All Other Attributes**
- **DateDue/Duration**
- **Steps**

---

**Figure 3-8: Task Security Dialog Box**

1. Select the Organization by clicking the small arrow to the right of the **Org** field.
2. Select the User ID or Work Group for which you want to assign permissions.
3. Select the desired permissions by clicking the appropriate checkbox.
4. For each additional user for whom you want to assign permissions, repeat steps 3 and 4.
5. Click **OK** to save.

---

**Default Public Task Security Settings**

The default Public Security Settings for new tasks can be set from within the Task Security dialog box. All new tasks will have the specified default Security Settings.

**To set the default Public Task Security Settings:**

1. Select a task in a Task Window and click **Modify** on the button bar. The **Task** dialog box appears.
2. Click on the **Security...** button. The **Task Security** dialog box appears.
3. Select **PUBLIC** in the **User/Group** listbox.
4. Set the desired public permissions for the task.

5. Check the checkbox titled Use as default PUBLIC permissions for new tasks.

6. Click OK.

Once you change the default public task security setting, any new tasks you create will have the specified public Security Settings.

* Modifying the Percent Complete Value of a Task using the Status Symbol Menu

Change the Percent Complete value for a task by selecting Percent Complete from the Status Symbol Menu for the task. This action displays a dialog box, which contains a slider bar that can be used to set the Percent Complete value.

To modify the Percent Complete value of a task using the Status Symbol Menu:

1. In any task window, position the mouse pointer within the left margin next to a task and click the left mouse button. The Status Symbol Menu appears.

2. Select Percent Complete. The Percent Complete Dialog Box appears, including a slider bar that indicates the current Percent Complete value for the task.

3. Click the slider button and drag it left or right to the desired Percent Complete value.

4. Click OK.

CYCLIC TASKS

Tasks that need to be performed at regular intervals are referred to as “cyclic” tasks in KWS. Cyclic tasks occur at regular cycles throughout a specified time period. For example, the task Conduct Weekly Project Meeting occurs every week until the project is complete. Instead of inserting the same task multiple times, KWS allows you to designate a task as Cyclic; multiple instances of the task will then be created automatically. All children, steps, attachments, and Do Its associated with a cyclic task are also associated with each occurrence of that task.

Template

A Task Template is generated when a cyclic task is created. This Template is used by KWS to create instances of the task. The Template appears in the Task Manager as TEMPLATE: <Task Name>. It appears in the Graphical
Task Manager as a task with a lighter bar color than other tasks. In both cases, the user can set options to display or not display Templates in the window. See Font and Data Display Preferences for more details on this option.

If a cyclic task is defined with an empty value in the Last Cycle field, only the Template is created. This fact allows you to define the task structure, including child tasks, attachments, Do Its, and steps before creating any of the cycles. When the task structure is complete, the instances of the cyclic task are created by entering a Last Cycle value for the Template.

**Cycle Types**

KWS allows users to define cyclic tasks that occur Weekly, Monthly, Quarterly, and Yearly.

**Weekly**

Instances of weekly tasks are assigned Date Due values that occur on the same day of the week as the Date Due value specified in the Template. For example, instances of a weekly task with Date Due of (Wednesday) 03feb99 will occur on Wednesdays.

**Monthly**

Monthly tasks are assigned Date Due values that occur on the same date of the month as the Date Due value specified in the Template. For example, instances of a monthly task with Date Due of 30dec99 will occur on the 30th of each month. If the month does not have a day with the date, as is the case with February, then KWS assigns the latest available date in the month, e.g., February 28th.

**Quarterly**

Quarterly tasks occur every 3 months. They are assigned Date Due values that occur on the same date of the third month as the Date Due value specified in the Template. For example, instances of a quarterly task with Date Due of 30mar99 will occur on the 30th of every third month, e.g., 30jun99. If the month does not have a day with the date, then the latest available date in the month is assigned.
Yearly tasks occur once every year. They are assigned Date Due values that occur on the same date of the year as the Date Due value specified in the Template. For example, instances of a yearly task with a Date Due of 31dec99 will occur on December 31st, e.g., 31dec99. If the month does not have a day with the date, then the last available date in the month is used.

Manipulating Cyclic Tasks

- Inserting Cyclic Tasks

The number of instances of a cyclic task created depends on the Date Due, Cycle Type, and Last Cycle Date values specified in the Task Dialog Box. The Date Due indicates the date that the first occurrence of the task is due and is used to determine the Date Due for all subsequent instances of the task. The Cycle Length indicates how often the task will occur: Weekly, Monthly, Quarterly, or Yearly. The Last Cycle Date indicates the date the last occurrence of the task is due. For instance, if you define a task as Cyclic, Weekly with a Date Due value of 05mar99 and a Last Cycle date value of 26mar99, four occurrences of the task will be created. The first occurrence will have a Date Due value of 05mar99 and the last occurrence will have a Date Due value of 26mar99.

Cyclic tasks may be inserted from the same locations as any other KWS task.

To insert a cyclic task:

1. Open a Task Dialog Box by clicking the Insert button.
2. In the Date Due field, enter the due date of the first occurrence of the cyclic task.
3. Click the Cyclic box. A check will appear in the box, and the Cyclic Options fields will become available.
4. Select the desired Cycle Type: Weekly, Monthly, Quarterly, or Yearly.
5. In the Last Cycle field, enter the date of the last occurrence of the cyclic task.
6. Enter all other Task data field values as appropriate, then click OK.
Modifying Cyclic Tasks  Both the Template and individual instances of cyclic tasks can be modified. Changes made to the Template will affect all unfinished instances of the cyclic task. Changes made to an individual instance will only affect that instance. Possible modifications to cyclic tasks include extending the Last Cycle Date, terminating unfinished instances, and changing the Cycle Type. In addition, modifications to the task structure can be made by adding or subtracting child tasks, attachments, Do Its, and steps.

Cyclic tasks cannot be changed to noncyclic.

To extend a cyclic task:

1. Select the Template for the cyclic task to be extended.

2. Open the Task Dialog Box by clicking the Modify button in the Task Button Bar options.

3. In the Last Cycle field, enter the new date of the last occurrence of the cyclic task.

4. Click OK.

To terminate unfinished instances of a cyclic task:

1. Select the Template for the cyclic task to be terminated.

2. Open the Task Dialog Box by clicking the Modify button in the Task Button Bar options.

3. In the Last Cycle field, enter the date of the last finished instance of the cyclic task.

4. Click OK.

5. A message will ask if you are sure you want to delete all of the tasks due after the date entered. Click Yes.

To modify an individual instance of a cyclic task:

1. Locate the individual instance of the cyclic task to be modified.

2. Modify the task structure as desired. All changes will be reflected only in the individual instance.
To modify the task structure for all unfinished instances of a cyclic task:

1. Locate the Template for the cyclic task to be modified.
2. Delete unfinished instances of the task.
3. Modify the task structure as desired.
4. Extend the cyclic task to the desired date.

To change the Cycle Type of a cyclic task:

1. Select the Template for the cyclic task to be changed.
2. Open the Task Dialog Box by clicking the Modify button in the Task Button Bar options.
3. Change the Cycle Type to the desired value.
4. Click OK.

If you change the Cycle Type of a cyclic task, the change will only affect future projections of the cyclic task. Existing instances of the cycle will remain unchanged. To remove unfinished instances of the previous cycle type, follow the procedure for terminating unfinished instances and then extend the cyclic task to create instances with the new Cycle Type.

 Deleting Cyclic Tasks

When deleting cyclic tasks, the Delete Cyclic Task? Dialog Box is displayed with the following options:

**Delete All Cycles**

Deletes all instances (finished and unfinished) of a cyclic task. The Template is not deleted.

**Delete Just This Cycle**

Deletes only the selected instance of a cyclic task whether finished or unfinished.

**Delete Unfinished Cycles**

Deletes all unfinished instances of a cyclic task.

**Delete This Cycle and Later Cycles**

Deletes the selected instance of a cyclic task and all later instances.

To delete all instances of a cyclic task:

1. Select the Template for the cyclic task to be deleted or any instance of the cyclic task.
2. Click the Delete button in the Task Button Bar options.

3. The Delete? Dialog Box will be displayed. Click Yes.

4. The Delete Cyclic Task? Window will then appear. From the options available, select Delete All Cycles.

5. Click OK.

To delete one instance of a cyclic task:

1. Select the instance of the cyclic task to be deleted.

2. Click the Delete button in the Task Button Bar options. The Delete? Dialog Box will be displayed.

3. Click Yes.

4. The Delete Cyclic Task? Window will then be displayed. From the options available, select Delete Just This Cycle.

5. Click OK.

To delete all unfinished instances of a cyclic task:

1. Select the Template for the cyclic task to be deleted or any instance of the cyclic task.

2. Click the Delete button in the Task Button Bar options.

3. The Delete? Dialog Box will be displayed. Click Yes.

4. The Delete Cyclic Task? Window will then be displayed. From the options available, select Delete Unfinished Cycles.

5. Click OK.

To delete all instances of a cyclic task due after a specific date:

1. Select the earliest instance of the cyclic task to be deleted.

2. Click the Delete button in the Task Button Bar options.

3. The Delete? Dialog Box will be displayed. Click Yes.

4. The Delete Cyclic Task? Window will then be displayed. From the options available, select Delete This Cycle and Later Cycles.

5. Click OK.
To delete all instances and the template of a cyclic task:

1. Select the template for the cyclic task to be deleted or any instance of the cyclic task.

2. Click the Delete button in the Task Button Bar options.

3. The Delete? Dialog Box will be displayed. Click Yes.

4. The Delete Cyclic Task? Window will then be displayed. From the options available, select Delete All Cycles.

5. Click OK. All instances of the cyclic task will be deleted, but the template will remain.

6. Select the template for the cyclic task to be deleted.

7. Click the Delete button in the Task Button Bar options.

8. The Delete? Dialog Box will be displayed. Click Yes.

9. The Delete Cyclic Task? Window will then be displayed. From the options available, select Delete Just This Cycle.

10. Click OK.

PREDECESSOR AND SUCCESSOR RELATIONSHIPS

A task that must be completed before starting another is called a predecessor. Conversely, a task that must be performed after another task is called a successor.

Certain rules are enforced whenever a task is designated as a predecessor or successor. These rules are:

- The status of a successor task cannot be set to Started or Finished until the predecessor task has been marked Finished or OBE. If you violate this rule, KWS displays a message stating that the task cannot be started until the predecessor has been completed. If a task is currently waiting for a predecessor to be completed, a W will appear in the status column of the task.

- The Start Date of a successor task must be greater than or equal to the Date Due of the predecessor task. If you violate this rule, KWS reschedules the Start Date of the successor to equal the Date Due of the
predecessor. If a task is a predecessor of a milestone, KWS reschedules the Date Due of the predecessor to equal the Start Date of the milestone.

Predecessor and successor links should typically be made between sibling tasks. If you need to do otherwise, you should probably rethink the way you have decomposed your tasks. The step-by-step nature of predecessor and successor links usually infers the sibling relationship. For example, the Acquire Funds task (see Figure 3-9) has five child tasks - Write Proposal, Write Cover Letter, Review Proposal, Acquire Signature, and Submit. The tasks Write Proposal and Write Cover Letter must be completed before Review Proposal, so they have been designated as predecessors of Review Proposal. Review Proposal must be completed before Acquire Signature and Submit and has been designated as a predecessor of the two tasks. Upon completion of the final two sibling tasks, the parent task will also be completed. This example illustrates how a good task decomposition has related child tasks whose completion will result in the completion of the parent task.

![Graphical Task Manager](image)

Figure 3-9: Task Structure With Predecessor/Successor Relationships

Creating Predecessor and Successor Relationships

The following method describes how to designate predecessor and successor relationships within task windows. Predecessor and successor relationships can be created by designating one task a successor of another or by designating one task a predecessor of another. Which method you use is a matter of personal preference. Once a task is designated as a predecessor (or successor) of a second task, the second task automatically becomes the successor (or predecessor) of the first task.
To designate a predecessor task:

1. Select the task with which you want to create a predecessor relationship.

2. Click the **Pred** button. A Predecessor Window will be displayed. If no predecessors of the selected task currently exist, this window will be empty.

3. Locate and select the task you would like to designate as the predecessor. Drag the selected task to the Predecessor Window by holding down the left mouse button and releasing it within the Predecessor Window. A message window will ask whether you want to Move or Copy the task.

4. Select **Copy**. The task should now be displayed in the Predecessor Window.

To designate a successor task:

1. Select the task with which you want to create a successor relationship.

2. Click the **Succ** button. A Successor Window will be displayed. If no Successors of the selected task currently exist, this window will be empty.

3. Locate and select the task you would like to designate as the successor. Drag the selected task to the Successor Window by holding the right mouse button down and releasing it within the Successor Window. A message window will be displayed asking whether you want to Move or Copy the task.

4. Select **Copy**. The task should now be displayed in the Successor Window.

Defining predecessor/successor relationships within Task Windows can be confusing because multiple windows must be opened. We recommend you define predecessor/successor relationships in the Graphical Task Manager. See the Creating Predecessor and Successor Links in the GTM section in Chapter 3, Tasks and Steps, for more detail on this option.

---

**Viewing Predecessor and Successor Relationships**

In the Task Manager, there is no way to immediately determine from the task list if a task has a predecessor or successor. Therefore, it is necessary to open the task’s Predecessor and Successor Windows to determine if it contains any such tasks.
To view a predecessor or successor task:

1. Select the task for which you want to view the predecessor or successor.
2. Click the Pred or Succ button in the Task Button Bar options.
3. A Predecessor or Successor Window will appear. If no predecessors or successors of the selected task currently exist, this window will be empty.

While you delete a task from the predecessor or successor list, it is not deleted from the task hierarchy; only the predecessor or successor relationship is deleted.

To delete a predecessor (or successor) task:

1. Select the task whose predecessor (or successor) you wish to delete.
2. Click the Pred (or Succ) button in the Task Button Bar options. A Predecessor (or Successor) Window will be displayed.
3. Select the item from the predecessor (or successor) list to be deleted and click the Delete button in the Task Button Bar options. A dialog box will ask you to confirm the deletion.
4. Click Yes.

**MILESTONES**

A milestone is a zero duration task with a set due date. Whereas a task represents an activity that starts, finishes, and consumes resources, a milestone represents completion of a task or a set of tasks. The task KWS Ver 3.5 is an example of a milestone. This task has a set due date and on its own has no duration. Instead, another task would be defined to accomplish this milestone such as Develop Ver 3.5 Intermediate Deliverables (Figure 3-10). The use of milestones within KWS is optional. They are useful when you want to assign a task without having to specify a start date and duration. The user assigned the milestone would then be responsible for defining the task structure required to complete the milestone by the set date.
Milestones are displayed in both the Task Manager and Graphical Task Manager Windows. The same actions that you can perform on tasks such as copying, deleting, and creating predecessor and successor relationships can be performed on milestones.

**Viewing Milestones**

To view Milestones:

1. Select **Task** from the KWS Menu Bar.

2. Select **Milestones** from the **Task** Menu. The Milestones Window showing the milestones defined for your organization will be displayed (Figure 3-11).

![Figure 3-11: Milestones Window](image)

**Inserting a Milestone**

To insert a Milestone:

1. Select **Task** from the KWS Menu Bar.

2. Select **Milestones** from the **Task** Menu. The Milestones Window for your organization will be displayed.

3. Click **Insert**. The Task Dialog Box will be displayed with the **Milestone** check box already marked (Figure 3-12).
**THE GRAPHICAL TASK MANAGER**

The Graphical Task Manager (GTM) enables the user to view tasks in a graphical format. The graphical view is presented in a combined hierarchical tree and Gantt chart format (Figure 3-13). Depending on your personal preference, the graphical display may make it easier to understand the “nesting” of tasks and their relationships to each other. It is also easier to perform some task manipulations in the graphical view, e.g., assigning predecessor and successor relationships. The Task Manager presents the same information in text form.

---

4. Enter the information required to define the milestone.

5. Click OK.
In the GTM, you may view all your organization’s public tasks, via the Graphic Task Manager option in the Task Menu.

To view all public tasks in the Graphical Task Manager:

1. Select the Task Menu from the KWS Menu Bar.
2. Select the Graphical Task Manager option from the Task Menu.

A specific task listed within the Task Manager, a Task Window or the ToDo List can be viewed graphically via the Graph option in the Available Options Menu.

To view a specific task in the Graphical Task Manager:

1. Select the desired task from your task list.
2. Open the Available Options Menu by clicking the right mouse button.
3. Select the Graph option from the Available Options Menu.

You may view the items in your ToDo List graphically via the ToDo Graph (TDG) option or the ToDo Context Graph (TDCG) option. These options open a Graphical Task Manager containing all of your ToDo items. The ToDo Context Graph shows the entire task hierarchy for processes that include your ToDo items. The items in your ToDo List are displayed in bold typeface.
To open the ToDo Graph (TDG):

1. Select the **ToDo** Menu from the KWS Menu Bar.
2. Select the **ToDo Graph** option from the **ToDo** Menu.

To open the ToDo Context Graph (TDCG):

3. Select the **ToDo** Menu from the KWS Menu Bar.
4. Select the **ToDo Context Graph** option from the **ToDo** Menu.

The purpose of the ToDo Context Graph is to enable you to see how your ToDo items fit within your organization. If your organization’s process hierarchy contains many tasks and your ToDo items span several processes, the TDCG may be difficult to interpret. In this case, it may be better to use the ToDo Graph, which does not show the context of each ToDo item.

Using the Graphical Task Manager

The GTM Window (Figure 3-13) is split into two parts by a separator bar: The task tree on the left and a Gantt chart on the right. The task tree provides a view of the task hierarchy. The Gantt chart provides a view of the tasks organized by date. A linear timeline at the top of the Gantt chart denotes months and years.

The Task Tree: In the task tree, each task is connected to its children and parents by a line. The task tree view may be expanded and compressed to display all of the tasks in the hierarchy or to display only a portion of the tasks. A plus (+) sign is displayed to the left of a task when the task has children and has not been fully expanded. A minus (−) sign is displayed to the left of a task when the task has been fully expanded.

The Gantt Chart: Each task in the Gantt chart is displayed as a rectangular bar, called the task bar, with attendant data in and around it. The attendant data includes the task **Title**, **Status Symbols**, and **Indicator Icons**. Depending on user-assigned preferences, the **Date Due**, **Start Date**, **Duration**, **Percent Complete** and predecessor/successor links may also be displayed with the task. The tasks are organized horizontally by date (**Start Date** and **Date Due**), with later dates to the right. The tasks are organized vertically by **Start Date**, with earlier tasks at the top. The size of each task is determined by the task’s duration. The result of this organization is that the tasks layer from left to right across the workspace in the order in which they should be performed.

Relationship Between the Task Tree and Gantt Chart: The two sides of the GTM Window are synchronized. When you select a task in the task tree, the same task is selected in the Gantt chart. Similarly, if you expand or
compress a task on either side, the task is expanded or compressed on the other.

❖ Adjusting the Separator Bar

The bar separating the two parts of the graphical view is called the Separator Bar. This bar can be moved to change the size of the task tree and Gantt chart views by dragging it one way or the other.

To adjust the Separator Bar:

1. Place the cursor over the bar. When the bar is selected, the cursor will change into a bar with arrows.

2. Click the left mouse button, and drag the bar to move it.

If you slide the bar to the leftmost side of the window, the task tree disappears and the separator bar is represented by a small bar, which appears to the left of the left scroll arrow at the bottom of the window. To move the bar back to the right, select the small bar and drag it.

❖ Viewing and Hiding Child Tasks

When you open the GTM, the task tree and Gannt chart are compressed and display only the top-level tasks. To view the children of a particular task, you must expand the task. After a task is expanded, the user must compress the task to hide the children of the task.

To expand a task:

In the task tree, double-click on the task title or click the plus sign to the left of the task.

or...

In the Gannt chart, double-click on the task bar.

To compress a task:

In the task tree, double-click on the task title or click the minus sign to the left of the task.

or...

In the Gannt chart, double-click on the task bar.

❖ Moving through the Task Tree and Gannt Chart

You can move horizontally in each window using the scroll bars at the bottom of the task tree and Gannt chart. The two windows are synchronized, so you can move vertically through both windows using the scroll bar at the right of the Gannt chart.
If you need to scroll a long distance through the Gantt chart, compressing the timeline can shorten the scroll time. Also, if you click the mouse anywhere in the Gantt chart outside of a task, the workspace will scroll horizontally to the task located on that line.

**Expanding and Compressing the Timeline**

The timeline at the top of the Gantt chart can be expanded or compressed to control the length of the time period displayed. You can expand the timeline to shorten the timeframe or compress it to lengthen the timeframe.

**To expand the timeline:**

1. Move your mouse over the timeline.
2. Click either mouse button and drag it to the right until the desired time period is displayed.

**To compress the timeline:**

1. Move your mouse over the timeline.
2. Click either mouse button and drag it to the left until the desired time period is displayed.

**Selecting a Task**

When a task is selected, the task bar is highlighted by a bold border and is outlined with a rectangular box. Within the outline, the **Late Start Date** is displayed on the left, the **Date Due** is displayed on the right, and the **Duration** is displayed in the middle. Other information may also be displayed depending on the GTM Window preferences specified. See Setting GTM Display Preferences in this chapter for more detail.

**To select a task:**

Click on the title of the task in the task tree.

or

Click on the task bar in the Gantt chart.

If you are selecting a task in order to edit it, you must select it from the Gantt chart, because tasks cannot be edited from the task tree.

**Changing Percent Complete in the GTM**

In the GTM, you can change the **Percent Complete** value by selecting the task and clicking the **Modify** button to open the Task Dialog Box. In the Task Dialog Box, enter the new value for **Percent Complete**. The GTM provides a simpler method that does not require opening the Task Dialog Box.
To change Percent Complete in the GTM:

1. Move the cursor between the two date fields in the Task Outline box. The cursor will change to a percent sign (%).

2. Click the left mouse button. The **Percent Complete** value will be displayed above the cursor.

3. While holding the left mouse button down, drag the percent cursor. When your desired **Percent Complete** value is displayed, release the mouse button.

If, in the GTM Window preferences, you specified that you wanted Percentage Complete to be displayed, then a red line representing the **Percent Complete** will be displayed over the task bar and will change in size as you drag the % cursor.

---

**Changing Task Status in the GTM**

Task Status is changed in the GTM in the same manner as in the Task Manager, that is, via the Task Dialog Box or the Status Symbol Menu.

**To change task status from the Status Symbol Menu:**

1. Click the right mouse button in the space between the task bar and the outline (to the left of the task bar). The Status Symbol Menu will appear.

2. Select the desired status value from the Status Symbol Menu and release the mouse button.

**To change task status from the Task Dialog Box:**

1. Select the task and click the **Modify** button. The Task Dialog Box will open.

2. In the Task Dialog Box, change the status by clicking the box next to the desired value.

3. Click **OK** to save.

Remember that only the status of a leaf-level task can be changed.

---

**Changing Task Dates in the GTM**

Changes to task dates may be made by either moving the entire task or changing the individual **Start Date** and **Date Due** values.

**To change task dates by moving the task:**

1. Select the task to be moved by clicking on its task bar with the left mouse button.
2. While holding the left mouse button down, drag the task to the desired location. Note that the Start Date and Date Due change as you move the task.

To change individual task dates:

1. Select the date to be changed, either the Start Date or Date Due, by clicking on it with the left mouse button. A red box will surround the selected date.

2. While holding the left mouse button down, drag the date until the desired value is displayed, then release the mouse.

You cannot change the Start Date and Date Due of a parent task directly. Instead, you must change the dates of the children, which will cause the dates to change in the parent. However, you can change both the Start Date and Date Due of a parent task by moving the task; the dates of the task’s children will be changed accordingly.

Setting the duedate of a subtask by dragging its parent task

In some circumstances, a user may wish to position a task in the Graphical Task Manager so that one of its subtasks will fall due on a specific date. When a task structure is dragged in the Graphical Task Manager, the duedates of all descendant tasks are displayed. The user can drag a task until one of its descendant tasks is due on the desired date.

To set the duedate of a subtask by dragging its parent task in the GTM:

1. Select the parent task in the GTM.

2. Expand the parent task until the subtask or descendant task is visible.

3. Click the left mouse button on the parent task and drag the task left or right.

4. The new duedates of the descendant tasks will change as you drag the parent task. Release the left mouse button when the descendant task has the desired duedate.

Inserting a Task in the GTM

A task may be inserted in the GTM as a sibling or child of another task. However, once a task already has a child, additional children are inserted by adding siblings to its child. Tasks are inserted into the GTM via the Task Dialog Box. See Task Definition in Chapter 3, Tasks and Steps, for detail on using the Task Dialog Box.
To insert a sibling task:

1. Select the task for which you want to insert a sibling.
2. Click the **Insert** button. The Task Dialog Box appears.
3. Enter the task information.
4. Click **OK** to save.

To insert a child task:

1. Select the task for which you want to insert a child.
2. Double-click the left mouse button. The Task Dialog Box appears.
3. Enter the task information.
4. Click **OK** to save.

**Modifying a Task in the GTM**

You may change all task data values within the GTM via the Task Dialog Box. See Task Definition in Chapter 3, Tasks and Steps, for detail on using the Task Dialog Box. However, the information that can be changed depends on the task permissions assigned to the user. See Task Security in Chapter 3, Tasks and Steps, for more detail.

To modify a task in the GTM:

1. Select the task to be modified by clicking the left mouse button on its task bar.
2. Click the **Modify** button from the Task Button Bar. The Task Dialog Box will open.
3. Enter your desired modifications into the Task Dialog Box.
4. Click **OK** to save your changes.

**Deleting Tasks in the GTM**

You may delete a task in the GTM only if you have been given delete permission for the task. See Task Security in Chapter 3, Tasks and Steps, for more detail.

To delete a task from the GTM:

1. Select the task to be deleted.
2. Click the **Delete** button from the Task Manager Window Button Bar. The Delete? Dialog Box will be displayed.
3. Click **Yes** to delete the appointment or **No** to cancel.
I Remember that deleting a task deletes all its children, attachments, steps, and Do Its. Use this command with caution.

Ordering Tasks in the GTM

Tasks can be ordered in the **Graphical Task Manager** by dragging the task up or down in the **Task Outline** view. The order in which the subtasks of a task are arranged will be preserved and restored the next time that task is viewed in the GTM.

**To order a set of subtasks in the Graphical Task Manager:**

1. Click the left mouse button on a task in the Task Outline frame of the **Graphical Task Manager** window.
2. While holding down the left mouse button, drag the task up or down. The mouse pointer will change to a horizontal bar.
3. Drag the horizontal bar pointer to the desired new position of the task in the task outline.
4. Release the left mouse button and the selected task will be moved to the new position.

Printing the Graphical Task Manager Window

The contents of the Graphical Task Manager window can be printed by selecting **Print** from the **File** menu. The printout will conform to the page formatting defined for the current user.

**To print the contents of the Graphical Task Manager window:**

1. Open the **Graphical Task Manager** window and scroll the tasks to be printed into view.
2. Adjust the date scale by clicking on the date bar at the top of the window and dragging the cursor left or right.
3. Adjust the size and shape of the window so the portion of the graph to be printed is in view. Note that whatever appears in the window will be stretched to fit the page when printed.
4. Select **Print** from the **File** menu. The **Print** dialog box appears.
5. Click **OK**.

Saving Changes in the GTM

If you have modified a task in the GTM, a red **M** symbol will appear in the left end of the task bar. If you have inserted a task in the GTM, a red **I** symbol will appear in the left end of the task bar. These symbols will remain until the changes are saved to the database.
You may choose to have your changes saved automatically as soon as you make them by setting the **Save After Each Change** to Graph option. See Setting GTM Display Preferences for more detail. The option to not have changes saved automatically facilitates “what if” analysis of your model.

**To save changes in the GTM:**

1. If the GTM is not already the active window, make it active by clicking anywhere on it.

2. Open the *Window* Menu from the KWS Menubar and select *Save Changes*.

   *If the GTM is not the active window, the *Save Changes* option will not be available.*

**Creating Predecessor and Successor Links in the GTM**

**To create a predecessor (or successor) link:**

1. Select the predecessor task.

2. While holding down the mouse button, press the [Shift] key and drag the cursor to the desired successor task.

3. Release the [Shift] key and mouse button. A red arrow will be displayed to represent the link between the two tasks.

**Deleting Predecessor and Successor Links in the GTM**

**To delete a predecessor (or successor) link:**

1. Select the predecessor task of the link to be deleted.

2. While holding down the mouse button, press the [Shift] key and drag the cursor to the successor task.

3. Release the [Shift] key and mouse button. The red arrow that indicated the predecessor/successor link will disappear.

**Workflow Icons in the GTM**

Workflow information can be viewed and manipulated in the GTM. For more information on workflow documents see Chapter 4, Attachments.

**The GTM workflow icons are:**

- **Workflow Link**
- **Workflow Copy**
- **Workflow Link which sends a workflow copy up to the parent task**
To view workflow links in the Graphical Task Manager:

1. In the Graphical Task Manager, select the task for which you want to view the workflow links.
2. Select Attachments from the Available Options Menu.
3. Select Workflow from the Attachments submenu.
4. Select the name of the attachment from the menu. The workflow icons will appear next to the tasks that receive either the original or copies of the workflow document.

To hide the workflow links in the Graphical Task Manager:

1. In the Graphical Task Manager, select the task for which you want to hide the workflow links.
2. Select Attachments from the Available Options Menu.
3. Select Workflow from the Attachments submenu.
4. Select Hide from the Workflow submenu. The workflow icons will be removed for the view.

To link a workflow document in the Graphical Task Manager:

1. Unhide the workflow icons as described in the steps for viewing workflow links.
2. Select the tasks you wish to link.
3. Place the mouse cursor over the workflow icon. When the mouse is over the icon, the icon will have a black box around it.
4. Drag the icon to the next task in the workflow. The workflow link icon will now be added to the destination task.

To copy a workflow document in the Graphical Task Manager:

1. Unhide the workflow icons (as described in the steps for viewing workflow links).
2. Select the tasks you wish to link.
3. Place the mouse cursor over the workflow icon. When the mouse is over the icon, the icon will have a black box around it.
4. Hold the [Shift] key down and drag the icon to the next task in the workflow. The workflow copy icon will now be added to the destination task.

**Removing Workflow Links or Copies in the GTM**

To remove a link or copy of a workflow document in the Graphical Task Manager:

Repeat the steps for creating the link or copy. Dragging the icon to an existing link or copy will toggle on and off the link or copy connection.

**Zoom Capability in Graphical Task Manager Window**

Select the Window|Zoom menu option in the Graphical Task Manager to see a zoomed view of tasks. Alternatively, press Ctrl-Z to toggle the zoomed view on or off.

**Viewing the Workload Graph in the GTM**

You can display a bar graph within the GTM that shows the workload distribution for a knowledge worker.

To view the workload bar graph in the Graphical Task Manager:

In the Graphical Task Manager, drag the window split bar (Figure 3-14) up. The lower section of the Graphical Task Manager window will now show the workload graph for the current knowledge worker.

To view the workload for a different knowledge worker in the Graphical Task Manager:

1. Open the workload view by dragging the split bar up.

2. Click the knowledge worker selection button once with the left mouse button. (The knowledge worker selection button is located in the upper right-hand corner of the workload display and is labeled with the current knowledge worker.)

3. Select the knowledge worker or workgroup from the Select KW or Group Dialog Box.

4. Click OK.
Figure 3-14: Graph Manager with Workload Window

You can customize the appearance of the GTM Window by specifying bar colors, which task data fields are displayed around the task bar, graph style, and whether KWS will save changes to a task as soon as you modify it.

To set GTM display preferences:

1. With a GTM Window active, open the Window Menu from the KWS Menu Bar and select Options. The Graph Preferences Window will appear (Figure 3-15).
2. Set display options by clicking on the box next to the option in the Display area. If an option is checked then it will be displayed for all tasks. The option definitions are:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Date</td>
<td>The Due Date value for the task will be displayed with the task bar.</td>
</tr>
<tr>
<td>Late Start Date</td>
<td>The Late Start Date for the task will be displayed with the task bar.</td>
</tr>
<tr>
<td>Duration</td>
<td>The Duration value for the task will be displayed with the task bar.</td>
</tr>
<tr>
<td>Percent Complete</td>
<td>A colored bar will be displayed over the task bar that represents Percent Complete value for the task.</td>
</tr>
<tr>
<td>Predecessor Links</td>
<td>The predecessor and successor links will be displayed by a red arrow between tasks.</td>
</tr>
<tr>
<td>Milestones</td>
<td>Milestones will be displayed in the GTM.</td>
</tr>
</tbody>
</table>

3. Color options may be set for:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Bar For Level</td>
<td>Allows you to customize the color of the first six task levels.</td>
</tr>
<tr>
<td>% Complete Bar</td>
<td>Allows you to customize the color of the Percent Complete bar.</td>
</tr>
</tbody>
</table>

Set Color options by clicking the button for the item for which you want to set the color. The Select Color Window will display (Figure 3-16). Set the color by sliding the Red, Green and Blue bar until the desired color is displayed in the box to the right.
4. Set Graph Style options by clicking on the box next to the option in the Graph Style area. If an option is checked, then the graph will be displayed using that style option. The option definitions are:

<table>
<thead>
<tr>
<th>Block</th>
<th>Parent tasks are displayed as blocks that surround child tasks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar</td>
<td>All tasks are represented as bars. A selected task will have a block that surrounds its child tasks.</td>
</tr>
</tbody>
</table>

5. Set the **Save After Each Change to Graph** option. If the Save After Each Change to Graph box is checked, KWS will save changes to a task as soon as it is modified in the GTM. If the box is not checked, then you must explicitly save any changes you make to a task in the GTM.

6. Set the **Save as Default** option. If the Save as Default box is checked, the preferences you specify will be saved as your default settings for future use in KWS. If the Save as Default box is not checked, changes made in the Graph Preferences Window will be active for the current KWS session only.

**STEPS**

Steps provide an outline of the procedures users must follow in order to complete a task. They are the lowest level of detail used to define a task. Unlike tasks, steps have few data fields associated with them. Step data fields are entered through the Step Dialog Box (Figure 3-17).
Step Title: Review current TAPES objectives

Step Number: 1

☑ Completed  Date Completed: 27Feb97

Figure 3-17: Step Window

The four data fields associated with a step are:

**Step Title**  
A textual description describing the action to be performed.

**Step Number**  
The number indicating the order in which the step should be performed.

**Completed**  
An indicator of whether the step has been completed.

**Date Completed**  
The date the step was completed.

Steps are displayed within the Steps Window (Figure 3-18). They are organized by **Step Number**, which reflects the order in which the steps should be performed. Information about each step’s status is displayed in the leftmost column with a check mark displayed if the step is completed. Similar to tasks, icons representing attachments and Do Its are displayed in the rightmost columns when these items exist.

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Date Finished</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td>Review current TAPES objectives</td>
<td>27Feb97</td>
</tr>
<tr>
<td>2</td>
<td>Print copy of your attached DA form 2222-1 and annotate required revisions for discussion with your Division Chief</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-18: Steps Window

*Viewing Steps*

Steps associated with a task may be viewed by opening the Steps Window.

To view steps:

1. Select the task for which you want to view steps.
2. Click the **Step** button in the Task Button Bar

or...

Click the Step icon in the Indicator Column. In either case, the Steps Window will be displayed.

**Inserting Steps**

**To insert a step:**

1. Select the task for which you want to insert the step.

2. Click the **Steps** button from the Button Bar or the Steps icon in the task's indicator column (if one exists). The Steps window for the selected task will open.

3. To add a step in a specific location in the steps list, select the step that will precede the new step.

4. Click the **Insert** button. The Step Dialog Box will open.

5. Enter the **Step Title** in the Step Dialog Box.

6. Click **OK** to save.

**Modifying Steps**

**To modify a step:**

1. Select the step to be modified.

2. Click the **Modify** button.

3. Change the step information as desired and click **OK** to save.

**Reordering Steps**

The order in which steps are listed in the Steps Window can be changed by modifying the **Step Number** value.

**To reorder a step:**

1. Select the step to be reordered.

2. Click the **Modify** button. The Step Dialog Box will appear.

3. Change the value of the **Step Number** to the new value.

4. Click **OK** to save.

**Deleting Steps**

**To delete a step:**

1. Select the step to be deleted.
2. Click the **Delete** button. The Delete? Window will appear.

3. Click **Yes** to confirm your deletion, or Click **No** to cancel.

Be careful when deleting steps. Deleting a step also deletes all links to any Do Its and attachments associated with the step.

**Changing Step Status**

Steps can be assigned status values of **Complete** or **Not Complete**. Similar to tasks, the status of a step can be set through the Step Dialog Box or the Status Symbol Menu.

**To change step status via the Step Dialog Box:**

1. Select the desired task.

2. Click the **Steps** button. The Steps Window will appear.

3. Click the **Modify** button. The Step Dialog Box will appear.

4. In the Step Dialog Box, a step is complete when the box to the left of the **Complete** field is checked and not complete when it is not checked. Click on the checked box to make the check disappear and vice versa.

5. Click **OK** to save. A check mark will appear in the symbol field next to a completed step.

**To mark a step complete via the Status Symbol Menu:**

1. Click your left mouse button in the leftmost column of the Step Window next to the desired step. The Status Symbol Menu will appear.

2. While holding the mouse button down, select the desired Status value and release the mouse button.

**Moving and Copying Steps**

Steps can be copied or moved to new locations within the task hierarchy. When a step is moved, all of its attachments and Do Its links are moved along with it. When a step is copied, new links are created between the new steps and the attachments and Do Its. It is important to remember that the attachments and Do Its are not copied. The attachments and Do Its are the same ones linked to the original step, so any changes made to them from the new step will be reflected in the old step.

**To copy or move a step:**

1. Open the destination Step Window by selecting the task that the step will be associated with and clicking the **Steps** button or icon.
2. Open the Step Window containing the step(s) to be moved by selecting the associated task and clicking the **Steps** button or icon.

3. Select the step to be moved or copied. Hold down the left mouse button and drag the selected step to the destination window.
# CHAPTER 4 ATTACHMENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
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<td>4-2</td>
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<tr>
<td>Defining Attachments</td>
<td>4-2</td>
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<td>4-36</td>
</tr>
</tbody>
</table>
OVERVIEW

Attachments are information resources used during the execution of an activity. Attachments can be associated with any of the following items: tasks, steps, appointments, and milestones. An association between any of these items and an attachment is referred to as an attachment "link." Attachments may be defined during the initial development of a KWS process model or ad hoc, as required by the user.

This chapter describes how to create an attachment, manipulate attachments to support task execution, define attachment access rights, and define attachment workflows.

DEFINING ATTACHMENTS

Each attachment has a specific set of information or data fields associated with it. This information is referred to as the Attachment Profile. When an attachment is created within KWS, the Attachment Profile information is stored in the KWS database and is used to search for and retrieve the file.
The Attachment Profile Dialog Box

Attachments are entered into the KWS database through the Attachment Profile Dialog Box (Figure 4-1). The Attachment Profile Dialog Box contains a set of data fields and captures user-specified values that define attachments within KWS. In addition, the Attachment Profile Dialog Box contains buttons used to access dialog boxes for capturing and viewing additional attachment information. The following sections describe the user-specified and KWS-generated data fields contained in the Attachment Profile Dialog Box.

### Attachment Profile

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>SME Guidelines</td>
</tr>
<tr>
<td>Description</td>
<td>Guidelines for SME Documentation</td>
</tr>
<tr>
<td>Application</td>
<td></td>
</tr>
<tr>
<td>Storage Type</td>
<td>Public</td>
</tr>
<tr>
<td>Attachment Type</td>
<td>Referential</td>
</tr>
<tr>
<td>Context</td>
<td></td>
</tr>
<tr>
<td>Long-Term Storage</td>
<td>Keep</td>
</tr>
<tr>
<td>MARKS Number</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>Available</td>
</tr>
<tr>
<td>Created By</td>
<td>KAPPES_S</td>
</tr>
<tr>
<td>Date Created</td>
<td>03Feb97</td>
</tr>
<tr>
<td>Last Edited By</td>
<td></td>
</tr>
<tr>
<td>Last Edit Date</td>
<td></td>
</tr>
</tbody>
</table>

The following sections describe the Attachment Profile data fields entered by the user when defining attachments within KWS.

### User-Specified Data Fields

The following sections describe the Attachment Profile data fields entered by the user when defining attachments within KWS.

### Title

- **Entering the Attachment Title**

  To enter an attachment Title: Type the desired value into the Title field.

  **Description:** A descriptive name given to the attachment.
Type: A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

Default Value: Blank

Usage: The Title value should contain a textual description that enables you to easily recognize what is contained in the attachment file, not the actual DOS file name. For example, use a descriptive title that will remind you of the nature of the attachment such as FY98 Budget Report. For an individual item, the Title value should be unique so that you can differentiate it from others. The Title values for versioned attachments cannot be changed from the original attachment's title.

Description

Entering an Attachment Description

To enter an attachment Description: Type the desired value into the Description field.

Description: Text describing the nature of the document.

Type: A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

Default Value: Blank

Usage: The Description value contains text that enables you to easily identify the purpose of the document and differentiate between attachment versions. For example, use a description that will remind you of the differences between versions such as 1st Quarter Revision and 2nd Quarter Revision.

Application

Entering the Application Used To Create an Attachment

To enter the Application Name: Click the small arrow to the right of the field and select the desired value from the list provided.

Description: The name of the application software or computer program used to create and launch the attachment file.

Type: A text field selected from your Application List.

Default Value: Blank

Usage: The Application Name is used by KWS to locate and launch the software required when editing the attachment. If the Application Name is left blank, you will not be able to edit the attachment. The Application Name is selected from a list you specify in the KWS File Menu, Preferences, Applications option. See Chapter 7, Customizing KWS, for more detail.
When you import an attachment file for which you have a predefined association for the extension of the file name, KWS will use the filename extension to automatically set the Application Name. This value can be changed if required. See Chapter 7, Customizing KWS for more detail.

When creating a new attachment, the Application Name field of the Attachment Profile dialog box lists only those applications for which a template has been defined. A template is necessary in order to create a new attachment. When importing an attachment file, all applications are listed regardless of whether a template is defined.

**Storage Type**

<table>
<thead>
<tr>
<th>To enter the attachment Storage Type</th>
<th>Click the small arrow located to the right of the field and select the desired value from the list provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>An indicator used by KWS to determine the physical location for storing the attachment file.</td>
</tr>
<tr>
<td><strong>Type:</strong></td>
<td>A text field selected from a list containing the values Public, Private, or Removable.</td>
</tr>
<tr>
<td><strong>Default Value:</strong></td>
<td>Public</td>
</tr>
<tr>
<td><strong>Usage:</strong></td>
<td>Storage Type indicates the physical location for storing the attachment file. There are three possible values: Public, Private, or Removable. Public files are stored on the KWS shared file server and can be accessed by all KWS users. Private files are stored on the KWS workstation of the individual creating the attachment and can only be accessed by the attachment creator. Removable files are stored on a removable media of your choice such as a floppy or Bernoulli disk. The directories for Public and Private attachments are defined by KWS during the KWS installation process. See Database and File Storage Setup, in Chapter 7, Customizing KWS for more detail. There is no required directory structure for removable media, but it is recommended that the media be dedicated for KWS use only.</td>
</tr>
</tbody>
</table>

**Attachment Type**

<table>
<thead>
<tr>
<th>To enter the Attachment Type</th>
<th>Click the small arrow to the right of the field and select the desired value from the list provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Indicates the category of a document.</td>
</tr>
<tr>
<td><strong>Type:</strong></td>
<td>A text field selected from a list containing a blank value and Referential.</td>
</tr>
<tr>
<td><strong>Default Value:</strong></td>
<td>Blank</td>
</tr>
</tbody>
</table>
Usage: The Attachment Type value is used by KWS to determine storage and archival routines for attachments. A blank Attachment Type value is used for most attachments to indicate a general category. This general category includes attachments that are a product generated by a task. An Attachment Type value of Referential is used to indicate that an attachment contains information that may be useful in completing the task but will not be modified during the execution of the task. Examples include online Standing Operating Procedures and Department of the Army Regulation documents. When an attachment is specified as Referential, it will be stored in the referential attachment directory specified during KWS setup. See Chapter 7, Customizing KWS, for detail on KWS Database and File Storage Setup.

The Attachment Type field is a relatively new feature and is not fully functional. Currently only two values are available: blank and Referential. Future versions will allow for additional values. Its primary purpose in the current version is to separate Referential attachments from other attachments so that routines may be developed to improve access, sharing, and administration of referential documents.

Context

Entering the Context of an Attachment

To enter the Context: Type the desired value into the Context field or click the small arrow to the right of the field and select the desired value from the list provided.

Description: A value used for organizing and searching attachments.

Type: A text field selected from a list or entered by the user that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

Default Value: Blank

Usage: The Context field is for organizing and searching for attachments based on its subject matter. It is an optional field but is useful for grouping related attachments. For example, if you want to relate all your attachments for a specific subject such as “Personnel,” you could enter the value Personnel into the Context field. You could then do an attachment search to list all attachments with the Context field value of Personnel.

Long-Term Storage

To enter the Long-Term Storage: Click the small arrow to the right of the field and select the desired value from the list provided.

Description: An indicator used by KWS to determine the long-term storage type.
Retention Days

To enter the number of Retention Days: Type the desired value into the Retention Days field.

Description: The number of days before an inactive attachment will be archived or deleted.

Type: A number.

Default Value: 365

Usage: The number of Retention Days is used by KWS to determine when an attachment is considered inactive. If an attachment with Long-Term Storage type of archive or delete has not been viewed or edited within the retention days period, the attachment is considered inactive and will be archived or deleted.

MARKS Number

To enter the MARKS Number: Type the desired value into the MARKS Number field or click the ... button to the right of the field to open the MARKS Number dialog box. The dialog box contains a search utility to assist you in determining the MARKS number.

Description: A document categorization standard used by the US Army.

Type: A text field containing a valid MARKS Number.

Default Value: blank
Usage: The MARKS Number is used for organizing and categorizing documents. This information is optional within KWS.

Access Rights

The Access Rights... Button on the Attachment Profile Dialog Box is used to define user access rights for attachments. Clicking the Access Rights... Button displays the Attachment Access Rights Dialog Box (Figure 4-2) where the following values may be assigned by Knowledge Worker and Work Group. See Attachment Access Rights, in this chapter for more detail.

<table>
<thead>
<tr>
<th>User/Group</th>
<th>Description</th>
<th>Cumulative Access Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC</td>
<td>View Profile, Read/Copy</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>BROWN_C</td>
<td>Chuck Brown</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>JONES_M</td>
<td>Mike Jones</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>KELLY_G</td>
<td>George Kelly</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>WENT_L</td>
<td>Lyn Went</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>ACCT</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>OPS</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
</tbody>
</table>

Figure 4-2: Attachment Access Rights Dialog Box

Access Rights

View Profile Allows the user or work group to view only the attachment's profile and not the attachment file.

Read/Copy Allows the user or work group to view the attachment’s profile and to view or copy the attachment file, but not to edit the document.

Read/Copy/Edit Allows the user or work group to view the attachment’s profile and to view, copy, and edit the attachment file.
Security Restrictions

**Sensitive**
Allows only the attachment creator to view the attachment profile and access the attachment file. If **Sensitive** is checked, the attachment title is displayed in the Attachments Window only when the attachment creator is logged in.

**Locked**
Allows the attachment creator to lock the attachment. If **Locked** is checked the attached file can be viewed but cannot be edited. An attachment that is checked out is automatically locked.

WWW User-Specified Data Fields

The following section describes the user-specified data fields contained in the WWW Attachment Profile Dialog Box (Figure 4-3).

![WWW Attachment Profile](image)

**Figure 4-3: WWW Attachment Profile Dialog Box**

**Title**

To enter a WWW Attachment Title: Type the desired value into the **Title** field.

**Description:** A descriptive name given to the attachment.

**Type:** A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

**Default Value:** blank
Usage: The Title value should contain a textual description that enables you to easily recognize the contents of the attachment web page.

Description

To enter a WWW attachment Description: Type the desired value into the Description field.

Description: Text describing the nature of the web page.

Type: A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

Default Value: blank

Usage: The Description value contains text that enables you to easily identify the purpose of the document and differentiate between attachment versions.

http address

To enter a WWW Attachment http address: Type the desired value into the http address field.

Description: The http address of the attachment web page.

Type: A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols that make up a valid URL.

Default Value: blank

Usage: The http address contains the URL of the attachment web page.

Context

To enter a WWW Attachment context: Type the desired value into the Context field or click the small arrow located to the right of the field and select the desired value from the list provided.

Description: A value used for organizing and searching attachments.

Type: A text field selected from a list or entered by the user that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.
Default Value: Blank

Usage: The **Context** field is for organizing and searching for attachments based on its subject matter. It is an optional field but is useful for grouping related attachments. For example, if you want to relate all your attachments for a specific subject such as “Personnel,” you could enter the value Personnel into the **Context** field. You could then do an attachment search to list all attachments with the **Context** field value of Personnel.

### KWS-Generated Data Fields

The following data fields are generated by KWS when a user defines an attachment within KWS.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
<td>Contains the version number of the attachment file.</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>The current accessibility status of the attachment file. The values of the status field are:</td>
</tr>
<tr>
<td></td>
<td><strong>Available</strong> The document is unlocked and available for edit.</td>
</tr>
<tr>
<td></td>
<td><strong>Locked</strong> The attachment is locked and can not be edited.</td>
</tr>
<tr>
<td></td>
<td><strong>Check Out By ...</strong> The attachment document has been checked out by the specified user and is locked.</td>
</tr>
<tr>
<td><strong>Created By</strong></td>
<td>The KWS User ID of the user who created the link to the attachment file. This value is used by KWS to determine who has subsequent modify rights to the attachment's profile.</td>
</tr>
<tr>
<td><strong>Date Created</strong></td>
<td>The date the attachment link was created.</td>
</tr>
</tbody>
</table>
**Last Edit By**

Contains the KWS User ID of the user who last edited the attachment file. This value is set whenever a user opens the attachment via the Edit button in the Attachment Window Button Bar.

**Last Edit Date**

Contains the date the attachment file was last edited. This value is set whenever a user opens the attachment via the Edit button in the Attachment Window Button Bar.

**Links**

Indicates the number of links to items associated with an attachment file. This value can be obtained by clicking on the Links... button in the Attachment Profile Dialog Box. Clicking the Links... button will display the Attachment Links Window (Figure 4-4) that displays the number of links and lists the titles of all items attached to the attachment file.

You can move to one of the linked Tasks by selecting the task and then clicking the Go To Task button. A Task Window will open and list the selected task and its siblings.

![Attachment Links Window](image)

**THE ATTACHMENTS WINDOW**

The Attachments Window (Figure 4-5) lists the attachment associated with a selected item alphabetically by Title. The information displayed in the window is determined by your display field setup. For instance, you may
change the order of the fields displayed or remove a field from display. See Chapter 7, Customizing KWS, Display Field Setup, for detail.

<table>
<thead>
<tr>
<th>Title</th>
<th>Version</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Templates</td>
<td>1</td>
<td>Public</td>
</tr>
<tr>
<td>Guidelines Page</td>
<td>1</td>
<td>WWW</td>
</tr>
<tr>
<td>Index Doc</td>
<td>1</td>
<td>Public</td>
</tr>
<tr>
<td>SME Document</td>
<td>1</td>
<td>Public</td>
</tr>
<tr>
<td>SME Guidelines</td>
<td>1</td>
<td>Public</td>
</tr>
</tbody>
</table>

Figure 4-5: The Attachments Window

The columns on the left of the Attachments Window contain symbol(s) that indicates the type and status of each attachment. There are three types of attachments: Normal, Referential, and Workflow. No symbol appears if the attachment is type Normal. There are two status symbols for attachments: Locked and Checked-Out. The following are the type and status symbols for attachments:

- R Referential
- W Workflow
- C Checked-Out
- \* Locked

**Accessing Attachments Window Options**

Options for manipulating attachments within the Attachments Window are accessed in the Attachments Window Button Bar and the Available Options Menu. These options are available whenever the Attachments Window is active.

**To access Attachments Button Bar options:**

1. Select the item associated with the attachment.
2. Click the Attach button in the button bar or the attachment icon in the indicator column to the right of the item. An Attachments Window will open and the Attachments Button Bar (Figure 4-6) will be displayed with the Insert, Delete, Profile, View, Edit, Export, Copy, Version, Check Out, and Check In options available for attachment manipulation.

Figure 4-6: The Attachments Button Bar
To access the Attachment Window Available Options Menu:

1. Within the Attachment Window, select the desired attachment.

2. Click the left mouse button. The Available Options Menu will be displayed with the View, Edit, Export, Copy, Version, Check Out, Check In, Links, Profile, Delete, and Define Workflow options available for attachment manipulation.

The Available Options Menu provides the same options available from the Attachment Window’s Button Bar, except Insert. In addition, the Available Options menu provides the options Links and Define Workflow. See Workflow in this chapter for more details.

- **Attachment Window Sort Options**

  The Attachment window provides a dialog box that allows the user to select from several sort choices, including chronological, reverse chronological and alphabetical.

  To specify the sort order for an Attachment window:

  1. Activate the Attachment window and select Options... from the Window menu.

  2. Select Sort... from the pull-down menu.

  3. Select an option from the Sort Order group box. If you wish to preserve this sort order as the default for all Attachment windows, check the Save Options as Default checkbox.

  4. Click OK.

- **Inserting an Attachment**

  When a user inserts a new attachment, a link is made from the attachment to the selected item. Attachment links may be made to URLs, existing files or to new files you create during the linking process.

  To insert an attachment link to an existing file:

  1. Select the item to which the file will be linked.

  2. Click the Insert button.

  The Attachment Insert Dialog Box appears (Figure 4-7).
3. From the Attachment Insert Dialog Box, select **Import**.
   A file browsing window opens.

   ![Attachment Insert Dialog Box](image)

   **Figure 4-7: Attachment Insert Dialog Box**

4. In the file browsing window, locate and select the file you want to attach and click **OK**.
   The Attachment Profile Dialog Box displays.

5. Enter the information describing the attachment in the Attachment Profile Dialog Box.

6. Click **OK**.
   The new attachment will appear in the Attachment Window.

**To insert an attachment link to a new file:**

1. Select the item to which the file will be linked.

2. Click the **Insert** button.
   The Attachment Insert Dialog Box will be displayed.

3. From the Attachment Insert Dialog Box, select **Create**.
   The Attachment Profile window displays.

4. Enter the information describing the attachment in the Attachment Profile Dialog Box.

5. Click **OK**.
   The application software entered in the **Application Name** field of the Attachment Profile will be launched with the new file.

6. Follow normal procedures for editing and saving the document with the launched application. **(DO NOT CHANGE THE NAME OF THE FILE—KWS only recognizes the link to the filename it generated.)** After you exit the application, the new attachment will be displayed in the Attachment Window.
To create a WWW attachment:

1. Open the Attachment Window.
2. Click the Insert button.
3. On the Attachment Insert Dialog Box, click the WWW button. The WWW Attachment Profile Dialog Box opens.
4. Enter the information describing the attachment in the Attachment Profile Dialog Box.
5. Click OK. The new attachment will appear in the Attachments Window.

Deleting an Attachment

When deleting an attachment, only the link to the attachment file is deleted and not the file itself. If the last link to an attachment is deleted, the attachment file will be deleted. However, the user is given the opportunity to store the file outside the KWS environment if desired.

To delete an attachment:

1. Select the attachment to be deleted.
2. Click the Delete button. The Delete? Dialog Box will be displayed (Figure 4-8).

![Delete? Dialog Box](image)

Figure 4-8: The Delete? Dialog Box for Attachments

3. Click Yes to confirm the deletion, No to cancel.
4. If you deleted the last link to the attachment, the Attachment Delete Dialog Box will be displayed (Figure 4-9).

5. If you want to save a copy of the attachment file, click Yes. Otherwise, click No. [If you clicked Yes, a file browser window will be displayed where you can designate the name and location of the saved file.]
Only the user who created the attachment link (or System Administrator) is able to delete it.

**Attachment Delete**

Budget Report
This is the last link to this attachment file in KWS.

Do you want to save the file to another location before it is deleted from the KWS storage area?

[ ] Yes  [ ] No

Figure 4-9: Attachment Delete Dialog Box

* Viewing and Modifying an Attachment Profile

Most of the attachment information defined within the Attachment Profile can be viewed in the Attachment Window display fields. However, to modify or view all of the information it is necessary to open the Attachment Profile.

To view or modify Attachment Profile information:

1. Select the attachment for which you want to view or modify the Attachment Profile.
2. Click the Profile button. The Attachment Profile Window will be displayed.
3. To modify the Attachment Profile, enter the new values in the appropriate data fields and click OK to save. To view only and exit without making changes, click Cancel.

Only the user who created the original attachment link (or System Administrator) is able to modify the Attachment Profile information. The User ID of the attachment link creator is contained in the Created By data field for the attachment.

* Dragging Files From Windows Explorer

Files can be dragged from a Windows Explorer folder into a KWS Attachment, Task, or Step Window. If dragged to an Attachment Window, the files are added to the list of attachments. If dragged to a Task or Step Window, the files are attached to the tasks or steps selected in that window.

To drag files from Windows Explorer to KWS

1. Open the Attachment, Task or Step window in KWS where you wish to attach the files from Windows Explorer. If the target window is a task or step, select the specific item where the file(s) will be attached.
2. Select one or more files from a folder in Windows Explorer.
3. Drag the file(s) to an Attachment, Task or Step window in KWS.

4. A new attachment is created for each file you dragged. If you dropped the file(s) into an Attachment Window, each is added to the list of attachments within that Attachment window. If you dropped the file(s) into a Task or Step Window, each is attached to the specific tasks or steps selected within that window.

**Viewing an Attachment File**

KWS attachment files may be viewed without loading the application used to create it. For instance, a file created in WordPerfect can be viewed on the computer screen without requiring a copy of WordPerfect. You must specify a file viewer for use with KWS to have the capability to view attachments. If you do not specify a file viewer, the View option will not be available. See Chapter 7, Customizing KWS, for more detail on setting up a file viewer.

**To view an attachment file:**

1. Select the attachment for which you want to view the file contents.

2. Click the View button from the Attachment Window Button Bar options. Your file viewer software package will be launched with the attachment displayed.

3. Follow normal procedures for viewing the document within the file viewer application. When finished, exit the application to return to KWS.

**Modifying an Attachment File**

KWS attachment files may be modified with the application used to create it. You must have a copy of the attachment’s associated application, and the application must be defined in your Application List in order to edit it. See Chapter 7, Customizing KWS, for more detail on defining your application list. In addition, you must be the attachment’s creator or have Edit access rights.

**To modify an attachment file:**

1. Select the attachment to be modified.

2. Click the Edit button. KWS will launch the associated application with the selected attachment file.
Exporting an Attached File

At times it may be necessary to copy an attachment file and save it to a location external to the KWS environment. For example, you may need to give a copy of an attachment file to someone who is not a KWS user or who is at a remote location. Within KWS, this capability is referred to as “exporting.”

To export a copy of an Attachment file:

1. Select the Attachment for which you want to export a copy.

2. Click the Export button from the Attachment Window Button Bar options. The Attachment Export Dialog Box will open (Figure 4-10).

3. Click the File button to the right of the File Name field. A file browser window opens.

4. In the file browser window, specify a name and location for the exported attachment and click OK.

It is important to remember that exporting an attachment file makes a copy of the attachment from the KWS environment. The original attachment file remains within KWS.

To send an Attachment to other knowledge workers as email:

1. Select an Attachment in an Attachment window.

2. Click the Export button on the button bar. The Attachment Export Dialog Box appears.

3. Select the Email option in the Export To group box.
4. Click the Next button.
   The Notification Dialog Box appears.
   The Attachment file appears in the Attachments field.

5. If desired, enter a subject and text, and/or select one or more knowledge workers, groups and email addresses as recipients.

6. Click OK.

To export an attachment as email, you must have a MAPI compliant email program and it must be currently running on your machine. Ask your System Administrator if you have questions about your email program.

To export an attachment as a FAX:

1. Select the attachment to export.

2. Click the Export button.
   The Attachment Export Dialog Box appears.

3. Select FAX from the Export To section.

4. Click OK.
   KWS will then pass the attachment file to your FAX program.

To export an attachment as a FAX, you must first specify (one-time only) a FAX program for your KWS login. See Chapter 7, Customizing KWS, for more on setting up KWS to work with a FAX program.

Making Copies of an Attachment Linked to Multiple Items

You can make copies of an attachment file to more than one task, step, appointment, or milestone through the Copy option in the Attachment Window Button Bar.

To make copies of an attachment to multiple items:

1. Select the attachment that you want to copy.

2. Click the Copy button.

3. If the attachment has multiple links, the Copy Links? Dialog Box will be displayed (Figure 4-11). If you want the new copy to have the same links as the original, click Yes. Otherwise, click No.
Creating Versions of an Attachment File

Versions of attachment files can be made to save variations of a single document as separate files. This capability can be used to track revisions of a document.

To create a new version of an attachment file:

1. Select the attachment for which you want to make a version.
2. Click the Version button. KWS will make a new version by making a copy of the selected attachment, incrementing the highest version number of the selected attachment by 1, and assigning the result to the version number of the copy. The new version will have the same title as the original attachment and cannot be changed.
3. (Optional) Enter text in the Description field of the new version that indicates the purpose of the version. Do this by modifying the Attachment Profile. Use this Description to differentiate between versions.

When you make a version of an attachment, you will become the owner of the new version. This will be reflected in the Attached By field value in the Attachment Profile. All other profile information remains the same.

Locking Attachments

Attachments can be locked by the owner to prevent other users from editing the attached file. An attachment that is currently locked will be indicated by a padlock icon to the left of the attachment in the Attachment List Window.

To lock an attachment:

1. Open the profile for the attachment.
2. Click the Access Rights button.
   The Attachment Access Rights Dialog Box opens.
3. Click the Locked check box.
4. Click OK.
To unlock an attachment:

1. Open the profile for the attachment.
2. Click the Access Rights button. The Attachment Access Right Dialog Box opens (Figure 4-12).
3. Click the Locked check box.
4. Click OK.

<table>
<thead>
<tr>
<th>User/Group</th>
<th>Description</th>
<th>Cumulative Access Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC</td>
<td></td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>BROWN_C</td>
<td>Chuck Brown</td>
<td>View Profile, Read/Copy/ Edit</td>
</tr>
<tr>
<td>JONES_M</td>
<td>Mike Jones</td>
<td>View Profile, Read/Copy/ Edit</td>
</tr>
<tr>
<td>KELLY_G</td>
<td>George Kelly</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>WENT_L</td>
<td>Lyn Went</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>ACCT</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>OPS</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
</tbody>
</table>

Figure 4-12: Attachment Access Rights

Attachement Check-In and Out

There may be times when you want to edit an attached document outside of the KWS environment. KWS provides a check-out and check-in function to allow you to temporarily use a document outside of the KWS program. The check-out capability enables users to copy files to external media for editing outside KWS. While a file is checked-out, the Attachment will be locked and disallow any editing until the document has been checked back in. Any user with edit rights for the Attachment can check out the document.

To check-out an attachment document:

1. Select the attachment in the Attachment Window.
2. Click the **Check-Out** button on the Attachment Window Button Bar. The Check-Out Attachment File Dialog Box appears.

3. Enter the Save Filename for the Attachment document.

4. Click **OK**. The Check-Out Attachment File Dialog Box closes. The attachment is now locked until the document is checked back in.

**To check-in an attachment document:**

1. Select the attachment in the Attachment Window.

2. Click the **Check-In** button on the Attachment Window button bar. The Select Files To Check In Dialog Box appears.

3. Select the file to check back in as the attachment.

4. Click **OK**. The Select Files To Check In Dialog Box closes. The attachment is now unlocked.

   **Note that the attachment document must be checked back in by the same user who checked the document out.**

**MOVING, COPYING, AND LINKING ATTACHMENTS**

When you move, copy, or link existing attachments within KWS, it is important to understand the relationships that may exist between items and attachments. When an attachment is inserted, its initial link to an item is created (Figure 4-13(a)). Once created, the attachment may be linked to additional items (Figure 4-13(b)), the attachment may be copied and the copy linked to another item (Figure 4-13(c)), and the link may be moved from one item to another (Figure 4-13(d)).
Moving an attachment creates a link with a new item and deletes the link from the item from which it was moved.

To move an attachment link to another item:

1. Select the item associated with the attachment that you want to move and open its Attachment Window by clicking the Attach button.

2. Select the destination item (the one to which you want to move the attachment) and open its Attachment Window by clicking the Attach button.

You should now have two Attachment Windows open—one for the originating item and one for the destination item.

3. Select the attachment that you want to move, hold down the left mouse button, drag the attachment to the destination item’s Attachment Window, and release the mouse button. The Modify Attachment Links Dialog Box (Figure 4-14) will be displayed.

4. Select Move.
Copying an Attachment to Another Item

Copy an attachment to another item creates a new copy of the attachment file and creates a link with the new item.

To copy an attachment to another item:

1. Select the item associated with the attachment that you want to copy to another item. Open its Attachment Window by clicking the Attach button.

2. Select the destination item (the one to which you want to move the attachment) and open its Attachment Window by clicking the Attach button.

You should now have two Attachment Windows open—one for the originating item and one for the destination item.

3. Select the attachment that you want to move, hold down the left mouse button, drag the attachment to the destination item Attachment Window, and release the mouse button. The Modify Attachment Links Dialog Box will be displayed.

4. Select Copy.

5. If the attachment has multiple links, the Copy Links? Dialog Box will be displayed (Figure 4-11). If you want the new copy to have the same links as the original, click Yes. Otherwise, click No.

Linking an Attachment to Another Item

Linking an attachment to another item creates a new link from the attachment file to the new item. This feature provides the capability to link an attachment to multiple items.
To link an attachment to another item:

1. Select the item associated with the attachment that you want to link to another item. Open its Attachment Window by clicking on the **Attach** button.

2. Select the destination item (the one to which you want to link the attachment) and open its Attachment Window by clicking on the **Attach** button.

   You should now have two Attachment Windows open—one for the originating item and one for the destination item.

3. Select the attachment that you want to link, hold down the left mouse button, drag the attachment to the destination item Attachment Window, and release the mouse button. The Modify Attachment Links Dialog Box will be displayed.

4. Select **Link**.

Creating Sensitive Attachments

Sensitive attachments are documents that must be kept secure from access by unauthorized personnel. For example, contract documents prior to award of the contract are considered sensitive. This access limitation typically requires that the file be stored on a media that can be removed and locked in a secure area. KWS provides the capability to link sensitive attachments to items, while maintaining the extra security restrictions required via the **Sensitive** option in the Attachment Profile.

Only the attachment creator is granted access rights to a sensitive attachment. In addition, the attachment is not listed in the Attachment Window unless the attachment creator is the user logged in to KWS, which further ensures that no one else is aware of the sensitive attachment’s existence.

Creating a Sensitive Attachment

1. Within the Attachment Profile, click the **Access Rights**... button. The Access Rights Dialog Box will appear.

2. Check the **Sensitive** box located within the Security Restrictions area of the dialog box. The **Assigned Access Rights** options and the **User/Group** List will become grayed out because you may not give other users access rights to a sensitive attachment (Figure 4-15).

3. Click **OK**. You will be returned to the Attachment Profile Dialog Box. Because you designated the attachment as Sensitive, the **Storage Type** value has been set to **Removable**.
Attachment Access Rights

User/Group: PUBLIC

- Assigned Access Rights
  - View Profile
  - Read/Copy
  - Read/Copy/Edit

- Security Restrictions
  - Sensitive
  - Locked

- Save as my default PUBLIC access rights for new attachments

<table>
<thead>
<tr>
<th>User/Group</th>
<th>Description</th>
<th>Cumulative Access Rights</th>
</tr>
</thead>
<tbody>
<tr>
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<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>KELLY_G</td>
<td>George Kelly</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>WENT_L</td>
<td>Lynn Went</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>ACCT</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>GPS</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
</tbody>
</table>

Figure 4-15: Attachment Access Rights Dialog Box With Sensitive Box Checked

4. Enter the information required for specifying the removable media to which you want to save the attachment. See Attachment File Storage, below, for more detail on saving to removable media.

An attachment with a Storage Type value of Public or Private may be stored as a sensitive attachment. However, since the intent is to store sensitive attachments on a securable media, doing so will jeopardize security.

5. Click OK.

ATTACHMENT FILE STORAGE

The ability to effectively use and share documents in a work group environment such as KWS depends on the user’s ability to access them. KWS manages attachment file storage to ensure you have access to the documents you need. In addition, KWS manages document storage to ensure that users who should not have access to your documents do not.

KWS allows three Storage Type values: Public, Private, or Removable. The default Storage Type value is Public. Public attachment files are stored on your organization’s shared file server and can be accessed by all KWS users. Private files are stored on the KWS workstation where you create the attachment and can only be accessed by users at that workstation. Removable files are stored on a removable media of your choice such as a floppy or a Bernoulli disk.
KWS assigns default attachment access rights based on the value you assign for Storage Type. You can assign specific access rights to users or work groups to further control access to your attachments. See Attachment Access Rights in this chapter for more detail.

When you create an attachment, KWS generates a file name and stores the file in a location reserved specifically for KWS attachments. This location is based on the value you assign to the Storage Type value. For Storage Types Public and Private, you are only responsible for designating the Storage Type value and are not required to determine the actual physical location where the document is to be stored. KWS uses the Storage Type value and the information specific to your organization to determine the physical location to store the document. See Database and File Storage Setup, in Chapter 7 for more detail. For Storage Type Removable, you must specify the physical location for storing the file. KWS then uses the location you specify to store and retrieve the attachment.

To save an attachment to removable media:

1. Within the Attachment Profile, click the small arrow located to the right of the Storage Type field and select Removable from the list provided. A Media Info... button will be displayed on the lower right corner of the Attachment Profile Dialog Box (Figure 4-16).

2. Click the Media Info... button. The Save to Removable Media Dialog Box will be displayed (Figure 4-17).
3. Specify the drive where the directory you want to open is located.

4. Select the directory that contains the file you want to open.

![Save To Removable Media Dialog Box](image)

**Figure 4-17: Save to Removable Media Dialog Box**

5. Enter text in the **Media Description** field that identifies the storage media. It is recommended that you also label the disk with the same text value so you can easily identify it when you later retrieve the attachment file.

6. Click **OK**.
   KWS will generate a file name for the attachment and save it to the specified drive and directory.
   KWS will use this information when you retrieve an attachment file from removable media. The system will display an Insert Removable Media Dialog Box to request you to insert the media you previously specified (Figure 4-18).
SEARCHING ATTACHMENTS

KWS enables you to search for attachments associated with tasks and steps using Query-by-Example (QBE). Essentially, QBE enables you to search attachments by entering data values for fields contained in the attachment’s Profile. KWS uses these values to perform the search and retrieve the attachments that contain them.

To search for an attachment:

1. Select Query from the KWS Menu Bar.
2. Select Attachments from the Query Menu.
3. Select the Attachment Search option from the Attachments submenu. The Attachment Search Dialog Box will appear (Figure 4-19).
### Attachment Search

<table>
<thead>
<tr>
<th>Search For:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Description:</td>
</tr>
<tr>
<td>Application:</td>
</tr>
<tr>
<td>Storage Type:</td>
</tr>
<tr>
<td>Attachment Type:</td>
</tr>
<tr>
<td>Context:</td>
</tr>
<tr>
<td>Long-Term Storage:</td>
</tr>
<tr>
<td>MARKS Number:</td>
</tr>
<tr>
<td>Checked-Out By:</td>
</tr>
<tr>
<td>Created By:</td>
</tr>
<tr>
<td>Document Text:</td>
</tr>
<tr>
<td>Locked</td>
</tr>
</tbody>
</table>

#### Current Task:
Midpoint Tapes objectives review

#### Search Documents Attached To:
- Current Task
- Ancestors of Current Task
- Descendants of Current Task
- All Tasks

![Match Case](on)| ![OK](on) | ![Cancel](on)

**Figure 4-19: Attachment Search Dialog Box**

4. (Optional) Enter the **Title** value for which you want to search. You may also enter a text string value if you want to find attachments containing the string in its title.

5. (Optional) Enter the **Description** value for which you want to search. You may also enter a text string value if you want to find attachments containing the string in its description.

6. (Optional) Enter the **Application** value for which you want to search by clicking the small arrow to the right of the data field and selecting the desired value.

7. (Optional) Enter the **Storage Type** value for which you want to search by clicking the small arrow to the right of the data field and selecting the desired value.

8. (Optional) Enter the **Attachment Type** value for which you want to search by clicking the small arrow to the right of the data field and selecting the desired value.
9. (Optional) Enter the **Context** value for which you want to search by clicking the small arrow to the right of the data field and selecting the desired value.

10. (Optional) Enter the **Long-Term Storage** value for which you want to search by clicking the small arrow to the right of the data field and selecting the desired value.

11. (Optional) Enter the **MARKS Number** value for which you want to search.

12. (Optional) Enter the **Checked-Out By** value for which you want to search by clicking the ... button to the right of the data field and selecting the user from the dialog box.

13. (Optional) Enter the **Created By** value for which you want to search by clicking the ... button to the right of the data field and selecting the user from the dialog box.

14. (Optional) Enter the **Document Text** value for which you want to search. *THIS SEARCH CAN TAKE A LONG TIME SO USE ONLY WHEN NECESSARY.*

15. (Optional) Check **Locked** if you want to search for attachments that are locked by a specified user.

16. (Optional) Check **Sensitive** if you want to search for attachments of type Sensitive.

17. Select the task from which you want to search by checking the box next to one or more of the following options:

- **Current Task**
  Searches for attachments linked to the selected task. Attachments linked to the Steps associated with the task will also be searched.

- **Ancestors of Current Task**
  Searches for attachments linked to the upper level tasks of the selected task (all parents and their parents). Attachments linked to the Steps associated with the tasks will also be searched.

- **Descendants of Current Task**
  Searches for attachments linked to the lower level tasks of the selected task (all children and their children). Attachments
KWS includes a pre-defined query that returns a list of the last 20 attachments you have accessed.

To list the last 20 attachments accessed:

1. Select Query from the KWS Menu Bar.
2. Select Attachments from the Query menu.

An Attachments Window displays titles of the 20 most recently accessed attachments.

ATTACHMENT ACCESS RIGHTS

Each attachment has access rights associated with it that enable you to limit access to your attachments. As the attachment creator, you automatically
have full rights to the attachment and are the only one who can modify access rights for other users.

The following access rights values may be assigned:

<table>
<thead>
<tr>
<th>Access Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>View Profile</strong></td>
<td>Allows the user or work group to view only the attachment’s profile and not the attachment file.</td>
</tr>
<tr>
<td><strong>Read/Copy</strong></td>
<td>Allows the user or work group to view the attachment’s profile and to view or copy the attachment file, but not to edit the document.</td>
</tr>
<tr>
<td><strong>Read/Copy/Edit</strong></td>
<td>Allows the user or work group to view the attachment’s profile and to view, copy, and edit the attachment file.</td>
</tr>
</tbody>
</table>

When you insert an attachment, KWS designates you as the Owner of the attachment and assigns default access rights to you and the Work Group PUBLIC. [PUBLIC is a KWS-generated Work Group that contains all KWS users within your organization.] Depending on the Attachment Type value you entered for the attachment—Public, Private, or Removable—KWS assigns the following default access rights:

<table>
<thead>
<tr>
<th>Attachment Type</th>
<th>Public Access Rights</th>
<th>Private Access Rights</th>
<th>Removable Access Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong></td>
<td>View Profile, Read/Copy/Edit</td>
<td>View Profile, Read/Copy/Edit</td>
<td>View Profile, Read/Copy/Edit</td>
</tr>
<tr>
<td><strong>PUBLIC</strong></td>
<td>View Profile, Read/Copy</td>
<td>View Profile</td>
<td>View Profile</td>
</tr>
</tbody>
</table>

*Assigning Attachment Access Rights*

To assign attachment access rights:

1. Within the Attachment Profile Dialog Box, click the **Access Rights** button.
   
   The Attachment Access Rights Dialog Box opens (Figure 4-21).
Attachment Access Rights

User/Group: PUBLIC

Assigned Access Rights
- View Profile
- Read/Copy
- Read/Copy/Edit

Security Restrictions
- Sensitive
- Locked

Save as my default PUBLIC access rights for new attachments

<table>
<thead>
<tr>
<th>User/Group</th>
<th>Description</th>
<th>Cumulative Access Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN_C</td>
<td>Chuck Brown</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>JONES_M</td>
<td>Mike Jones</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>KELLY_G</td>
<td>George Kelly</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>WENT_L</td>
<td>Lyn Went</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>ACCT</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
<tr>
<td>OPS</td>
<td>Group</td>
<td>View Profile, Read/Copy</td>
</tr>
</tbody>
</table>

Figure 4-21: Attachment Access Rights Dialog Box

2. Select the User ID or Work Group ID to which you want to assign access rights by clicking on it in the User/Group list.

To give the same access rights to all users, choose the KWS Work Group PUBLIC.

3. Within the Assigned Access Rights area of the dialog box, click the button next to the desired access rights (View Profile, Read/Copy, or Read/Copy/Edit).

4. Repeat steps 2 and 3 for each User ID or Work Group to which you want to assign access rights.

5. Click OK.
You will be returned to the Attachment Profile Dialog Box.

5. Click OK.

Default Public Attachment Access Rights

The default Public Attachment Access Rights can be set from within the Attachment Rights Dialog Box. As new Attachments are created, each will have the specified default Public Access Rights.

To set the default Public Attachment Access Rights:

1. Select an Attachment in an Attachment window and click on Profile from the button bar. The Attachment Profile dialog box appears.
2. Click on the Access Rights button. The Attachment Access Rights
dialog box appears.

3. Click on PUBLIC in the User/Group listbox and select public Access
Rights for the Attachment.

4. Check the checkbox titled Save as default PUBLIC Access Rights for
new Attachments.

5. Click OK.

Any new Attachments you create will have the specified public Access
Rights.

WORKFLOW

Workflow is a capability that allows an organization to manage the route a
document takes as it passes from person to person. As each person com-
pletes an assigned action on the document, the document is passed to the
next person in the workflow. Insurance claim processing is a classic
example of a workflow application. A predefined set of actions occur on the
insurance claim document from its point of receipt in the claims office to the
time it is processed and the final action is taken on the claim.

KWS provides workflow capability by allowing the user to define the path
an attachment takes as it progresses through a task hierarchy. This path is
referred to as the “workflow path.” As an attachment progresses through a
workflow path, successive actions are performed on it until it reaches the last
task in the path. The final task’s action on the attachment should result in a
completed product.

Definition of a workflow path requires a mechanism for specifying the next
task in the sequence. Within KWS, this mechanism is provided through
predecessor and successor links. See Chapter 3, Tasks and Steps,
Predecessor and Successor Relationships, for more detail. After these
relationships are established within a task hierarchy, an attachment can be
designated as a workflow attachment and the path it will follow within the
predecessor and successor task structure can be defined.

Proper definition of a workflow path requires a thorough understanding of
the process and of task decomposition. Also, you must understand what
types of task structures are candidates for workflow definition. The
following criteria can be used to identify candidates when defining workflow
paths.
• Tasks in the task hierarchy must be completed in a step-by-step fashion. In other words, before one task can be started, another one must be completed.

• A specific attachment is required at each step of the task hierarchy and some modification is performed on the attachment at each step. In addition, this attachment is a final product resulting from the completion of the tasks in the hierarchy.

* Defining a Workflow Path

Before defining a workflow path for an attachment, the predecessor and successor links must be set up for the task hierarchy through which the path will flow. See Chapter 3, Tasks and Steps, Predecessor and Successor Relationships, for further detail. Once these links have been established, the workflow path is defined by linking the attachment from predecessor task to successor task until the attachment has been passed through the task hierarchy. At any point in the path, a copy of the attachment may be passed to the parent task or a successor task.

To define a workflow path for an attachment:

1. Select the attachment for which you want to define a workflow path.

2. Open the Available Options Menu by clicking the right mouse button.

3. From the Available Options Menu, select Define Workflow. The Workflow Definition Dialog Box will appear (Figure 4-22). This dialog box displays the name of the attachment, the name of the current task to which the attachment is linked, and the successor tasks of the current task. The parent task of the successor task is included at the top of the list.
4. Select the task to which you want to link the workflow attachment. Click the **Link** button. The symbol L will appear to the left of the task. Only one task in the window may have a workflow link.

5. If you want to link copies of the workflow attachment to any of the other tasks listed, select the task and click the **Copy** button. The symbol C will appear to the left of the task.

6. Click the **Continue** button. The Workflow Definition Dialog Box will show the successor tasks of the task to which you linked the workflow document. If there are no successors, the successor task list will contain only the title of the Parent task. If only the parent task is listed, you may only send a copy to it because it is not a successor.

7. Repeat Steps 4 and 5 until you have made all the desired workflow links. At any time during workflow definition, you may click the **Back** button to return to your previous link and make any modifications.

8. To terminate the workflow definition, click the **Finish** button. You will be returned to the Attachment Window. The workflow attachment will now have a W next to it in the indicator column.
Choosing Between Copying and Linking in Workflow Definition

The following example is provided to illustrate how to choose between copying or linking an attachment within a workflow path. Essentially you should follow the simple rule: If an attachment is going to be modified in some way during execution of the successor task, it should be linked to the task; otherwise, it should be copied. Copies are made to pass the attachment to a new workflow process or to provide information only. The following example is somewhat complex in that two attachments are being flowed through the task hierarchy. However, it illustrates how more than one workflow path can be used to produce the final product.

A graphical depiction of the sample workflow path is shown in Figure 4-23. In this process, the task Write Proposal has the attachment “Proposal Document.” The task Write Proposal Cover Letter has the attachment “Proposal Cover Letter.” Both of these attachments must be passed to the task Review Proposal Package. Upon completion of Review Proposal Package, both attachments must be passed to Submit Proposal Package for Approvals and a copy of each passed to Acquire Sponsor’s Signature on Draft Proposal. Upon completion of Submit Proposal Package for Approvals, the attachment will be the final product of the overall task structure so a copy is sent to the parent task, Acquire Funds. The receipt of the signed hard copy of the attachments copied to the task Acquire Sponsor’s Signature on Draft Proposal will result in completion of the task, and the attachment will not be passed to any additional tasks.

Note that when an attachment is copied and not linked to another task in the workflow path, it should no longer be considered part of the workflow. However, the copy could then be used to start a new workflow definition. In this example, the copy passed to the parent task Acquire Funds could then be used in a new workflow within the parent’s sibling task Execute Funded Project.

When defining the workflow paths for these attachments, three successive Workflow Definition Dialog Boxes would be displayed. The following workflow definitions would be designated in the order listed for the attachment “Proposal Document”:

1. **Link** to Review Proposal Package.

2. **Copy** to Acquire Sponsor’s Signature on Draft Proposal and **Link** to Submit Proposal Package for Approvals.

3. **Copy** to Acquire Funds.
The following workflow definitions would be designated in the order listed for the attachment “Proposal Cover Letter”:

1. **Link** to Review Proposal Package.
2. **Copy** to Acquire Sponsor’s Signature on Draft Proposal and **Link** to Submit Proposal Package for Approvals.
3. **Copy** to Acquire Funds.

**Accessing Workflow Attachments**

Workflow attachments are accessed in the same manner as any other attachment. However, workflow attachments have additional access constraints imposed. These constraints are:

- Once the task linked to a workflow attachment has been marked complete, the workflow attachment can no longer be modified from the completed task.
- A workflow attachment cannot be modified from a task until the predecessor task has been marked complete.

**Creating Multiple Copies of a Workflow Attachment**

At times you may want several copies of an attachment to follow the same workflow path. KWS enables this capability without having to define the path for each copy.

To create multiple copies of a workflow attachment:

1. Select the workflow attachment to be copied.
2. Click the **Copy** button.
   The Copy Links? Dialog Box opens.
3. Click Yes.  
The attachment and all its links will be copied.

**Auto Workflowing of Attachments**  
You can automatically create workflow links for an Attachment where its associated tasks have successors. To automatically flow an attachment through a chain of single successors to the task, select *Auto Workflow* from the Available Options Menu for that attachment.

| Note that workflow will be created only for each task that has a single successor. |

To automatically create workflow for an Attachment:

1. Select an Attachment in an Attachment Window and right click to access the Available Options Menu.

2. Click on *Auto Workflow*.  
Workflow links will be created for the attachment for each task in the chain of single successors. A message displays the number of workflow links created.
OVERVIEW

Do Its are executable programs that can be launched directly from KWS. Like attachments, Do Its can be linked to any of the following items: tasks, steps, appointments, and milestones. In general, Do Its automate repetitive activities performed by knowledge workers. An example of an activity that could be automated by a Do It is generating a weekly report that requires logging into a remote database, downloading data to your workstation, and compiling a report from the data.

Do Its also can be associated with time agents, which are executable programs performed at a specified time. Within KWS, you can define time agents that are associated with a Do It and time agents that run independently of Do Its. When a Do It is associated with a time agent, it is called a Time-Contingent Do It. This capability enables a user to define activities that can be executed automatically, eliminating the need for the user to start the program.

As the number of Do Its within the organization increases, a mechanism will be required for storing and retrieving them to simplify access and support sharing. KWS provides this capability through the DoItBase application. DoItBase is a collection of Do Its that have been archived. You may store your own Do Its in the DoItBase, and you may retrieve Do Its belonging to other users.

DO ITS

Each Do It has a specific set of information associated with it that KWS uses to execute the Do It. Do It information is captured using the Do It Dialog Box (Figure 5-1).
The Do It Dialog Box contains the following data fields, which capture user-specified values required for executing Do Its within KWS.

**Title**

- **Entering the Do It Title**: Type the desired value into the **Title** field.

  **Description**: A descriptive name given to the Do It.

  **Type**: A text field that can include any combination of alphanumeric characters, punctuation marks, and standard ASCII symbols.

  **Default Value**: blank

  **Usage**: The Title value should contain a textual description that enables you to easily recognize what the Do It does, not the actual DOS filename. For example, use a descriptive title such as Generate Budget Report. For an individual task, step, or appointment, the Title values should be unique so that you can differentiate between them in the Do It Window.

**Command**

- **Entering the Do It Command**: Type the desired value into the **Command** field

  or...

  Click the file browser button to the right of the **Command** field and select
the path and executable file name.

**Description:** The name of the executable file required to launch the Do It.

**Type:** Text field containing a valid file and path name.

**Default Value:** blank

**Usage:** Any executable filename may be entered into the Command field. This includes program files with .exe extensions, batch files with .bat extensions, and command files with .com extensions. KWS supports both DOS- and Windows-executable files.

---

## Optional Parameters

**Entering Do It Optional Parameters**

To enter the Do It optional parameters:

Type the desired value into the **Optional Parameters** field

or...

If your optional parameter is a file, click the file browser button to the right of the **Optional Parameters** field to select a filename.

**Description:** The parameters that your application uses on startup.

**Type:** Text field.

**Default Value:** blank

**Usage:** These are the same parameters you would type after the application's filename when starting the application from the MS-DOS command prompt or from the Windows File, Run option. For example, to start Microsoft Excel with a specific file open, type the filename in this field. If your Do It does not require parameters, leave this field blank. See the documentation for your Do It for valid parameters.

---

## Working Directory

**Entering the Do It Working Directory**

To enter the Do It working directory:

Type the directory path value into the **Working Directory** field

or...

Click the file browser button to the right of the **Working Directory** field and
select the desired path.

**Description:** The name of the directory where the program files for the Do It are located.

**Type:** Text field containing a valid path name.

**Default Value:** blank

**Usage:** The working directory value is optional. If a value is entered, the current directory is changed to this value before the Do It is executed. If the value is left blank, the directory where the program files are located is the working directory.

### Execution Mode

**Entering the Do It Execution Mode**

To enter the Do It execution mode: Click on the box next to the desired value within the Execution Mode area. If one box is already checked, clicking on another box will uncheck it and set the new value.

**Description:** The screen interface mode in which you want the Do It displayed.

**Type:** A text field selected from the values DOS Full Screen, DOS Window, or Windows Program.

**Default Value:** Windows Program

**Usage:** This option is used to control the screen interface for initially displaying the Do It. The possible values are:

- **DOS Full Screen**
  - Displays the Do It in a full screen DOS shell.

- **DOS Window**
  - Displays the Do It in a window from which the DOS application is executed.

- **Windows Program**
  - Displays the Do It in the Windows environment.

You may use either DOS Full Screen or DOS Window to run DOS applications. However some DOS applications may not run in DOS Window mode. In this case, you will have to use DOS Full Screen mode. You must use Windows Program mode to run Windows applications.

### Window Size

**Entering the Do It Window Size**

To enter the Do It window size: Click on the box next to the desired value...
window size

Within the Window Size area. If one box is already checked, clicking on another box will uncheck it and set the new value.

Description: The size of the window used for displaying Do Its with a value of Windows Program specified for the Execution Mode.

Type: A text field selected from the values Normal, Maximized or Minimized.

Default Value: Normal

Usage: This option is only available if the Execution Mode value has been set to Windows Program. The possible values are:

- Normal: Displays the Do It in the screen size set by the Do It.
- Maximized: Displays the Do It in full-size window, which occupies the full screen.
- Minimized: Displays the Do It as an icon.

You should only use the Minimized value when the Do It does not require user input to execute.

Time Agent Setup...

To create a time contingent Do It: Click the Time Agent Setup... button. The Time Agent tool and Event Detail Dialog Box will appear. Enter the details into the specified fields. See Time Agents in this chapter for more detail.

The Do Its Window

The Do Its Window (Figure 5-2) lists the Do Its associated with the selected item alphabetically by Title. The information displayed in the window is determined by your display field setup. For instance, you can change the order of the fields displayed or remove a field from display. See Chapter 7, Customizing KWS, Display Field Setup, for detail.
Accessing Do It Window Options

Options for manipulating Do Its within the Do Its Window are accessed in the Do Its Window Button Bar and the Available Options Menu. These options are available whenever the Do It Window is active.

To access Do It Button Bar options:

1. Select the item associated with the Do It.
2. Click the Do It button in the button bar or the Do It icon in the indicator column to the right of the item. A Do Its Window will open and the Do Its Button Bar (Figure 5-3) will be displayed with the Insert, Delete, Modify, and Execute options available for Do It manipulation.

Accessing the Do Its Window Available Options

You can access the Available Options Menu if at least one Do It is listed in the Do It Window.

To access the Do Its Window Available Options:

1. Within the Do Its Window, select the desired Do It.

Click the left mouse button. The Available Options Menu will be displayed with the Delete, Modify, and Execute options available for Do It manipulation.

Inserting a Do It

To insert a Do It:

1. Select the item to which the Do It will be linked.
2. Click the Insert button. The Do It Dialog Box will be displayed (Figure 4-1).
3. Enter the information describing the Do It in the Do It Dialog Box.
4. Click OK. The new Do It will appear in the Do It Window.
Deleting a Do It

When deleting a Do It, only the link to the Do It is deleted and not the Do Its program file.

To delete a Do It:

1. Select the Do It you want to delete.
2. Click the Delete button. The Delete? Dialog Box will appear.
3. Click Yes to confirm the deletion, No to cancel.

Modifying a Do It

To modify a Do It:

1. Select the Do It you want to modify.
2. Click the Modify button. The Do It Dialog Box will be displayed.
3. Enter your modifications in the Do It Dialog Box in the appropriate data fields.
4. Click OK.

Executing a Do It

To execute a Do It:

1. Select the Do It you want to execute.
2. Click the Execute button. The Do It will be executed.

If the Do It does not execute, you may not have defined it correctly or there may not be enough memory available on your workstation.

Moving and Copying Do Its

You may copy a Do It to multiple items after it has been inserted in a Do Its Window. Also, you may move a Do It link from one item to another.

Moving a Do It

Moving a Do It creates a link with a new item and deletes the link from the item from which it was moved.

To move a Do It to another item:

1. Select the item associated with the Do It that you want to move and open the Do Its Window by clicking the Do It button.
2. Select the destination item (the one to which you want to move the Do It) and open its Do Its Window by clicking the Do It button.
3. Select the Do It that you want to move, hold down the left mouse button, drag the Do It to the destination item’s Do Its Window, and release the mouse button. The Confirm Move or Copy Dialog Box (Figure 5-4) will be displayed.

![Confirm MOVE or COPY](image)

Figure 5-4: Confirm Move or Copy Dialog Box

4. Select **Move**.

*Copying a Do It*

Copying a Do It to another item creates a link between the Do It to the new item. The Do It program files are not copied. This feature provides the capability to link a Do It to multiple items.

**To copy a Do It to another item:**

1. Select the item associated with the Do It that you want to copy and open the Do Its Window by clicking the **Do It** button.

2. Select the destination item (the one to which you want to copy the Do It) and open its Do Its Window by clicking the **Do It** button.

You should now have two Do Its Windows open—one for the originating item and one for the destination item.

3. Select the Do It that you want to copy, hold down the left mouse button, drag the Do It to the destination item’s Do Its Window, and release the mouse button. The Confirm Move or Copy Dialog Box will be displayed.

4. Select **Copy**.
TIME AGENTS

Time agents are useful to support execution of repetitive tasks that occur at regularly scheduled times. For example, suppose you have the ToDo item Generate Weekly Budget Report that consists of three steps: 1. Get budget data, 2. Review budget data, and 3. Print budget report. The first step involves downloading data from a remote computer into the appropriate budget report format. In addition, the first step is performed every Monday morning. If a Time-Contingent Do It is linked to this step, the budget data could be downloaded automatically at a specified time without your input. You could even set the Time-Contingent Do It to execute at a time such that the budget data is waiting for you when you arrive at work on Monday morning. You could then start immediately on the next step of reviewing the data, saving the time you would have spent waiting for the data to download.

[*] Executing Time Agents

Individual time agents are started through the TimeAgent Program. Hence, the TimeAgent Program must be running before you can execute a time agent. If KWS is not running when the TimeAgent Program starts a time agent, you will be prompted for your KWS login information, which is required to obtain access to the KWS database. However, the KWS application will not be started; only its database will be accessed.

To start the TimeAgent Program:

1. Select Tools from the KWS Menu Bar.

2. Select TimeAgent from the Tools Menu options. The KWS TimeAgent Window will be displayed (Figure 5-5).

Figure 5-5: KWS TimeAgent Window
If you want a time agent to execute when you are not at your workstation, you must leave your workstation on with KWS and the TimeAgent Program running. If KWS is closed, the TimeAgent program will also close, and the Time Agent will not execute.

To close the TimeAgent Program:

1. Switch to the KWS TimeAgent Window using normal Windows procedures, e.g., [Ctrl-Tab].

2. Select File, Close from the TimeAgent Window Menu Bar or double click on the Control-menu box in the upper left corner of the window.

* Adding a Time Agent

Time agents are added within the TimeAgent Program. Remember that you may define time agents that are associated with a Do It and time agents that run independently of Do Its. When a Do It is associated with a time agent, it is referred to as a Time-Contingent Do It.

To add a time agent [not associated with a Do It]:

1. If you have not already done so, start the TimeAgent Program.

2. In the KWS TimeAgent Window, click the Add button. The TimeAgent Event Detail Window will appear (Figure 5-6).

![Event Detail Window](image.png)

Figure 5-6: TimeAgent Event Detail Window

The TimeAgent Event Detail Window contains the following data fields:
<table>
<thead>
<tr>
<th>Title</th>
<th>A textual description identifying the time agent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command Line</td>
<td>The path and executable file name of the program to be executed.</td>
</tr>
<tr>
<td>Parameters</td>
<td>Any additional parameters required in the Command Line when executing the program.</td>
</tr>
<tr>
<td>Prompt Before Execution</td>
<td>An indicator that specifies whether the user should be prompted before the program is executed.</td>
</tr>
<tr>
<td>Type of Action</td>
<td>Indicates that the time agent executes a program when set to the value Run Program or displays a message when set to the value Display Message.</td>
</tr>
<tr>
<td>Owner</td>
<td>The KWS user who added the time agent.</td>
</tr>
<tr>
<td>Assign To</td>
<td>The user or work group who can execute the time agent.</td>
</tr>
<tr>
<td>Frequency</td>
<td>How often the time agent should be run. Possible values are: One Time, Yearly, Monthly, Weekly, Week Days (every day Monday through Friday), Daily (every day of the week), and Hourly. [Note that a time agent with a Frequency value of One Time will automatically be deleted after it executes.]</td>
</tr>
<tr>
<td>Time</td>
<td>The hour and minute that the time agent should execute.</td>
</tr>
<tr>
<td>Week Day</td>
<td>The day of the week the time agent should execute when Frequency is set to Weekly.</td>
</tr>
<tr>
<td>Day</td>
<td>The day of the month the time agent should execute when Frequency is set to Monthly.</td>
</tr>
<tr>
<td>Month</td>
<td>The month of the year the time agent should execute when Frequency is set to Yearly.</td>
</tr>
<tr>
<td>Year</td>
<td>The year the time agent should execute when Frequency is set to One Time.</td>
</tr>
<tr>
<td>Enable Event</td>
<td>Activates the time agent. This box must be checked before the time agent will execute.</td>
</tr>
</tbody>
</table>
3. Enter the information describing the time agent into the TimeAgent Event Detail Window.

4. Click OK.

A Time Agent associated with a KWS Do It is considered to be a Time-Contingent Do It.

To add a time agent [associated with a Do It]:

1. Select the item to which you want to link the Time-Contingent Do It.

2. Click the Do It button or icon. The Do Its Window will appear.

3. Click the Insert button. The Do It Dialog Box will appear.

4. Enter the information describing the Do It in the Do It Dialog Box. [See Do Its in this chapter, for details on entering data field values.]

5. Click the Time Agent Setup... button. The TimeAgent Event Detail Window will appear.

6. Enter the data field values to define the time agent. The values for Title and Command Line are automatically set to the values entered in the Do It Dialog Box and cannot be changed.

7. Click OK. You will return to the Do It Dialog Box. A clock icon will appear to the left of the Do It title to indicate that it is a Time-Contingent Do It.

8. Click OK. The new Time-Contingent Do It will appear in the Do Its Window.

*Modifying a Time Agent*

To modify a time agent:

1. Select the time agent to be modified.

2. Click the Modify button.

3. Enter the modifications.

4. Click OK.

*Deleting a Time Agent*

To delete a time agent:

1. Select the time agent to be deleted.
2. Click the **Delete** button.

💡 **Copying a Time Agent**

*To copy a time agent:*

1. Select the time agent to be copied.
2. Click the **Copy** button. A copy of the time agent will appear with the same title as the original but prefixed by **COPY OF**.

💡 **Refreshing a Time Agent**

*To refresh a time agent:*

1. Select the time agent to be refreshed.
2. Click the **Refresh** button. The time agent information will reflect current values stored in the KWS database.

💡 **Deactivating a Time Agent**

*To deactivate a time agent:*

1. Select the time agent to be deactivated.
2. Click the **Modify** button. The Event Detail Dialog Box will appear.
3. Uncheck the Enable Event check box.

💡 **Reactivating a Time Agent**

*To reactivate a time agent:*

1. Select the time agent to be Reactivated.
2. Click the **Modify** button. The Event Detail Dialog Box will appear.
3. Check the Enable Event check box.

**DOITBASE**

The DoItBase contains a set of archived Do Its that have been saved by you and other users within your organization. You may add Do Its to the DoItBase or you may retrieve Do Its for your own use. Do Its in the DoItBase are stored in zip file format, which is used to compress multiple files into one file. You may then expand this compressed file to return the multiple files into their original format.

💡 **Starting the DoItBase**

*To start the DoItBase application:*

1. Select **Tools** from the KWS Menu Bar.
2. Select **DoItBase** from the **Tools** Menu options. The KWS DoItBase Window will open (Figure 5-7).
Opening a DoItBase Database

To open an existing DoItBase database:

1. Select File from the DoItBase Menu Bar.

2. Select Open DoItBase from the File Menu. The Open DoItBase Dialog Box (Figure 5-8) will be displayed.

3. Select from the Defined DoItBases listed in the Open DoItBase Dialog Box and click OK.
   The KWS DoItBase Window now contains a list of all of the archived Do Its in the selected database (Figure 5-3).
Adding a New DoItBase Database

To add a new DoItBase database:

1. Select File from the DoItBase Menu Bar.

2. Select New DoItBase from the File Menu. The Add DoItBase Dialog Box (Figure 5-10) will be displayed.

3. Enter a value in the DoItBase Name field and click OK.

Adding an Archive

To add an archive:

1. Click the Add button. The Archive Detail Dialog Box (Figure 5-11) will appear.
The Archive Detail Dialog Box contains the following data fields:

**File Name**
The full path and file name of the zip file containing the Do It.

**Brief Description**
A short description that identifies the Do It.

**Full Description**
A long description that provides information about the contents of the zip file, Do It installation instructions, and any other information that might be useful.

**Required Programs**
A list of commercially available software programs required to execute the Do It (e.g., Microsoft Excel).

2. Enter the information describing your archived Do It.

3. Click **OK**.

**Copying an Archive**
When an archive is copied, only the definition of the archive is copied. The actual archive file is not copied. Both definitions will be linked to the same file. If you want to link to a separate archive file, you must copy the archive.
file and add into the DoItBase a new definition that points to it.

To copy an archive:

1. Select the archive to be copied from your DoItBase list.

2. Click the **Copy** button. The archive definition will be copied and displayed in your DoItBase list prefixed by **COPY OF:**.

---

**Modifying an Archive**

To modify an archive:

1. Select the archive to be modified from your DoItBase list.

2. Click the **Modify** button. The Archive Detail Dialog Box will appear.

3. Enter your modifications into the Archive Detail Dialog Box.

4. Click **OK**.

---

**Deleting an Archive**

To delete an archive:

1. Select the archive to be deleted from your DoItBase list.

2. Click the **Delete** button. A message box will be displayed to confirm the delete.

3. Click **Yes**.

---

**Viewing an Archive**

The DoItBase application contains a zip file viewer that enables you to view the contents of a zip file.

To view an archive:

1. Select the archive to be viewed from your DoItBase list.

2. Click the **View** button. The View Zip File Window will be displayed listing the contents of the zip file (Figure 5-12).

3. Exit the View Zip File Window by selecting **File, Exit** from the menu bar or double-clicking on the Control-menu box in the upper left corner of the window.
Building a DoItBase Automatically

The DoItBase application will automatically populate a DoItBase from a directory containing zip files.

To automatically build a DoItBase:

1. Open an existing or create a new DoItBase.
2. Select File from the DoItBase Menu Bar.
3. Select Properties from the File Menu. The DoItBase Properties Dialog Box will be displayed (Figure 5-13).
4. Enter the name of the directory containing the zip files into the Default Directory field.
5. If you want another user or work group to be able to access your DoItBase, enter the desired User ID in the Assigned To field.
6. Click OK. The zip files will be added to your DoItBase with the brief description value for each set to the name of the file.
The DoItBase application can determine if the zip files entered in the archive definitions still exist and, if not, delete the definition. This process is called reconciling a DoItBase.

To reconcile a DoItBase:

1. Open the DoItBase that you want to reconcile.
2. Select File from the DoItBase Menu Bar.
3. Select Reconcile from the File Menu. You will be prompted to delete any DoItBase archive definitions where the zip file does not exist.

You may search for text strings contained in the values for the Short Description, Long Description, and Required Programs of an archive.

To search a DoItBase:

1. Select Edit from the DoItBase Menu Bar.
2. Select Find from the Edit Menu. The Find Dialog Box will appear (Figure 5-14).
3. Enter the text field for which you want to search into the Find What field.
4. Select which data fields to search by checking any or all of them.
5. If desired, check Match Case.
6. Click OK. The first definition in your DoItBase Window that contains the text string will be highlighted.
Figure 5-14: Find Dialog Box for Searching a DoItBase
CHAPTER 6 TASK PALETTE

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Using the Task Palette 6-2
Task Palette Manager 6-13
OVERVIEW

The Task Palette application provides a mechanism for storing tasks that can be added to your KWS model as needed. Typically, tasks that are repetitive and ad hoc in nature are good candidates for the Task Palette. For example, the task of generating a purchase order request is done the same way each time. However, when it is done varies from instance to instance. The Task Palette application enables you to store the task “Generate Purchase Request” so that you can easily access it and add it to KWS whenever you need to perform the task.

Within the Task Palette, you can create multiple “palettes.” Each palette contains a set of related “palette tasks.” For instance, you can define a palette titled Admin that contains tasks for performing various administrative tasks for which you are responsible and another one titled Contracting that contains tasks for performing contracting activities. Any of these palette tasks can be added to your KWS model by opening the palette that contains them and copying them to KWS.

Palette tasks are originally defined within KWS and then copied to a palette. They have the same structure as any KWS task including child tasks, steps, attachments, and Do Its. Once copied to a palette, some of the field values can be modified, but you cannot change the task structure.

USING THE TASK PALETTE

Starting the Task Palette

To start the Task Palette application:

1. Select Tools from the KWS Menu Bar.
2. Select Task Palette from the Tools Menu.
   An empty KWS Palette Window (Figure 6-1) opens.
Opening an Existing Task Palette

To open an existing Task Palette:

1. Select **File** from the KWS Palette Menu Bar.
2. Select **Open Palette...** from the **File** Menu. The Open Palette Dialog Box (Figure 6-2) opens.
3. Select the organization to which the palette belongs.
4. Select the name of the palette to open. The **Palette Name** and **Owner** values of the selected palette will be displayed in their respective data field boxes.
5. Click OK. 
The palette opens and its individual palette tasks will be represented by a title and an icon in the KWS Palette Window (Figure 6-3). Also, the name of the palette will appear in the window’s title bar.

![KWS Palette Window With an Open Task Palette](image)

Figure 6-3: KWS Palette Window With an Open Task Palette

- **Status Bar**

  The Task Palette Status Bar is split into three sections:

  - **Left**
    
    The last operation performed on the Task Palette.

  - **Middle**
    
    The owner of the currently selected palette.

  - **Right**
    
    Your privileges for the currently selected palette.

- **Creating a New Palette**

  **To create a new palette:**

  1. Select **File** from the KWS Palette Menu Bar.

  2. Select **New Palette...** from the **File** menu. The name of the palette will displayed as “untitled” in the window’s title bar. To give it a name, you must save the new palette.

- **Saving a Task Palette**

  **To save a task palette:**

  1. Select **File** from the Task Palette Menu Bar.

  2. Select **Save As...** from the **File** menu. The Save As Dialog Box opens (Figure 6-4).
6-5

*!*  Copying a Task from KWS to a Palette

<table>
<thead>
<tr>
<th>Admin</th>
<th>Contracting Personnel</th>
<th>Travel</th>
</tr>
</thead>
</table>

Save As

Palette Name:

Organization:

Owner:

OK

Cancel

Figure 6-4: Task Palette Save As Dialog Box

3. Enter a name for the new Task Palette into the Palette Name field box.

4. Click OK.

**Copying a Task from KWS to a Palette**

A task can be copied from any ToDo, Task, or Task Manager Window to a Palette. When you copy the task, all its child tasks, steps, attachments and Do Its also are copied.

You cannot drag a task from a Graphical Task Window to a palette.

To copy a task from KWS to a palette:

1. In KWS, select the top level task of the task you want to copy to a palette.

2. Click on a task within a KWS task window and while holding down the mouse button, drag the task to the KWS Palette Window. A Palette icon opens, entitled with the name of the selected task.

**Copying a Palette Task to KWS**

You can copy a palette task to any ToDo, Task or Task Manager Window. When you copy the task, all its child tasks, steps, attachments, and Do Its are copied. If you copy a task to a Task Window or Task Manager Window, the task is changed to Public and becomes a child of the task to which you copied it. If you copy a task to your ToDo List, it automatically becomes Private and is assigned to you.

You cannot drag a palette task from a palette to a Graphical Task Window.

To copy a palette task to KWS:

1. Open the palette that contains the palette task you want to copy to KWS.
2. Select the palette task that you want to copy.

3. Click on a palette task and, while holding down the mouse button, drag the palette task to the desired location in KWS.

   If the palette task requires any variable assignments before it can be copied, you will be prompted for the values (Figure 6-5). If the palette task contains any invalid values, such as an invalid User ID, you will be prompted for a new value.

```
Figure 6-5: Task Attributes Dialog Box
```

To copy a palette task from one palette to another:

1. Open the two task palettes.

2. Select the palette task to be copied by clicking on the palette task icon. If you wish to drag more than one palette task, select any additional palette tasks by holding the [Ctrl] key down and clicking the other palette task icons.

3. Drag the icons to the second task palette. The Move, Copy dialog box appears.

```
Figure 6-6: Move, Copy Dialog Box
```

4. Click Copy to link the palette task to the second task palette.
Moving from one palette to another.

To move a palette task from one palette to another:

1. Open the two task palettes.

   Select the palette task to be moved by clicking on the palette task icon. To drag more than one palette task, select any additional palette tasks by holding the [Ctrl] key down and clicking the other palette task icons.

3. Drag the icons to the second task palette.
   The Move, Copy dialog box appears.

![Figure 6-7: Move, Copy Dialog Box](image)

4. Click **Move** to move the links to the palette task to the second task palette.

Deleting a Palette

To delete a palette:

1. Select **File** from the Task Palette Menu Bar.

2. Select **Delete Palette...** from the **File** Menu.
   The Delete Palette Dialog Box (Figure 6-8) opens.
3. Select the Palette to be deleted. The Palette Name and Owner values of the selected task will be displayed in their respective data field boxes.

4. Click OK. A message box opens and asks you to confirm the deletion.

5. Click Yes.

**Editing the Name of a Palette Task**

When a task is copied into a palette, the name of its icon is set equal to the title of the task. However, if you would like another title you can change it.

**To edit the name of a palette task:**

1. Click once on the name of the icon to be changed, a line cursor will appear.

2. Enter your modifications by adding or deleting text from the label.

If you are unable to edit the name of the palette, you may not have edit permission.

**Deleting a Palette Task**

**To delete a palette task:**

1. Select the palette task to be deleted.

2. Press the [Del] key. A message box opens and asks you to confirm the deletion.

3. Click Yes.
Changing Task Palette Settings

A few options are available for customizing your Task Palette environment. These options are available from the Settings Menu in the KWS Palette Menu Bar.

To change Task Palette settings:

1. Select **Settings** from the KWS Palette Menu Bar.
2. Select **Application** from the **Settings** menu.
3. Select **Preferences** from the **Application** submenu.

The following options are offered:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always on Top</td>
<td>By default, the KWS Palette Window will always be in front of any other windows. This option allows you to change the default so that when you move to another window, the KWS Palette Window will move to the background.</td>
</tr>
<tr>
<td>Prompt for Icon Name</td>
<td>By default, when you copy a task to a palette, the task icon is given the name of the selected task. This option will cause a prompt to appear whenever you copy a task to a palette; you will be asked to provide a name for the task icon.</td>
</tr>
<tr>
<td>Confirm Copy</td>
<td>By default, when you copy a palette task, you are not asked to confirm whether you want to copy the task. This option will cause a prompt to appear whenever you copy a task.</td>
</tr>
<tr>
<td>Load on KWS Start Up</td>
<td>By default, when KWS is started, the Task Palette is not started. This option will cause the Task Palette program to start whenever KWS is started.</td>
</tr>
<tr>
<td>Notification</td>
<td>This option sets the notification preference used whenever a palette task is changed. By default, whenever a palette task is modified a Palette...</td>
</tr>
</tbody>
</table>
Modification message is sent to all users who have a task instantiated from the palette task. You can choose to be prompted whether or not to send a Palette Modification message or you can choose to never send a Palette Modification message.

4. Select your desired option.

- Setting Palette Permissions

You may assign permissions for other users to use and edit your palette.

Note: By default, nobody can use or edit the task palettes you create.

To set palette permissions:

1. Select Settings from the KWS Palette Menu Bar.
2. Select Palette from the Settings Menu.
3. Select Permissions... from the Palette submenu.

The Palette Security Dialog Box opens (Figure 6-9).

The palette security options are:

- **None**
  - The user cannot open or manipulate the palette.

- **Open, Copy From**
  - The user can open the palette and copy palette tasks from the palette.

- **Open, Copy From, Copy To, Edit**
  - The user can open, copy, and edit any palette task in the palette.

- **Open, Copy From, Copy To, Edit, Delete Items**
  - The user can open, copy, edit, or delete any palette task in the palette.

- **Owner**
  - The user has full rights, plus the permission to grant or revoke permissions for the palette to other users.

- **Administrator**
  - The user has the same privileges as the owner.
4. Select the organization by clicking the down arrow to the right of the **Organization** field and selecting the organization from the list. Use this to select the organization of the user to which you want to grant privileges. Notice that when the different organization is selected, the list of knowledge workers in the **Kwid** box below changes.

5. Select the user or group to assign rights by clicking once with the left mouse button on the name in the **Kwid** list. The selected ID will be highlighted in blue.

6. Select the set of access rights to grant by clicking on the appropriate set in the **Assigned Access Rights** box.

7. Click **OK**.

![Figure 6-9: Palette Permissions Dialog Box](image)

**Viewing a Task Palette Task**

You can view the task structure of a palette task and edit the task field values. You can also enter variable names for task field values so that users will be prompted to enter values when copying a palette task to KWS.
To edit a palette task:

1. Double-click on the task icon. The Task Palette Manager window opens in the main KWS window, with the palette task selected.

2. Use the Modify button on the button bar to modify the palette task.

△ Changing Palette Task Icons

You can change the palette task icon for an entire palette or for a single palette task.

![Default Icon](image)

Figure 6-10: Task Palette Default Icon Dialog Box

To change the default icon for all palette tasks on a palette:

1. Select the palette to change.

2. Select **Settings** from the Task Palette menu bar.

3. Select **Palette** from the **Settings** menu.

4. Select **Default Icon** from the **Palette** submenu. The Default Icon dialog box will appear.

5. Click the **Select** button. The Icon Browser dialog box will open.

6. Select the icon file to be used as the default icon.

7. Click **OK**.
   You will be returned to the Default Icon dialog box.

8. Click **OK**.

To change the default icon back to the palette default icon:

1. Select the palette to change.

2. Select **Settings** from the Task Palette menu bar.

3. Select **Palette** from the **Settings** menu.
4. Select Default Icon from the Palette submenu. The Default Icon dialog box will appear.

5. Click Reset.

6. Click OK.

To change the icon for a single palette task:

1. Select the palette task to change.

2. Open the Task Dialog box for the palette task by double clicking on the palette task icon.

3. Click the Change Icon button. The Icon Browser dialog box will open.

4. Select the new icon file.

5. Click OK.

To change the icon for a single palette task back to the default icon:

1. Select the palette task to change.

2. Open the Task Dialog box for the palette task by double clicking on the icon.

3. Click the Set To Default button. The icon will change back to the default icon for the palette.

When an icon for the single palette task is set back to the default icon, it is the default icon for the palette, which is not necessarily the Task Palette program default icon.

**TASK PALETTE MANAGER**

The Task Palette Manager (Figure 6-11) is used to create and manage palette processes. The Task Palette Manager is similar to the Task Manager Window except that, instead of processes, the Task Palette Manager lists all palettes owned by the current user’s organization.
To assign a variable value to a field:

You can assign a variable name to a field value or perform simple calculations within a field. A variable name can be any text string that starts with a dollar sign ($). For example, you can enter the variable name $ID in the ID field. Then, whenever you copy the task to KWS you will be prompted to enter a value for the $ID variable. The ID field will then be set to the value specified. Fields can also contain simple mathematical formulas. For example, you can enter the formula $START_DATE + 5 into the Date Due field. Whenever you copy the palette task to KWS you will be prompted to enter a value for the $START_DATE variable. The Date Due field will then be set to the value specified plus five.

When you are creating a palette task that will be used by other users, it is recommended that you enter variable values into the Assigned To, Performed By, and Assigned By fields. For example, suppose all three fields are set to the variable $KWS_USER. Each time the task is copied to KWS, the user copying it will be prompted to enter one value that will be assigned to all three fields. You may also leave these fields blank, and the values will default to the User ID of the user dragging the task to KWS.

The Task Palette includes the Task Palette Manager. This window is available under the Task menu within KWS, along with the Task Manager and Graphical Task Manager. The Task Palette Manager provides the capability to edit Palette Processes within KWS, using the same interface used to create normal processes. A list of all of the Palettes containing a particular Palette Process can also be viewed.
To edit palette processes in the Task Palette Manager:

1. Select Task Palette Manager from the Task menu.  
The Task Palette Manager window appears. This browser window allows you to browse through palette process hierarchies.

2. Use the Insert, Delete, and Modify buttons on the button bar to add, remove, or change palette tasks.

To view a list of palettes containing a specified palette process:

1. Select a palette process in the top-level window of the Task Palette Manager window.

2. Click the Palettes button on the button bar. 
The Palettes Containing Task Dialog Box that appears contains a list of all of the palettes containing the selected palette process.

3. Click OK to close the dialog box.

To filter the list of palette processes in the Task Palette Manager:

1. While the Task Palette Manager window is active, select Filter... from the Window|Options menu.

   The Task Window Options dialog box appears. 
   Selecting users and groups in the User/Groups listbox only displays palette processes owned by the users/groups.

2. Check the Save Options as Default button if you want to use the same Task Palette Manager Windows options in the future.

3. Click OK to save the specified options.

To add a palette process to a task palette:

1. Open the Task Palette Manager window by selecting Task Palette Manager from the Task window.

2. Drag a palette process from the Task Palette Manager window to a task palette. A link to the palette process will be placed on the palette.

Ʌ  Graphical Editing of Palette Processes  
Palette processes can now be edited graphically in a Graphical Task Manager window by selecting Graph in the Available Options Menu of the Task Palette Manager.
To edit a palette process graphically:

1. Open the Task Palette Manager window by selecting Task Palette Manager from the Task window.

2. Select a palette process and select Graph from the Available Options Menu for the task. A Graphical Task Manager window opens and displays the palette process. The due date of the top-level task of the palette process ($DUEDATE) will be set to the current date, and all editing of dates will be relative to this date.

3. When editing the palette process, select SaveChanges from the Windows menu.
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OVERVIEW

KWS provides several options for customizing the KWS environment. These options include configuring the KWS Program Window, setting font and display preferences, defining options for handling attachments, entering knowledge worker and work group information, and setting up KWS database connections. The following sections describe these options.

SYSTEM OPTIONS

❖ Non-Working Day Prompt

KWS allows you to set the prompt option for non-working days. This setting determines what action the program will take when a task is due on a non-working day.

To change the non-working day prompt option:

1. Select File from the KWS Menu Bar.
2. Select Preferences from the File menu.
3. Select System Options from the Preferences submenu. The Options dialog box opens.
4. In the Task Scheduling section, select the prompt option you desire.
5. Click OK.

❖ Notification Option

KWS can be set to automatically open the Notifications window on startup if you have new notifications.

To set the Notifications option:

1. Select File from the KWS Menu Bar.
2. Select Preferences from the File menu.
3. Select System Options from the Preferences submenu. The Options dialog box will appear.
4. In the Notifications section select the check box for Open window on startup. If the box is checked, the Notifications window will automatically open on KWS startup, whenever you have new notifications.
**Notification as Email**

Notifications can be sent to you as email.

To allow other users to send you notifications as email:

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** menu.
3. Select **System Options** from the **Preferences** submenu. The Options dialog box will appear.
4. In the Notifications section select the check box for **Send Notifications as Email**. If the box is checked, other users will be able to send notifications to you through your email package.

---

**KWS PROGRAM WINDOW CONFIGURATION**

**Saving Your KWS Window Configuration**

KWS allows you to save your current window configuration with KWS. When you do this, the current size and location of all windows in the KWS workspace will be saved. These windows will then be displayed each time you login to KWS until you save a new configuration.

To save your KWS window configuration:

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** Menu.
3. Select **Save Window Configuration** from the **Preferences** Menu.

or...

Instead of steps 1-3, you may enter **[Ctrl]+ S**.

The contents of a GTM Window, attachment query windows and Do It search windows are not saved.

**Displaying the Status Bar**

You can specify whether the status bar will be displayed in the KWS Program Window.

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** Menu.
3. Select **Show Status Bar** from the **Preferences** Menu.
If the **Show Status Bar** option has a check mark next to it, the Status Bar will be displayed. Otherwise, it will not be displayed.

**Displaying the Button Bar**

You can specify whether the button bar will be displayed in the KWS Program Window.

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** Menu.
3. Select **Show Button Bar** from the **Preferences** Menu.

If the **Show Button Bar** option has a check mark next to it, the Button Bar will be displayed. Otherwise, it will not be displayed.

**FONT AND DATA DISPLAY PREFERENCES**

KWS allows you to set preferences for fonts and displaying data fields. Preference options that are not window specific are accessed from the File Menu, Preferences option. Preference options that are window specific are accessed from the Window Menu.

**Display Font Setup**

**Setting Display Fonts**

You can specify the font to use to display text within KWS. The font you specify will be used for all text display within KWS, so any window can be active when you select this option.

**To set display fonts:**

1. Select **Preferences** from the KWS Menu Bar.
2. Select **Display Font...** from the **Preferences** Menu. The Font Window will be displayed (Figure 7-1).
3. Select your desired **Font**, **Font Style**, and **Size** values from the lists provided.
4. Click **OK**.
Figure 7-1: Font Window

**Display Field Setup**

*Specifying Display Fields* You can specify which data fields will be displayed, the order in which they will be displayed, the width of the data field, and whether text should be wrapped for each window type. These options are window specific, so the fields displayed are different for each window type. **Remember to make the correct window type active before you select this option.**

To access display field options for the active window:

1. Select **Window** from the KWS Menu Bar.

2. Select **Display Field Setup** from the **Window** Menu. The Display Field Setup Window for the active window type will appear (Figure 7-2).
Figure 7-2: Display Field Setup Window

The Display Field Setup Window contains the following information:

**Fields Displayed**
- The data fields that will be displayed in the window.

**Fields Not Displayed**
- The data fields that will not be displayed in the window.

**Width**
- The display width of the data field.

**Wrap**
- Causes the text in the data field to wrap around to the next line within the boundaries of the data field width.

3. Within the Display Field Setup Window, any of the following procedures can be performed. When finished, click **OK** to save your changes.

* Specifying Data Fields To Display

To specify which data fields to display:

You specify which data fields to display by moving them between the **Fields Displayed** and the **Fields Not Displayed** lists.

1. Select the data field in the **Fields Displayed** list or the **Fields Not Displayed** list that you want to move.

2. Click the arrow button between the **Fields Displayed** and **Fields Not Displayed** lists that points toward the list to which you want to move the data field. The data field will move.
Reordering Data Fields

To reorder data fields:

1. Select the data field to be moved by clicking on it in the Fields Displayed list.

2. Move your cursor into the column of horizontal lines to the left of the data field titles. Do not hold down the mouse button. A thick bar will appear in place of the cursor.

3. Move the bar up or down through the column to the desired position.

4. Click the mouse button. The selected data field will be moved to the new position.

5. For each data field to be moved, repeat steps 1 through 4.

Setting Data Field Width

To set data field width:

1. Select the data field for which you want to change the display width.

2. Enter the new value in the Width field.

3. For each data field width to be changed, repeat steps 1 and 2.

Setting the Text Wrap Option

To set the text wrap option:

1. Select the data field for which you want the text to wrap.

2. Click the Wrap checkbox. A check will appear in the box.

3. For each data field for which the text is to wrap, repeat steps 1 and 2.

Printer Page Setup

Specifying Page Setup for Printing

You can specify page margins, headers, and footers to be used when printing from KWS. The values specified will be used for all text prints from KWS, so any window can be active when you select this option.

To specify page setup for printing:

1. Select Preferences from the KWS Menu Bar.

2. Select Printer Page Setup from the Preferences Menu. The Page Setup Window will appear (Figure 7-3).
3. Enter the desired values for the Page Width, Page Length, Top Margin, Bottom Margin, Left Margin, and Right Margin.

4. Enter any text that you would like to display in the header and footer and enter values for their Left, Center, and Right Margins. You may also specify replaceable parameters in the header and footer to display information such as the current date, database ID, or KWS User ID. To see a complete list of valid replaceable parameters, click the Replaceable IDs... button in the lower left corner of the Page Setup Dialog Box. The Print IDs Window will be displayed with the available IDs listed.

5. Click OK.

![Page Setup Window](image)

**Figure 7-3: Page Setup Window**

### Printer Font Setup

#### Setting Printer Fonts
You can specify the font that you want to use to print text from KWS. The font you specify will be used for all text prints from KWS so any window can be active when selecting this option. Note that these options only affect how the data will appear when printing and do not affect how the data appears in the window.

**To set printer fonts:**

1. Select Preferences from the KWS Menu Bar.
2. Select **Printer Font...** from the **Preferences** Menu. The Font Window will appear (Figure 7-1).

3. Select your desired **Font**, **Font Style**, and **Size** values.

4. Click **OK**.

### Printer Field Setup

#### Specifying Printer Field Options

You can specify which data fields will be printed, the order in which they will be printed, the width of the data field, and whether text should be wrapped when printing from each window type. These options are window specific, so the fields displayed are different for each window type. **It is important to remember that you have made the correct window type active before you select this option.** Also note that these options only affect how the data will appear when printing and do not affect how the data appears in the window.

To access print field options for the active window:

1. Select **Window** from the KWS Menu Bar.

2. Select **Printer Field Setup** from the **Window** Menu. The Print Field Setup Window for the active window type will appear (Figure 7-4).

![Figure 7-4: Print Field Setup Window](image)

The Print Field Setup Window contains the following information:
Fields Displayed  The data fields that will be printed from the window.

Fields Not Displayed  The data fields that will not be printed from the window.

Width  The print width of the data field.

Wrap  Causes the text in the data field to wrap around to the next line within the boundaries of the data field width.

3. Within the Print Field Setup Window, any of the following procedures can be performed. When finished, click OK to save changes.

❖ Specifying Data Fields To Print

Specify which data fields to print by moving them between the Fields Displayed list and the Fields Not Displayed list.

1. Select the data field in the Fields Displayed list or the Fields Not Displayed list that you want to move to the other list.

2. Between the Fields Displayed and Fields Not Displayed lists, click the arrow button that points toward the list to which you want to move the data field. The data field will be moved.

3. For each data field you want to move, repeat steps 1 and 2.

❖ Reordering Data Fields

To reorder data fields:

1. Select the data field to be reordered by clicking on it in the Fields Displayed list.

2. Move your cursor into the column of horizontal lines to the left of the data field titles. Do not hold the mouse button down. A thick bar will appear in place of the cursor.

3. Move the bar through the column to the desired position.

4. Click the mouse button. The selected data field will be moved to the new position.

5. For each data field that you want to reorder, repeat steps 1 through 4.
Setting the Data Field Width

To set data field width:

1. Select the data field for which you want to change the print width.
2. Enter the new value in the Width field.
3. For each data field width you want to change, repeat steps 1 and 2.

Setting the Text Wrap Option

To set the text wrap option:

1. Select the data field for which you want the text to wrap.
2. Click the Wrap checkbox. A check will appear in the box.
3. For each data field for which you want the text to wrap, repeat steps 1 and 2.

ATTACHMENT OPTIONS

Customize the KWS environment for handling attachments by setting file associations, specifying a file viewer, and defining your Applications List. These options are described in the following sections.

Setting File Associations

File associations are relationships between files and the applications used to manipulate them. These relationships are based on the one to three character suffix that appears after the period in the filename. For example, a file name of budget.doc has a file extension of doc. Most applications append a file extension that is unique to the files created. When a file is associated with an application, you can open the file and start the application at the same time.

In the Windows environment, these associations are managed within the File Manager. When you install Windows, some files are already associated with applications and you may add your own associations. During initial installation, KWS imports the Windows File Manager associations into its own Associations List. You may add to and modify your KWS Associations List. KWS uses this information to determine the Application Name for an attachment when it is imported or to launch an attachment for editing if an Application Name has not been specified.

Setting KWS File Associations

To set KWS file associations:

1. Select File from the KWS Menu Bar.
2. Select Preferences from the File Menu.
3. Select **Associations** from the **Preferences** Menu. The File Extension Associations Window will be displayed (Figure 7-5).

4. Enter the extension to be associated with an application in the **Extension** field.

5. Enter the path and command line for executing the application in the **Command** field by either typing the value into the field or by clicking the file browser button on the right and selecting the file in the file browser dialog box.

6. Click the **Set** button.

7. For each file association you wish to create, repeat steps 4 through 6.

8. When finished, click **OK**.

When your KWS Associations List is modified, your Windows Association List is not updated and vice versa. These are two separate lists. KWS simply takes advantage of the contents of the Windows Association List to populate the KWS Associations List when it is initially installed on your workstation.

**Specifying a File Viewer**

KWS enables you to view an attachment without having to launch the application used to create it. However, a file viewer must be specified before this option is available. A file viewer is a software package that displays the contents of a file as it would be displayed in the application that created it. A variety of commercially available file viewers allow users to view common
file formats such as text files, word processing documents, database files,
and graphic files.

Specifying a File Viewer

To set up a file viewer:

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** Menu.
3. Select **File Viewer** from the **Preferences** Menu. The Select File Viewer Window will be displayed (Figure 7-6).
4. Select the path and executable file name for your file viewer software.
5. Click OK.

![Figure 7-6: Select File Viewer Window](image)

Specifying a WWW Browser

KWS enables you to view a HTTP attachment by automatically launching your WWW browser. To enable KWS to launch your WWW browser, you must first define the location of your browser.

To define a WWW Browser:

1. Select the **File** menu from the KWS Menu Bar.
2. Select **Preferences** from the **File** menu.
3. Select **WWW Browser** from the **Preferences** submenu. The Select WWW Browser window will open.
4. Select your browser program.
5. Click OK.

**Specifying a FAX Program**

KWS has the option to export an attachment as a FAX. To enable KWS to launch your FAX program, first define the location of your FAX program.

**To define a FAX program to be used within KWS:**

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** menu.
3. Select **FAX** from the **Preferences** submenu. The Select FAX Program window will appear.
4. Select your FAX program.
5. Click **OK**.

**Application List Setup**

Before KWS can launch the application program used to create or edit an attachment file, it must know the application's location and executable command line. For example, if a user wants to edit an attachment file created in WordPerfect, KWS must know the location of the requesting user's executable file for WordPerfect (e.g., \c:\wpwin\wpwin.exe). Using this information, KWS can launch the application with the associated attachment file. In KWS, this information is stored in the Application List.

Each KWS user maintains their own personal Application List. When you set up your Application List, you will choose the application names from the Master Application List. The Master Application List is entered by your KWS System Administrator and contains the standard names given to applications within KWS.

The purpose of the Master Application List is to ensure consistency in naming applications throughout KWS. Without this consistency, problems may arise when you try to edit an attachment created by another user who uses a different name for the application. For example, suppose you named your WordPerfect “Wpwin” and another user named theirs “WordPerfect,” and each of you created attachments using these values in the Attachment Profile. When either of you tried to edit an attachment created by the other, KWS would not be able to find the application required to launch the file. To solve the problem, each of you would have to add the other user’s
application to your application list. In a large KWS environment, this fix is both cumbersome and confusing.

**Adding Applications to Your Application List**

To add an application to your Application List:

1. Select **File** from the KWS Menu Bar.
2. Select **Preferences** from the **File** Menu options.
3. Select **Application List...** from the **Preferences** Menu options. The Application List Dialog Box will appear (Figure 7-7).
4. Select the application name to add to your list by clicking the small right arrow to the right of the **Application Name** field and then clicking on the desired application name from the list provided. The name you select will be entered for the value in the **Application Name** field, and its corresponding executable command will be entered for the value in the **Command Line** field.
5. The value in the **Command Line** field is a default value associated with the Application Name in the Master Application List. If this value is not correct for your individual workstation, change it by entering the correct value. To enter the value, type it into the field or select it by clicking the file browser button to the right of the field.
6. Once you have entered the **Application Name** and **Command Line** values, click the **Set >>>** button on the left of the dialog box to add it to your list.
7. For each application to be added to your list, repeat steps 4 through 6.
8. When finished adding applications, click **OK**.
To change the Command Line of an Application:

1. Select File from the KWS Menu Bar.
2. Select Preferences from the File Menu options.
3. Select Application List... from the Preferences Menu options. The Application List Dialog Box will appear.
4. Select the application name to be modified by clicking on its name in your application list. The name selected will be displayed in the Application Name field along with its Command Line.
5. Enter the new value in the Command Line field.
6. Click the Set >>> button on the left side of the Application List Dialog Box. The new Command Line value should appear in the application list.
7. Click OK.

To delete an entry in your Application List:

1. Select File from the KWS Menu Bar.
2. Select **Preferences** from the *File* Menu options.

3. Select **Application List...** from the *Preferences* Menu options. The Application List Dialog Box will appear.

4. Select the application name to delete by clicking on its name in your application list. The name you select will be displayed in the **Application Name** field along with its **Command Line**.

5. Click the **Delete** button on the left side of the Application List Dialog Box. The application will be removed from the application list.

6. Click **OK**.

**Creating Private Application Templates**

When you create new attachments, KWS must be able to find a template file for the application. This template file is a file that is saved in the application's format. The template file is usually an empty file but may contain characters if desired. When you create a new attachment, KWS makes a copy of the template file and gives it a KWS generated filename. If a template file does not exist for a given application, you will not be able to create new attachments using its **Application Name**. However, you may still edit or view existing attachments with it.

KWS automatically generates a template file for an application selected from the Master Application List. This template file may be used for creating attachments, so it is not necessary to create template files. If you would rather have a personalized template for an application, you may create a private application template. For example, you may always want your Microsoft Word documents to be formatted using a specific style sheet. You may do this by creating a private application template for Microsoft Word that uses the style sheet.

**To create a private application template:**

1. Select **File** from the KWS Menu Bar.

2. Select **Preferences** from the *File* Menu options.

3. Select **Application List...** from the *Preferences* Menu options. The Application List Dialog Box will appear.

4. Select the application name for which to create a template by clicking on its name in your application list. The name selected will be displayed in the **Application Name** field along with its **Command Line**.

5. Click the **Launch** button on the left of the dialog box. KWS will launch the selected application.
6. Enter any text to be included in the template file and then save it using normal procedures for the application. \[\text{REMEMBER THE NAME AND LOCATION OF THE FILE YOU CREATE—YOU WILL NEED IT LATER.}\] Exit the application and you will return to the Application List Dialog Box.

7. Click the Select Template button on the left of the dialog box. The Select Template File Dialog Box will appear. Select the name of the file created in the previous step and click OK. Two asterisks will be displayed to the right of the Application Name to indicate that you have created a private template file for it.

8. Repeat steps 4 through 7 for each private template you want to create.

9. Click OK to save and exit the Application List Dialog Box.

\textbf{Editing a Private Application Template}

\textbf{To edit a private application template:}

1. Select File from the KWS Menu Bar.

2. Select Preferences from the File Menu options.

3. Select Application List... from the Preferences Menu options. The Application List Dialog Box will appear.

4. Select the application name for which you want to edit the template by clicking on its name in your application list. The name selected will be displayed in the Application Name field along with its Command Line.

5. Click the Edit Template button on the left of the dialog box. KWS will launch the selected application with the template file.

6. Edit the template file. When you are finished editing, save the file using normal procedures for the application. \[\text{DO NOT CHANGE THE NAME OF THE FILE.}\] Exit the application and you will return to the Application List Dialog Box.

7. Click OK to save and exit the Application List Dialog Box.

\textbf{Adding Private Application Names to Your Application List}

KWS allows you to add applications to your personal Applications List that are not in the Master Application List. This capability is provided so attachments can be created using an application that has not been set up yet on the Master Application List. It is not recommended for regular use unless you do not need to share attachments with other users.

KWS will automatically set the Storage Type to Private for attachments created using Private Application Names. Hence, only the user creating the attachment will have access to it. As a private attachment, it will also be stored on the workstation where it was created. An attachment's private Application Name may be changed to an Application Name on the Master
Application List only after the application has been added by your System Administrator.

To add a private application name to your Application List:

1. Select File from the KWS Menu Bar.
2. Select Preferences from the File Menu options.
3. Select Application List... from the Preferences Menu options. The Application List Dialog Box will appear.
4. Enter the name of the application that you want to add to your list by typing it in the Application Name field.
5. Enter the executable file name for the application in the Command Line field by typing it into the field or by clicking on the file browser button to the right of the field and selecting the file name in the file browser window.
6. Once you have entered the Application Name and Command Line values, click the Set >>> button on the left of the dialog box to add the application to your list.
7. Click OK.

Archiving Attachments

The KWS Administrator can periodically run the Attachment Archive function. This function will go through the KWS database and move any attachment document with a long-term storage type of Archive and that has not been viewed or edited within the retention period to the archive directory. A document that has been archived will automatically be moved back to the KWS Attachment directory if it is accessed from within KWS. The Attachment Archive function will also delete any attachment with a long-term storage type of Delete and that has not been viewed or edited within the retention period.

To run the Archive Attachments function:

1. Select Admin from the KWS menu bar.
2. Select Archive Attachments from the Admin menu. The Archive Attachment dialog box will appear, giving you the option to cancel the operation.
3. Click **OK** if you want to archive attachments or click **No** if you want to skip archive but want to run the delete attachments option. The Delete Attachment dialog box will appear next, giving you the option to cancel the operation.

4. Click **OK** if you want to delete attachments.

### KNOWLEDGE WORKERS AND WORK GROUPS

KWS provides the capability to view a list of knowledge workers and work groups in your organization. In addition, you can modify information about a knowledge worker and add, modify, and delete work groups.

You must have KWS System Administrator privileges in order to add and delete KWS User IDs.

#### The User List

**Viewing the KWS User List**

The KWS User List contains a list of organizations and their users within an MDI window. The split-screen MDI window allows you to view the users within and organization and the work groups of each user.

To view the KWS user list:

1. Select **Admin** from the KWS Menu Bar.

2. Select **Knowledge Workers** from the **Admin** Menu. The Knowledge Workers Window (Figure 7-8) will be displayed with your organization and users listed.

3. A list of the users in an organization can be viewed by double-clicking on the organization. The users in the selected organization will appear in the lower level.
Move between levels of the window by clicking the browser arrow buttons located on the leftmost edge of the windows. If the browser arrow is gray, there are no items at the next level.

Each KWS User ID has information associated with it that describes the knowledge worker to whom it is assigned. This information includes the knowledge worker’s full name, supervisor, phone number, and so on.

To modify user information:

1. Select Admin from the KWS Menu Bar.

2. Select Knowledge Workers from the Admin Menu. The Knowledge Workers Window will appear.

3. Select the User ID for which you want to modify user information.

4. Click the Modify button. The Knowledge Worker Dialog Box (Figure 7-9) will appear.

Figure 7-8: Knowledge Workers Window
Figure 7-9: Knowledge Worker Dialog Box

The Knowledge Worker Dialog Box contains the following data fields:

User ID  
The selected KWS User ID.

Org  
The name of the organization to which the User ID has been assigned in the KWS database.

KWS Admin Privilege  
Indicates whether the User ID has been granted KWS administrative rights.

Name  
The first, middle, and last name of the user.

Supervisor  
The name of the user’s supervisor.

Office Symbol  
The user’s office symbol.

Phone  
The user’s telephone number.

FAX Phone  
The user’s FAX number.

Address  
The user’s business mailing address.

EMail Addr  
The user’s email address.

5. Change user information by entering the desired value into the data field. Unless you have the KWS Admin Privilege, the User ID and Org fields will be grayed out and cannot be changed.

6. Click OK to save your changes.
**Changing Passwords**

KWS includes a function for changing a user's KWS and database password. Changing a password from within KWS is only possible if the user's KWS and database accounts have the same name.

**To change a user password:**

1. Open the Knowledge Worker window.
2. Select the user's account.
3. Click the **Modify** button. The Knowledge Worker Modify Dialog Box opens.
4. Click **Change Password**.
5. Enter the new password.
6. Click **OK**.

**Viewing Work Groups Containing a Selected User ID**

From the User List, you may view a list of all of the work groups to which a selected User ID has been assigned. You may also view a list of all members assigned to work groups of the selected User ID.

**To view work groups containing a selected User ID:**

1. Select **Admin** from the KWS Menu Bar.
2. Select **Knowledge Workers** from the **Admin** Menu. The Knowledge Workers Window will appear.
3. Double-click on the User ID for which you want to view its assigned work groups. A Work Groups containing <User ID> Window will be displayed in the lower part of the Knowledge Workers Window.

**Work Groups**

A work group is two or more knowledge workers working toward a common business goal. In KWS, tasks can be assigned to individual knowledge workers and work groups. An organization within KWS is typically composed of multiple work groups with one or more knowledge workers assigned to each work group. When a task is assigned to a work group, each individual KWS User ID within the work group is assigned the task. Although a work group is part of a KWS organization, members of the work group can belong to different organizations.
Information about work groups may be viewed within the Work Groups Window (Figure 7-10), which displays a list of organizations and their Work Groups within an MDI Window. The split-screen MDI window allows you to view the work groups within an organization, the knowledge workers assigned to a work group, and the work groups assigned to a knowledge worker.

<table>
<thead>
<tr>
<th>Work Groups</th>
<th>Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Title</td>
</tr>
<tr>
<td>FF</td>
<td>FF ORG</td>
</tr>
<tr>
<td>GMT</td>
<td>General Management Team</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Groups in Organization GMT</th>
<th>ID</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td></td>
<td>Accounting</td>
</tr>
<tr>
<td>OPS</td>
<td></td>
<td>Operations</td>
</tr>
</tbody>
</table>

Figure 7-10: Work Groups Window

To view work group information:

1. Select Admin from the KWS Menu Bar.

2. Select Work Groups from the Admin Menu. The Work Groups Window will be displayed with your organization and work groups listed.

3. A list of the work groups in an organization can be viewed by double-clicking on the Organization. The work groups in the selected organization will appear in the lower level.

4. A list of the knowledge workers in a work group can be viewed by double-clicking on the Work Group. The work group list will move to the top level window and the knowledge workers in the selected work group will be displayed in the lower level.

5. A list of work groups to which a knowledge worker belongs can be viewed by double-clicking on the knowledge worker. The knowledge worker list will move to the top level window and the list of work groups
to which the knowledge worker belongs will be displayed in the lower level.

Move between levels of the window by clicking the browser arrow buttons located on the leftmost edge of the windows. If the browser arrow is gray, there are no items at the next level.

* Adding Work Groups

To add a Work Group:

1. Select Admin from the KWS Menu Bar.

2. Select Work Groups from the Admin Menu. The Work Groups Window will be displayed with your Organization selected and Work Groups listed.

3. Click Insert. The Work Group Dialog Box will appear (Figure 7-11).

![Figure 7-11: Work Group Dialog Box](image)

The Work Group Dialog Box contains the following data fields:

- **ID**: The name of the Work Group. This value will appear in the KWS user list when assigning tasks.
- **Title**: A descriptive title that describes the purpose of the work group.
- **Org**: The organization to which the work group belongs.

4. In the Work Group Dialog Box, enter values for the **ID** and **Title**.

5. Click **OK**. The Work Group will appear in the list for the organization.

* Deleting Work Groups

To delete a Work Group:

1. Select Admin from the KWS Menu Bar.
2. Select **Work Groups** from the **Admin** Menu. The Work Groups Window will be displayed with your Organization selected and Work Groups listed.

3. Select the Work Group to be deleted.

4. Click **Delete**. The Delete? Dialog Box will be displayed.

5. Click **Yes**.

A work group with uncompleted assigned tasks cannot be deleted; all tasks must first be reassigned to other users or work groups. If you try to delete a work group that has uncompleted tasks, KWS will open a Task window that list all uncompleted tasks assigned to the work group. After you have reassigned the tasks, the work group can be deleted.

<table>
<thead>
<tr>
<th>Modifying Work Group Information</th>
</tr>
</thead>
</table>

To modify work group information:

1. Select **Admin** from the KWS Menu Bar.

2. Select **Work Groups** from the **Admin** Menu. The Work Groups will appear with your Organization selected and Work Groups listed.

3. Select the Work Group for which you want to modify information.

4. Click **Modify**. The Work Group Dialog Box will be displayed.

5. Enter new values for the **ID** and **Title**.

6. Click **OK**.

<table>
<thead>
<tr>
<th>Adding Users to a Work Group</th>
</tr>
</thead>
</table>

To add users to a Work Group:

1. Select **Admin** from the KWS Menu Bar.

2. Select **Work Groups** from the **Admin** Menu. The Work Groups Window will be displayed.

3. Double-click on the work group to which users are to be added. A list of users in the work groups appears in the lower level window.

4. Select **Admin** from the KWS Menu Bar.

5. Select **Knowledge Workers** from the **Admin** Menu. The Knowledge Workers Window will open.

6. Select the Organization and User ID that you want to add to the work group. To select multiple User IDs, press the [Ctrl] key and click each
ID you wish to include. While holding down the mouse button, drag the selected User IDs to the window containing the list of users in the work group. A Confirm MOVE or COPY Dialog Box opens.

7. Click **Copy**. The User ID will appear in the Knowledge Workers in Work Group level of the Work Groups Window.

---

**Deleting a User from a Work Group**

To delete a user from a work group:

1. Select **Admin** from the KWS Menu Bar.

2. Select **Work Groups** from the **Admin** Menu. The Work Groups Window (Figure 7-10) will appear.

3. Double-click on the work group from which you want to delete a user. To select multiple User IDs, press the [Ctrl] key and click each ID you wish to include. A list of users in the work groups will be displayed in the lower level window.

4. Select the user that you want to delete from the work group.

5. Click **Delete**. The Remove from Group? Dialog Box will be displayed.

6. Click **Yes**.

---

**Reassignment**

It may become necessary to reassign the tasks belonging to a user, work group, or organization. KWS allows an administrator to reassign all tasks or a single task structure to other users.

**Reassigning All of a User’s Tasks**

To reassign all of a user’s tasks:

1. Open the Knowledge Worker window.

2. Select the user.

3. Click the **Reassign** button. The Reassign Tasks Dialog Box opens.

4. For each of the fields, **Assigned To**, **Performed By**, **Assigned By**, and **Task Owner**, select the user to assign the task.

5. Click **OK**.
Reassigning a User’s Task

**To reassign a task and all its children:**

1. Select the task to reassign.
2. Select Reassign from the Available Options Menu. The Reassign Tasks dialog box opens.
3. For each of the fields, **Assigned To**, **Performed By**, **Assigned By**, and **Task Owner**, select the user to assign the task.
4. Click **OK**.

Reassigning an Org ID

KWS has a function that changes an organization’s ID field throughout the database.

**To change an organization’s Org ID:**

1. Open either the Knowledge Worker list or the Work Group list.
2. Select the organization to change.
3. Click the **Modify** button. The Organization Dialog Box opens.
4. Modify the **ID** field.
5. Click **OK**. You will be asked to confirm that you want to change all occurrences of the old organization ID.

Changing a Task’s Org ID

**To change the Org ID of a task:**

1. Open either the Knowledge Worker list or the Work Group list.
2. Select the organization that contains the tasks to be changed.
3. Click the **Tasks** button. The Task Manager for the selected organization opens.
4. Select the task to change.
5. Click the **Modify** button.
6. Enter the new value in the **Org ID** field.
7. Click **OK**.
Your KWS database connections are typically defined for you when KWS is installed. You may view and modify this information and establish connections to other KWS databases if needed. When you have more than one database connection setup, you select which one you want to connect to when you log in to KWS. See Chapter 1, The KWS User Interface, Logging in to KWS, for more details.

Database connections are entered using the KWS Database Setup Window. In this window you may specify the information required for connecting to the database, as well as information required for storing attachment files. If you do not have the information you need, see your KWS System Administrator for assistance.

Figure 7-12: KWS Database Setup Dialog Box
The KWS Database Setup Window contains the following data fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>A short name used for identifying the database.</td>
</tr>
<tr>
<td>Name</td>
<td>A long name used to describe the database.</td>
</tr>
<tr>
<td>Database Type</td>
<td>The type of the database to which you are connecting. The value must be either Oracle OCI, Oracle ODBC, or Access ODBC.</td>
</tr>
<tr>
<td>Oracle Host</td>
<td>The source string required for connecting to the database.</td>
</tr>
<tr>
<td>Knowledge Worker ID</td>
<td>The KWS User ID used for connecting to the database.</td>
</tr>
<tr>
<td>Database Login ID</td>
<td>The Oracle User ID used for connecting to the database.</td>
</tr>
<tr>
<td>Database Login Password</td>
<td>The KWS password used for connecting to the database.</td>
</tr>
<tr>
<td>KWS Table Owner ID</td>
<td>The Oracle Table Owner ID of the database.</td>
</tr>
<tr>
<td>Public Attachment Directory</td>
<td>The directory and pathname used for storing Public attachment files.</td>
</tr>
<tr>
<td>Private Attachment Directory</td>
<td>The directory and pathname used for storing Private attachment files.</td>
</tr>
<tr>
<td>Public Referential Attachment Directory</td>
<td>The directory and pathname used for storing Public Referential attachment files.</td>
</tr>
<tr>
<td>Private Referential Attachment Directory</td>
<td>The directory and pathname used for storing Private Referential attachment files.</td>
</tr>
<tr>
<td>Attachment Archive Directory</td>
<td>The directory and pathname used for storing archived attachment files.</td>
</tr>
</tbody>
</table>

To view or modify your KWS database connection information:
1. Select Admin from the KWS Menu Bar.

2. Select Database from the Admin menu.

3. Select Setup Database Connections from the Database submenu. The KWS Databases Window will be displayed listing all of the connections you have defined (Figure 7-13).

4. Select the database for which you want to view information.

5. Click the Modify button. The KWS Database Setup Dialog Box will be displayed.

6. Click the Cancel button to exit without making modifications. Enter your desired changes and click the OK button to save changes.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>Source/Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>cerlmain</td>
<td>Cerl's main database</td>
<td>Oracle OCI</td>
<td>kwscerl</td>
</tr>
<tr>
<td>cerltrain</td>
<td>Cerl Training Database</td>
<td>Oracle OCI</td>
<td>kwstrain</td>
</tr>
<tr>
<td>kws30</td>
<td>KWS 3.0 test database</td>
<td>Access ODBC</td>
<td>kws30</td>
</tr>
<tr>
<td>kws95</td>
<td>Test KWS Access db for Win</td>
<td>Access ODBC</td>
<td>kws95</td>
</tr>
<tr>
<td>kwdbname</td>
<td>kws user manual database</td>
<td>Access ODBC</td>
<td>kwsman</td>
</tr>
<tr>
<td>kwserde</td>
<td>KWS Access demo database</td>
<td>Access ODBC</td>
<td>kwserde</td>
</tr>
</tbody>
</table>

Figure 7-13: KWS Databases Window

**Attachment Directory Maintenance**

The Database Connections Setup dialog box contains a Validate Directories button that validates the specified attachment directories. A user with Admin privilege has the option of allowing KWS to automatically create the validation files in the specified directory.

**To setup the attachment directories for a database connection:**

1. Open the Database Connections Setup Dialog Box by inserting or modifying a database connection record from the Database Connections window.

2. Enter or select a directory for each Attachment directory field.

3. Obtain the ID of the database from the System Administrator and enter this value into the Database ID field. This value is compared to a value in the control file of each attachment directory to verify that the correct attachment directory has been specified.

4. Click the Validate Directories button. This action will verify each directory and display a message for each invalid directory. If you have
Admin privilege, you will be given the option of creating a directory and the control file if it does not exist.

DATA MAINTENANCE

KWS includes several functions to help the KWS Administrator maintain the database. These functions include exporting and importing all or part of a KWS database, and identifying and removing orphaned objects.

Exporting the Entire Database

To export the entire database:

1. Select Admin from the KWS menu bar.
2. Select Database from the Admin menu.
3. Select Export Entire Database from the Database submenu. A Dialog Box will open.
4. Enter the name for the database file.
5. Click OK.

Exporting a Task Structure

To export a task structure:

1. Select Admin from the KWS menu bar.
2. Select Database from the Admin menu.
3. Select New Export/Import Database from the Database submenu. A Dialog Box will open.
4. Enter a name for the database file.
5. Click OK. An empty Task Manager Window will open.
6. Drag the task structure to export into the destination Task Manager Window.
7. Close the Task Manager Window.

Importing a Task Structure

To import a task structure:

1. Select Admin from the KWS menu bar.
2. Select Database from the Admin menu.
3. Select Open Export/Import Database from the Database submenu. A Dialog Box will open.

4. Select the previously-exported database file to import. A Task Manager Window for the selected database will be opened.

5. Open the KWS Task Window where the tasks are to be imported.

6. Drag the task structure into the KWS Task Window.

**Orphan Objects**

As KWS evolves, it is possible that the database will contain orphan objects. An orphan is a non-top level task that doesn't have a parent, or steps, attachments, or Do Its that are not associated with an object. A KWS administrator can get a list of orphans and delete them from the database.

**To list orphan Tasks, Steps, Attachments or Do Its:**

1. Select the Admin menu from the KWS menu bar.

2. Select Database from the Admin menu.

3. Select Orphans from the Database submenu.

4. Select Tasks, Steps, Attachments or Do Its from the Orphans submenu. A window will open with all orphans listed.

**To delete an orphan Tasks, Steps, Attachments or Do Its:**

1. Open the list of orphans Tasks, Steps, Attachments, or Do Its.

2. Select the orphan to delete.

3. Click the Delete button.

**KWS CONVERTER**

**Converting Between KWS and Other Tools**

A set of conversion utilities allows the import and export of KWS data to and from IDEF, SDEF, and Microsoft Project.
Overview

The KWS Converter utility enables the user to import and export information from a variety of formats to and from a KWS database. The formats supported are IDEF, SDEF, and MS Project.

Running the Program

When the Converter utility is started, the user must log on to a KWS database. If KWS is already running, KWS Converter will log on to the current KWS database. If KWS is not running, the user will be prompted to log on to a KWS database.

The KWS Converter interface (Figure 7-14) consists of two panes: a tree view control, which displays the current task hierarchy, and a client area, which displays edit forms for the current tasks. Clicking on a task name in the tree view will display the task information in the edit form.

Aligning the Tree View

To align the Tree View:

1. Click the right mouse button on the tree view portion of the KWS Converter. A menu appears with the choices Align Right and Align Left.
2. Select the desired alignment.
3. The Tree View will align accordingly.
Converting from IDEF to KWS

To convert from IDEF to KWS:

1. Select IDEF from the File|Open menu. Select a valid IDL file containing an IDEF model from the Open File dialog box. Opening the file will convert the IDEF model to a KWS model (Figure 7-15). The IDEF project name will appear as the KWS process, and thus the top level in the tree view. The status bar will display "IDEF -> KWS," signifying an IDEF to KWS conversion.

2. Double clicking on a task in the tree view will display its subtasks. Single click on any task, and its task information will be displayed in the KWS Task form.

3. Edit the task information as necessary.

4. When you are ready to import tasks into KWS, you can select KWS from the File|Save menu. This action will import the entire task structure into KWS as a top-level process.

While holding down the Shift key, drag from the tree view to a Task or ToDo window on KWS. The task structure will be inserted into that KWS window.

Converting from KWS to IDEF

To convert from KWS to IDEF:

1. Drag a task from a KWS Task or ToDo window onto the tree view area of KWS Converter.

2. The Convert To Dialog Box will appear, prompting you for the destination model type. Select IDEF and press OK.
3. The KWS tasks will be converted to an IDEF model (Figure 7-16), with the top-level task being the top level in the tree view. The status bar will display “KWS -> IDEF,” signifying a KWS to IDEF conversion.

![KWS Converter](image)

Figure 7-16: KWS to IDEF Conversion

4. When you are ready to export to IDEF format, select IDEF from the File|Save menu. A Save As Dialog Box will appear and prompt you for a file name. Select a file name that ends in .idl. Select OK to save the IDEF tasks in IDL format.

**Converting from SDEF to KWS**

1. Select SDEF from the File|Open menu. Select a valid SDEF model file (.txt) from the Open File dialog box. Opening the file will convert the SDEF model to a KWS model (Figure 7-17). The SDEF project name will appear as the KWS process, and thus the top level in the tree view. The status bar will display “SDEF -> KWS,” signifying an SDEF to KWS conversion.
2. Double clicking on a task in the tree view will display its subtasks. Single click on any task, and its task information will be displayed in the KWS Task form.

3. Edit the task information as necessary.

4. When you are ready to import tasks into KWS, you can select KWS from the File|Save menu. This action will import the entire task structure into KWS as a top-level process.

5. While holding down the Shift key, drag from the tree view to a Task or ToDo window on KWS. The task structure will be inserted into that KWS window.

\[\text{Converting from KWS to SDEF}\]

\[\text{To convert from KWS to SDEF:}\]

1. Drag a task from a KWS Task or ToDo window onto the tree view area of the KWS Converter.

2. The Convert To dialog box will appear, prompting for the destination model type. Select SDEF and press OK.

3. The KWS tasks will be converted to an SDEF model, with the top-level task being the top level in the tree view. The status bar will display "KWS -> SDEF," signifying a KWS to SDEF conversion.
Figure 7-18: KWS to SDEF Conversion

4. Double clicking on a task in the tree view will display its subtasks. Single click on any task, and its task information will be displayed in the KWS Task form.

5. Edit the task information as necessary. Fields that have been supplied with program defaults are marked in **bold** and may need to be reviewed before exporting.

6. When you are ready to export to SDEF format, select **SDEF** from the **File|Save** menu. A **Save As** Dialog Box will appear and you will be prompted for a file name. Select a file name that ends in **.txt**. Select **OK** to save the tasks in SDEF format.

Data must be exported from MS Project as “Text (Tab Delimited)” using the “Task (Export Table) Map.” This action will produce a **.txt** file.

**Converting from MS Project to KWS**

**To export data from MS Project for import by the KWS Converter:**

1. From MS Project, select **Save As** from the **File** menu. The **File Save** dialog box appears.

2. Select **Text (Tab delimited) (*.txt)** from the **Save As Type** selection box.

3. Enter the name for the export file in the **File Name** edit box. And click **OK**. The **Export Format** dialog box appears (Figure 7-19).
4. Select Task "Export Table" map from the Import/export map list box.

5. Click Edit... and the Define Import/Export Map dialog box appears.
6. If the Export header row/Import includes headers checkbox is checked, click on it to uncheck it.

7. Click OK and you will return to the Export Format dialog box.

8. Click Save and the data will be exported.

To convert from MS Project (MSP) to KWS:

1. Select MS Project from the File|Open menu. Select an MSP model in a valid file format (.txt) from the Open File dialog box. Opening the file will convert the MSP model to a KWS model. The MSP project name will appear as the KWS process, and thus, the top level in the tree view. The status bar will display "MSP -> KWS," signifying an MSP to KWS conversion.

2. Double clicking on a task in the tree view will display its subtasks. Single click on any task, and its task information will be displayed in the KWS Task form.

3. Edit the task information as necessary.

4. When you are ready to import into KWS, you can select KWS from the File|Save menu. This action will import the entire task structure into KWS as a top-level process.

While holding down the Shift key, drag from the tree view to a Task or ToDo window on KWS. The task structure will be inserted into that KWS window.

To convert from KWS to MS Project:

1. Drag a task from a KWS Task or ToDo window onto the tree view area of KWS Converter.

2. The Convert To dialog box will appear, prompting for the destination model type. Select MS Project and press OK.

3. The KWS tasks will be converted to an MSP model (Figure 7-21), with the top-level task being the top level in the tree view. The status bar will display "KWS -> MSP," signifying a KWS to MSP conversion.
4. Double clicking on a task in the tree view will display its subtasks. Single click on any task, and its task information will be displayed in the KWS Task form.

5. Edit the task information as necessary. Fields that have been supplied with program defaults are marked in bold and should be reviewed and possibly edited before exporting.

6. When you are ready to export to MSP format, select MSP from the File|Save menu. A Save As Dialog Box will appear and will prompt you for a file name. Select a file name ending in .mpx. Select OK to save the tasks in Microsoft Project MPX format.

ADDING ITEMS TO THE TOOLS MENU

The Tools Menu in the KWS Menu Bar provides access to applications you can use to enhance your KWS environment. KWS is initially installed with the Task Palette, DoItBase, and TimeAgent applications included in the Tools Menu. If desired, you can include additional applications in your Tools Menu so they can be launched directly from KWS.

Adding Items to the Tools Menu

To add items to the Tools Menu:

1. Open your KWS.INI file (located in the Windows directory) using any ASCII file editor.

2. In the Tools section of your KWS.INI file, enter the items you would like to include using the following syntax:

   ITEM<#>=<executable filename>,<name>
where <#> is the location of the item in the menu
<executable filename> is the full path and filename required
for executing the application
<name> is the name you want to display in the Tools Menu.

The following example will cause two items to display in order at the
bottom of the Tools Menu, provided the paths you supply are correct.
KWS will not check for correct/full paths.

[TOOLS]
ITEM1=c:\windows\calc.exe,Calculator
ITEM2=c:\timelog\timelog.exe, TimeLogger

3. Save and exit the KWS.INI file.

CREATING QUERIES

KWS system administrators can create custom queries that can be used by all
knowledge workers in an organization. Custom queries created and
activated by the administrator will be listed under the Query, Tasks,
Custom Queries menu.

Figure 7-22: Custom Query Dialog box
Creating a Custom Query

To insert a new custom query:

1. Select the **Custom ToDo Queries** submenu under the **Admin** menu.

2. Click the **Insert** button. The Custom Query Setup Dialog Box will appear.

The Custom Query Setup dialog box contains the following data fields:

<table>
<thead>
<tr>
<th>Title</th>
<th>The title of the query.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KWS Version</td>
<td>The version of KWS under which this query was written. If the query is executed under a different version of KWS, a warning message is displayed but execution is still allowed.</td>
</tr>
<tr>
<td>Active</td>
<td>A check box for activating the query. If a query is not active, it will not appear on the Custom Queries menu.</td>
</tr>
<tr>
<td>Query Select List</td>
<td>This is a list of the KWS fields that will be returned from the database. This is a non-editable list, provided only for reference.</td>
</tr>
<tr>
<td>Query From/Where Clause</td>
<td>This is the actual SQL From and Where clause for the Select statement. The administrator may edit this field to return the desired information from the database. The query must be a standard SQL statement. Variables may be entered in this clause and must start with $. If the variable is not followed by a character that is not alphanumeric, it can be terminated by a $. The user will be prompted for these variables when the query is executed.</td>
</tr>
</tbody>
</table>

3. Enter the information in data fields.

4. Click **OK**.

Deleting a Custom Query

To delete a Custom Query:

1. Select the **Custom ToDo Queries** submenu under the **Admin** menu.

2. Select the query to delete from the query list.
3. Click the **Delete** button.

- **Modifying a Custom Query**

  To modify a Custom Query:

  1. Select the Custom ToDo Queries submenu under the Admin menu.
  2. Select the query to edit from the query list.
  3. Click the **Modify** button. The Custom Query Setup dialog box will open.
  4. Make the desired modifications to the data fields.
  5. Click **OK**.

- **Executing a Custom Query**

  To execute a Custom Query:

  1. Select **Query** from the KWS Menu Bar.
  2. Select **Tasks** from the **Query** Menu.
  3. Select **Custom Queries** from the **Query...Tasks** menu.
  4. From the **Custom Queries** menu, select the name of the query to be run. The query will run and return the results in a task list window.

**TASK ARCHIVING**

The Task Archiving feature allows tasks to be moved to a separate archive database. These tasks can later be restored by copying them from the archive database to the main KWS database.

A KWS database can have only one archive database associated with it, and an archive database can be associated with only one main KWS database. This association is set up using the **KWS Database Setup** dialog box.

When a task is moved to the task archive, the attachments remain in the main KWS attachment directories and will be moved to the attachment archive directory if the last link to an attachment is deleted.
Setting up a Task Archive database

To setup a Task Archive database:

The task archive database must be setup by the KWS system administrator and associated with the KWS main database using the Database Connections manager:

1. Create a new KWS database (see KWS System Administrator's Guide) and give the new database the same database ID as the main KWS database.

2. Open the KWS Connections window by selecting the Database Connections option from the Admin menu.

3. Edit the entry for the new archive database by selecting the entry and clicking Modify.

4. In the KWS Database Setup dialog box click the Archive checkbox. This action identifies this database as an archive database, thereby preventing its display in the Login dialog box.

5. Click OK.

6. Edit the entry for the main KWS database by selecting the entry and clicking Modify.

7. In the Archive Connection ID field, select the connection id for the archive database setup in the previous steps.

8. Click OK.

The archive database is now associated with the main KWS database and will be opened when the user selects Archive Manager from the Admin menu.

Opening the Archive Manager Window

To open the Archive Manager Window:

1. Select Archive Manager from the Archive menu. You must be an administrator to select this option.

2. The Archive Manager Window appears (Figure 7-23).
To archive a task:

1. Open the **Archive Manager Window** as described above.

2. Drag the tasks to be archived from a Task or ToDo window to the **Archive Manager Window**.

3. The tasks will be copied to the task archive and you will be given the option of deleting the original tasks.

Or ...

1. Select a task in the **Task Manager Window**.

2. Select **Archive Selected Task** from the **Admin** menu.

3. The **Archive Manager Window** will be opened if it has not already been opened, and the selected task(s) will be copied to the archive. You will be given the option of deleting the original tasks.

To restore a task from the task archive:

1. Open the **Archive Manager Window** as described above.

2. Drag the tasks to be restored from **Archive Manager Window** to a KWS task window. The tasks will be copied from the task archive to the task window.
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