

CA Telon® Application Generator

PWS Option Administration Guide

r5.1



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CA Product References

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- CA Telon®

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Chapter 1: Introduction

CA Telon® Application Generator PWS Option (PWS) provides all the power of its mainframe counterpart, CA Telon Application Generator (CA Telon), in an easy to use, intuitive Windows interface. It supports the full functionality of the mainframe product and, at the same time, gives you the convenience and efficiency of Windows. PWS also incorporates new features that provide enhanced security and reporting.

This guide describes the features of PWS for application programmers and database administrators. It should be used along with the PWS Option Installation Guide and the mainframe CA Telon documents included on the product CD. For a list of the document titles, see the readme.

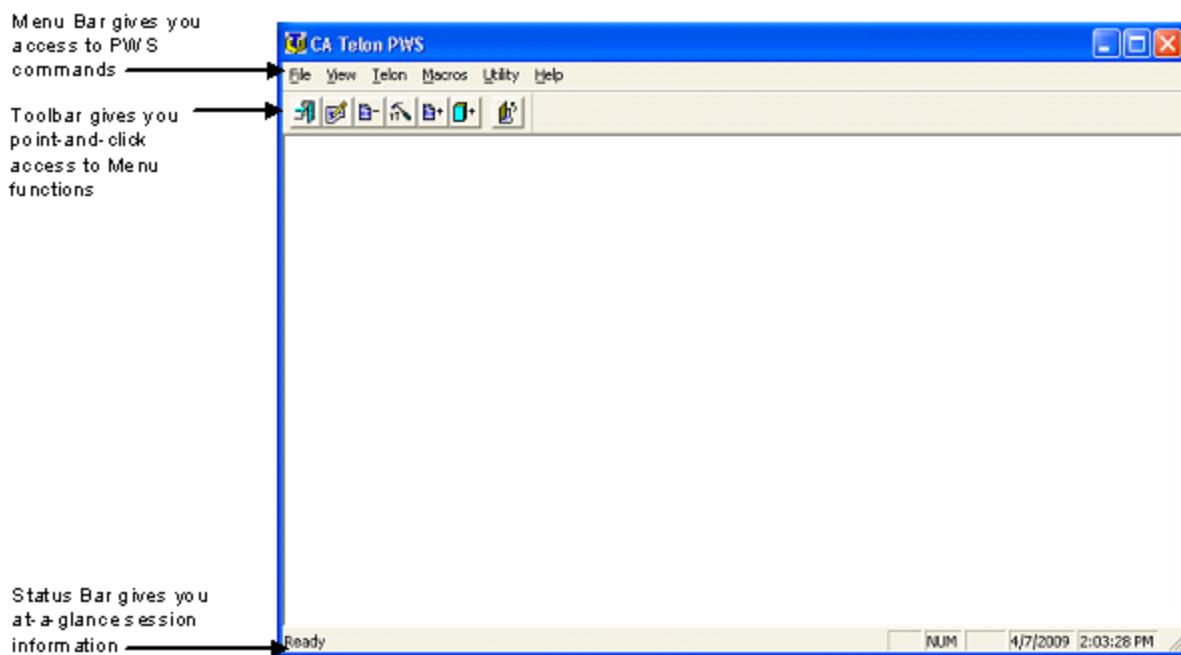
This guide begins by introducing you to PWS. This chapter describes all the things that you will use when working with the product, including the main window, the menus, the toolbar, and the status bar.

PWS Main Window

PWS provides a Graphical User Interface (GUI) to access the CA Telon application development system. From the main menu, all the familiar functions in CA Telon on the mainframe are available, including access to the TDF, Transport, Import, Export, and Generate functions. In addition, PWS includes utilities for maintenance of the TDF and Generator, and a reporting facility.

The main window includes menus to perform all the familiar CA Telon tasks. The Toolbar gives you quick, point-and-click access to menu functions. The Status Bar gives you current session information, including status, time, and date.

When you double-click the PWS icon on your desktop, the PWS main window opens.



Menus

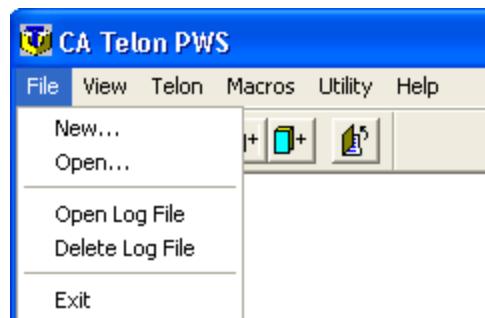
The following PWS menus enable you to perform all the functions of CA Telon on the mainframe and some PWS-specific functions as well.

- File
- View
- Telon
- Macros
- Utility
- Help

Each menu is described in detail in the following sections.

File Menu

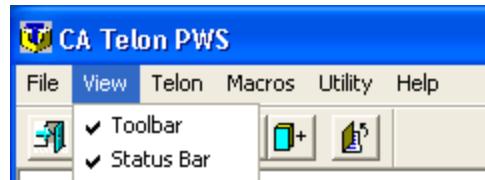
The File menu contains items that enable you to create a new file, open an existing file, or exit PWS.



Item	Description
New	Creates a new file.
Open	Opens an existing file.
Open Log File	Opens the PWS log file.
Delete Log File	Deletes the PWS log file (with confirmation).
Exit	Exits PWS.

View Menu

The View menu contains items that enable you to display or hide the toolbar and the status bar.

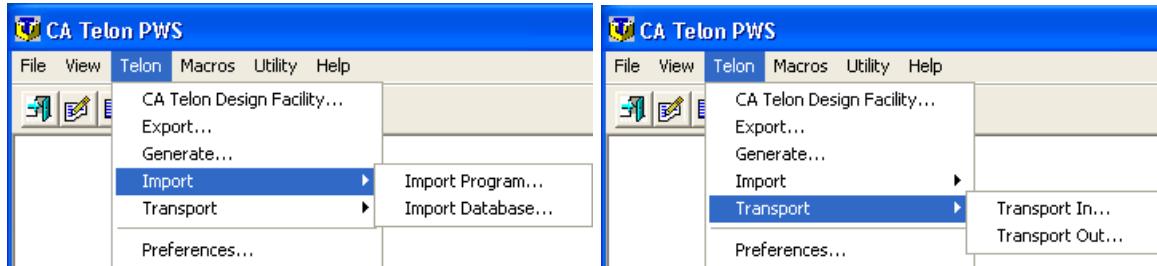


Item	Description
Toolbar	Toggles the display of the toolbar on and off. When checked, the toolbar displays buttons to help you quickly access key functions of PWS.
Status Bar	Toggles the display of the status bar on and off. When checked, the status bar at the bottom of the PWS main window displays

Item	Description
session information including status, date, and time.	

Telon Menu

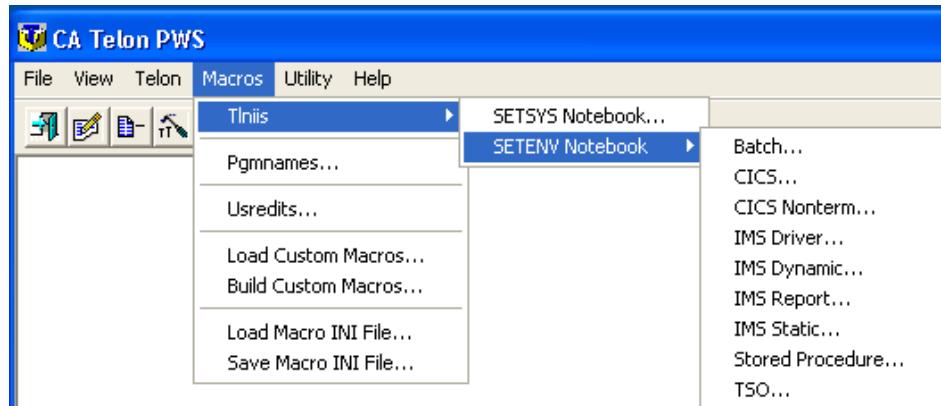
The Telon menu contains items that enable you to access the TDF and to export, import, and generate COBOL and PL/I programs, and to transport CA Telon objects.



Item	Description
CA Telon Design Facility	Invokes the TDF.
Export	Exports CA Telon source from the TDF.
Generate	Generates COBOL and PL/I programs.
Import > Import Program	Imports CA Telon programs into the TDF.
Import > Import Database	Imports DBD or PSB information into the TDF.
Transport > Transport In	Transports into the TDF, CA Telon objects that were transported from another TDF.
Transport > Transport Out	Transports out of the TDF, CA Telon objects to be transported into another TDF.
Preferences	Establishes default values for Telon menu dialog controls.

Macros Menu

The Macros menu contains items that enable you to modify TLNIIS, PGMNAMES, and USREDITS information. Using Macros menu items, you can also load and build custom macros, and load and save the macro initialization file. For more information, see the appendix "Macro.ini."



Item	Description
Tlniis	Contains parameters that customize the generation of COBOL and PL/I programs. Defines the variables for the SETSYS and various SETENV sections in Macro.ini. TLNIIS contains code that customizes the generation of SETENV information. TLNIIS calls the PGMNAMES and USREDITS macros to control naming conventions and user-written edits.
Pgmnames	Defines the variable names for the PGMNAMES section in the Macro.ini file. PGMNAMES sets default naming conventions.
Usredits	Defines the variables for the USREDITS section in the Macro.ini file. USREDITS specifies user-defined field edits that are passed to the generator.
Load Custom Macros	Takes existing TLNIIS, PGMNAMES and USREDITS macros, and converts them into macro initialization (Macro.ini) file format. This process can be used to begin converting copies of TLNIIS, PGMNAMES, and USREDITS

Item	Description
	from previous versions of PWS or from the mainframe version of the product. Once these macros are loaded, they can be maintained by the TLNIIS, PGMNAMES, and USREDITS menu items, with new copies of these macros built using the Build Custom Macros menu selection.
Build Custom Macros	Takes existing TLNIIS, PGMNAMES, and USREDITS information contained in a macro initialization (Macro.ini) file, and builds new copies of the TLNIIS, PGMNAMES, and USREDITS macros. This process provides the PWS Generator with customizable macro information that was maintained by the TLNIIS, PGMNAMES, and USREDITS menu items.
Load MacroINI File	Takes a previously saved macro initialization file and loads its contents to become the active Macro.ini file.
Save MacroINI File	Saves the active macro initialization file into another file for use at a later time (similar to a Save As).

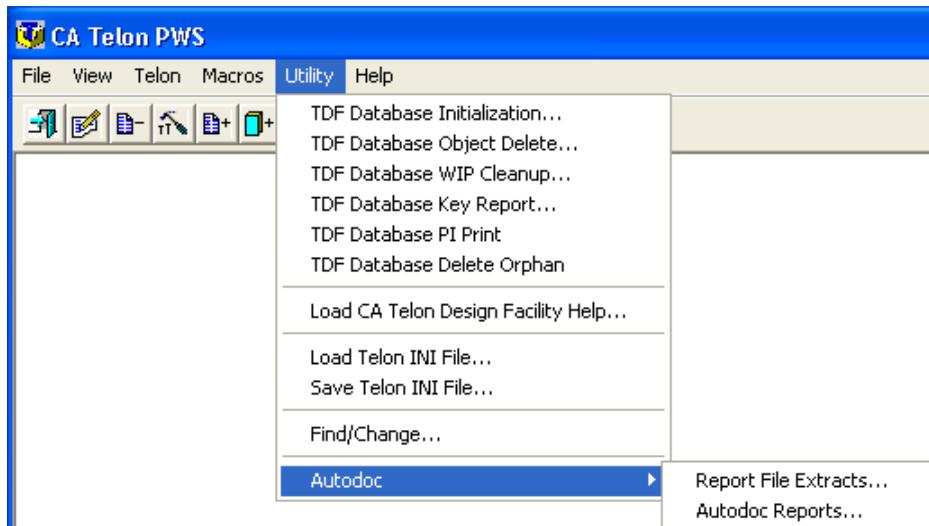
Utility Menu

The Utility menu provides programs that enable you to:

- Initialize the TDF database
- Delete objects from the TDF database
- Clean up the work-in-progress (WIP) files
- Execute the TDF Database Key report
- Execute the Panel Image print
- Delete orphan records from the TNTCCL
- Load TDF help
- Load and save the Telon.ini file

- Execute Find/Change
- Execute and display Autodoc reports

These utilities are discussed in detail in the chapter "Using the Utilities."

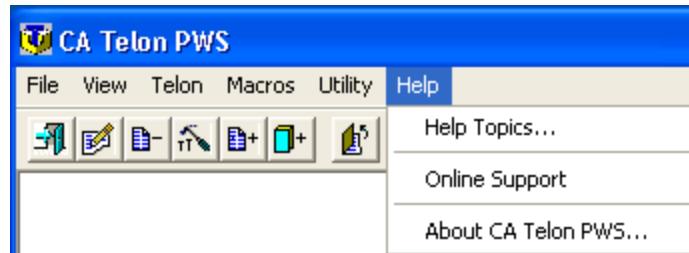


Item	Description
TDF Database Initialization	Initializes a TDF database.
TDF Database Object Delete	Deletes objects from the database.
TDF Database WIP Cleanup	Recreates the WIP files, should they become corrupted.
Telon Database Key Report	Executes a Database Key Report.
TDF Database PI Print	Executes a report of panel images.
TDF Database Delete Orphan	Deletes orphaned custom code records found in the Tntcl database and reports on the deletions.
Load CA Telon Design Facility Help	Loads TDF help with help information (short and long).
Load CA TelonINI File	Copies a previously saved CA Telon initialization file and makes it active.
Save CA TelonINI File	Saves the active CA Telon initialization file into another file for use at a later time (similar to a Save As).
Find/Change	Finds text strings and changes them in one or more text files.

Item	Description
Autodoc > Report File Extracts	Creates files from the TDF that are used in producing the Autodoc Reports.
Autodoc > Autodoc Reports	Executes and displays Autodoc reports.

Help Menu

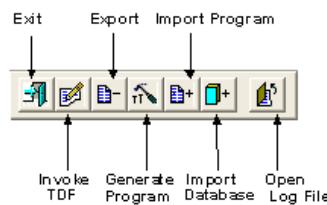
The Help menu contains items that enable you to access the PWS help system and to view version information about PWS.



Item	Description
Help Topics	Accesses PWS help system.
About CA Telon PWS	Provides information about this version of PWS.

PWS Toolbar Buttons

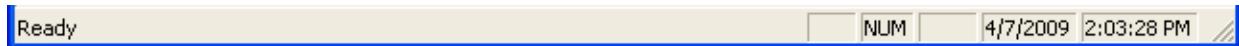
The toolbar on the PWS main window contains buttons that provide shortcuts to key PWS menu functions as described below. From the View menu, you can toggle the display of the toolbar on and off.



Button	Function
	Exits PWS.
	Invokes the CA Telon Design Facility (TDF).
	Exports CA Telon source.
	Generates a program.
	Imports CA Telon source.
	Imports a database (DBD or PSB).
	Opens the PWS log file.

PWS Status Bar

The status bar at the bottom of the PWS main window displays session information including status, date, and time. Using the View menu, you can toggle the status bar display on and off.



Select Files, Directories, and TDF Databases

Many of the PWS dialogs involve the selection of files, directories, or the TDF database. In most cases, the dialog contains a button to the left and an associated text box to the right. In other cases, there is also an associated list box that contains the names of the files selected.

File and Directory Selection

For the selection of files and directories, you can type the name into the text box or click the button. When you click the button, a Windows File Selection dialog (for files) or a Windows Browse for Folder dialog (for directories) opens, from which you can drill to the desired location. In the case of file selection, in certain functions such as Import and Generate, multiple files can be selected.

TDF Database Selection

TDF database selection involves a selection process. For more information on TDF database when Btrieve is in use, see the chapter "Use the CA Telon Design Facility."

When you make a selection and click OK, PWS checks to ensure that the TDF database specified actually exists; if not, an error message is displayed, and the process is terminated.

Some of the PWS dialogs also let you select one or more CA Telon objects found within the TDF database.

Chapter 2: Use the CA Telon Design Facility

This chapter describes the differences between PWS and its mainframe counterpart, CA Telon. It discusses the available type of TDF database engine, initializing the database, the TDF user interface, the TDF monitor, and how to use PWS-specific TDF functions.

TDF Database Engine

The TDF database engine available for use is Btrieve. Once a database has been created as Btrieve, it can be accessed only by the Btrieve engine.

The database engine selection is made in the Common tab of the Telon Preferences dialog, discussed in the chapter "Setting Preferences." After selecting a database engine, you can use the respective buttons on the PWS dialogs to select TDF databases and TDF help databases. Depending on the database engine you specified, the respective dialogs are used to select TDF databases.

For Btrieve engine, the Browse for Folder dialog opens. If you want to use an existing Btrieve database, the Browse for Folder dialog lets you select the folder where existing database files reside.

If you want to create a new database, invoke the TDF Database Initialization dialog on the Utility menu and identify the folder where you want to create the new database.

Initialize the TDF Database

Before you begin using the TDF, you must initialize a database. Use the Utility menu and select TDF Database Initialization to access the TDF Database Initialization dialog.

Important! Exercise care when initializing an existing database; all existing information in that database will be lost.

For more information about database initialization, see the chapter "Use the Utilities."

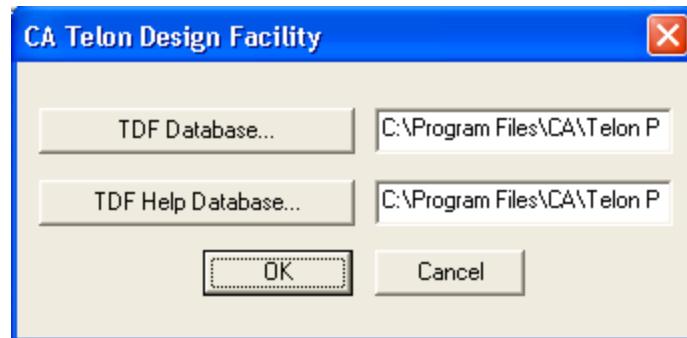
Starting the CA Telon Design Facility

Use the following procedure to start the PWS CA Telon Design Facility.

To start the PWS CA Telon Design Facility

1. Select Telon, CA Telon Design Facility in the PWS main window to open the CA Telon Design Facility dialog.
2. Specify the TDF database and the TDF help database:
 - TDF Database—Stores the TDF database files that contain CA Telon objects.
 - TDF Help Database—Stores the TDF database help file. Information in this file can be modified using the Load Help utility discussed in the chapter "Using the Utilities."

Note: For more information about selecting TDF databases, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.

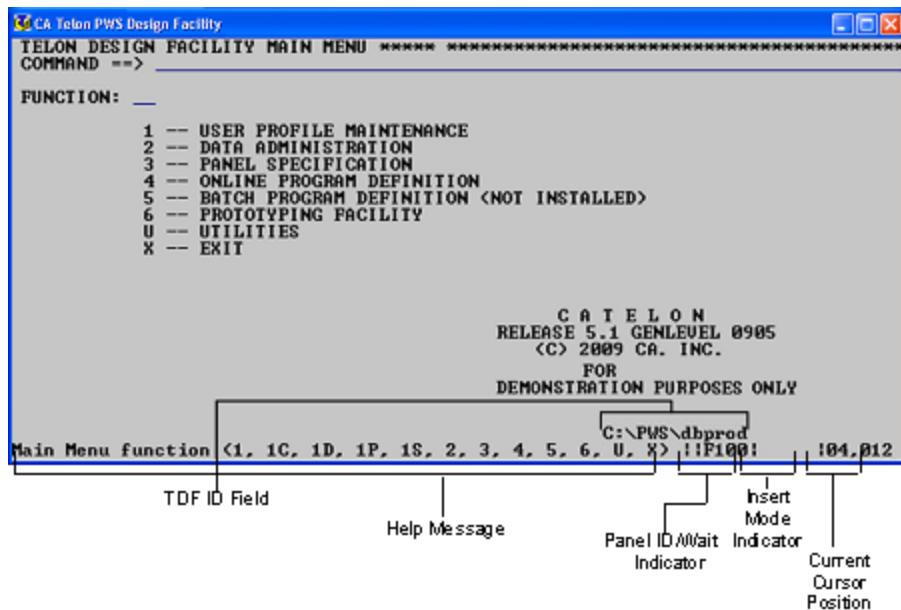


If you have changed the settings during the current session, PWS automatically displays the TDF database most recently specified. If you have not changed the settings during the current session, PWS displays the settings defined in the Telon Preferences dialog.

Note: Once a TDF is accessed using the new release of PWS, you cannot use an older release of PWS to access the same TDF.

3. Click OK after you specify the path for the TDF database and the TDF help database.

The TDF Main Menu opens, providing a gateway to all TDF functions.



TDF ID Field

If you use multiple TDFs, you can use the TDF ID field to identify the TDF database to which you are connected. This field is initialized with the path of the Btrieve database to which you are connected. If you want to change it, the CA Telon administrator can change the value on the TDF Installation menu.

Short Help Message

Provides a simple explanation for an input field. To receive field-level help, position the cursor in a field and type a question mark in the field, then press Enter. This brings up one or more field-level help screens.

Wait Indicator

A wait indicator is displayed whenever the TDF is processing. When the TDF is waiting for input, this area contains a four-character screen identification number (for example, F100).

Insert Mode Indicator

An insert mode indicator is displayed when the insert mode is on; it is blank when the insert mode is off. Use the Insert key on your keyboard to toggle between insert mode on and insert mode off.

Current Cursor Position

The current cursor position is displayed in line and column format.

Using PWS-Specific TDF Functions

The following TDF functions are specific to PWS. These functions are provided in addition to the standard mainframe TDF features and functions.

- **Color Profile**—Enables you to select the colors and intensities for all foreground and background fields on the TDF screens as part of your TDF profile.
- **PWSCOPY Command**—Allows you to copy ASCII files from a directory into the custom code member using the Custom Code Editor command line. PWSCOPY is equivalent to PDSCOPY on the mainframe.
- **Security**—In addition to the security features found in the TDF, PWS provides a security layer that controls access to its menus and dialogs.
- **Mouse**—Enables you to use your mouse to position the cursor on TDF input fields.

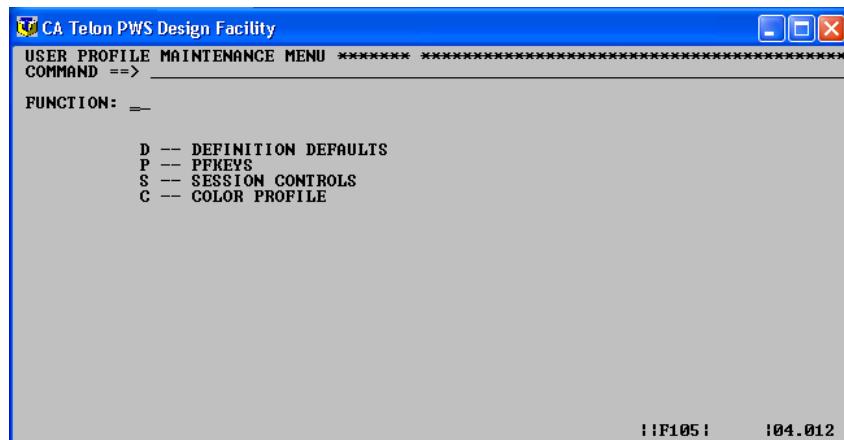
Note: The ISPF, TSO, and PDF commands are not available in PWS.

Defining a Color Profile

The color profile function lets you select foreground and background colors and intensities for all fields on the TDF screens, including the status line. It also lets you select the blinking attribute (on or off) for a field, and to define screen color.

To define the color profile

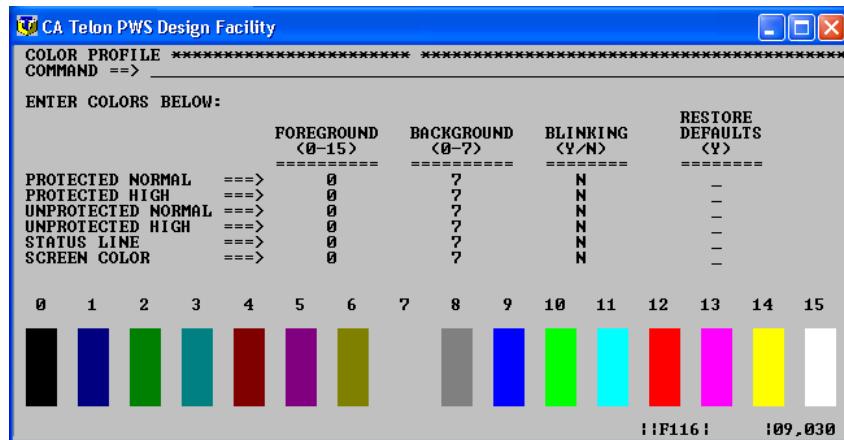
1. Select Telon, CA Telon Design Facility in the PWS main window.
The TDF Main Menu opens.
2. Type 1 in the Function field and press Enter. The User Profile Maintenance Menu opens:



3. Type C in the Function field in the User Profile Maintenance Menu to access the Color Profile screen.,

Note: You can also enter 1C in the TDF Main menu Function field or type =1C on the command line of any TDF screen, and press Enter.

The Color Profile screen opens.



The numbers 0 through 15 located above the colors represent the colors that you can specify for each of the fields with the attributes described below.

- Protected Normal—All literal text that appears on the screen
- Protected High—Usually the error message field
- Unprotected Normal—Fields where input can be entered
- Unprotected High—Fields where input was entered in error
- Status Line—Short help message and related fields at bottom of screen
- Screen Color—Blank areas of the screen

PWS supports 16 foreground colors (0-15) and 8 background colors (0-7). For each field type, you can define values for the following:

- Foreground—Enter the number between 0 and 15 for the color that you want as the foreground for the field type.
- Background—Enter the number between 0 and 7 for the color that you want as the background for the field type.
- Blinking—Enter Y to set the field to a blinking field or enter N to set the field to a non-blinking field.
- Restore defaults—Enter Y to return the definition of the field type to the default definition. This field overrides the color combinations you selected.

4. Press Enter after making your selections.

The TDF Color Profile (F116) screen displays the colors based on your selection. You can see the effect your choices have on all TDF screens.

Using the PWSCOPY Command

The PWSCOPY command lets you copy an ASCII text file into a TDF custom code editor member. From the custom code editor command line, enter the following:

```
PWSCOPY file-name
```

where:

file-name is the drive, directory, and fully qualified name of the file you want copied into the TDF.

As an alternative, you can access the File Open dialog to select a file to be copied into the TDF. To do so, enter the following:

```
PWSCOPY *
```

When you select the file that you want to copy and click OK, the file is copied into your custom code member at the location specified with an A (After) or B (Before) line command.

Defining PWS Security

PWS includes security to administer the CA Telon work environment from the TDF. This allows administrators to control access to TDF functions and to various PWS menu items for three user types:

- Controller
- Programmer
- Analyst

To define security, use the procedures described in the chapter "Implement Security."

Chapter 3: Import, Export, and Generate Programs

The Import and Export utilities allow you to bring one or more program definitions into and out of the TDF. The Generator converts the CA Telon source produced by Export into a native COBOL or PL/I program.

Import

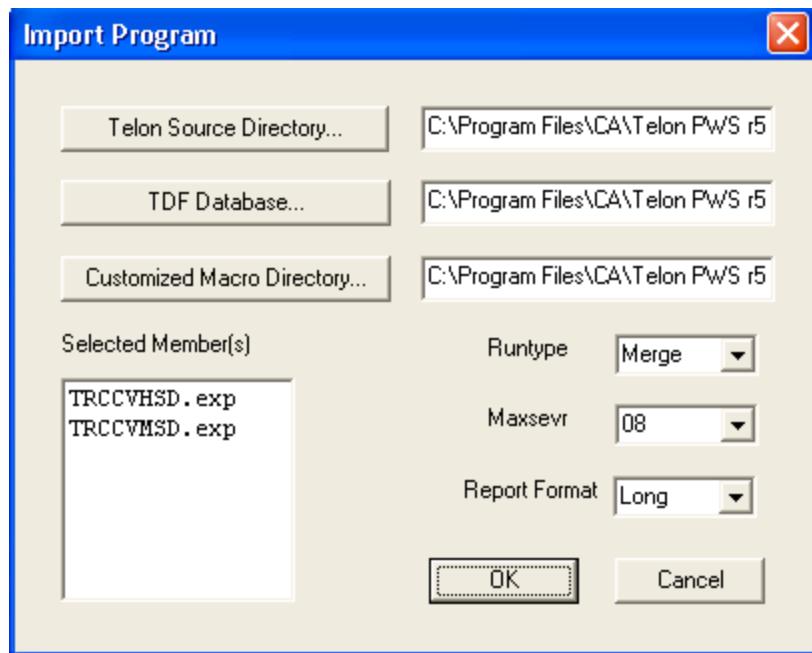
This section describes how to import CA Telon source, IMS DBDs (database definitions), and PSBs (program specification blocks).

Import CA Telon Programs

The Import Program utility is designed to bring one or more CA Telon source members from a file into the TDF. Depending on the runtype and maximum severity, the import may succeed or fail. It can also produce a summary report or a full comparison between the CA Telon source and the contents of your TDF's Data Administration.

Import Program Dialog

The Import Program dialog lets you select the CA Telon source files that you want to import into a TDF database.



To specify the Import processing parameters using the Import Program dialog

1. Select the directory where the source files are located, the TDF Database, and the directory containing your customized CA Telon macros.
Important! Ensure that the appropriate TLNIIS, PGMNAMES, USREDITS, and TELONIIS macros are loaded into the Customized Macro Directory prior to importing the CA Telon source.
Note: For more information about selecting files, directories, and TDF databases, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Select the runtype to use for the import. The runtype determines whether the global Data Administration information in the CA Telon source is imported into the TDF. The runtype and maxsevr (maximum severity) parameters determine whether the CA Telon source is imported.
3. Select maxsevr to set the maximum severity allowed for Import processing. If the runtype is set to Compare or Merge, the Import Compare process determines the severity of differences between the TDF Data Administration values and those specified in the program being imported. If the compare severity exceeds the maxsevr, the program is not imported.

4. Select between the short and long report formats. The short format produces a summary report. The long format details the differences between the global data information in the CA Telon source and the Data Administration values of the TDF that you are importing into.

For a sample Import report, see the appendix "Importing Data Inheritance" in the *Programming Concepts Guide*.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.

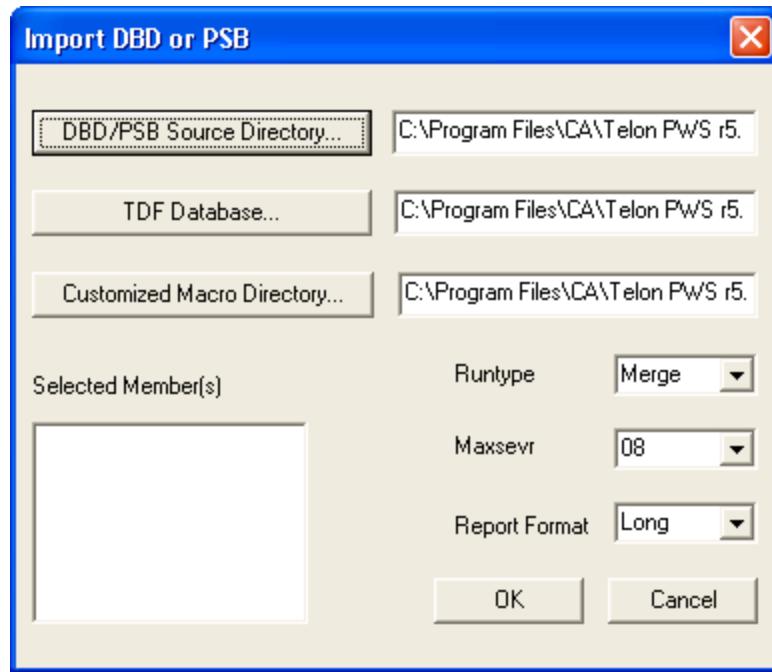
5. Click OK to start the Import process.

Import Databases

The Import Database utility can be used to bring IMS DBDs and/or PSBs into the TDF. Depending on the maxsevr (maximum severity) and runtype you specify, the DBD or PSB import may succeed or fail. When you import a DBD, the Import Database utility can also produce a summary report or a full comparison of the DBD source and the contents of your TDF's Data Administration. If the runtype, is set to Overlay, the Import utility replaces the version of the DBD or PSB in your TDF's Data Administration.

Import DBD or PSB Dialog

The Import DBD or PSB dialog lets you select the DBD or PSB database files that you want to import into a TDF database.



To specify the Import processing parameters using the Import DBD or PSB Dialog

1. Select the directory where the DBD or PSB database files are located, the TDF Database, and the directory containing your customized CA Telon macros.

Important! Ensure that the appropriate TLNIIS, PGMNAMES, USREDITS, and TELONIIS macros are loaded into the Customized Macro Directory prior to importing the CA Telon source.

Note: For more information about selecting files, directories, and TDF databases, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.

2. Select the runtype to use for the import. The runtype determines whether the global Data Administration information in the DBD or PSB source is imported into the TDF. The runtype and maxsevr (maximum severity) parameters determine whether the DBD or PSB source is imported.

3. Select maxsevr to set the maximum severity allowed for Import processing.

If the runtype is set to Compare or Merge, the Import Compare process determines the severity of differences between the TDF Data Administration values and those specified in the program being imported. If the compare severity exceeds the maxsevr, the program is not imported.

4. Select between the short and long report formats. The short format produces a summary report. The long format details the differences between the global data information in the CA Telon source and the Data Administration values of the TDF that you are importing into.

For a sample Import report, see the appendix "Importing Data Inheritance" in the *Programming Concepts Guide*.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.

5. Click OK to start the Import process.

Export

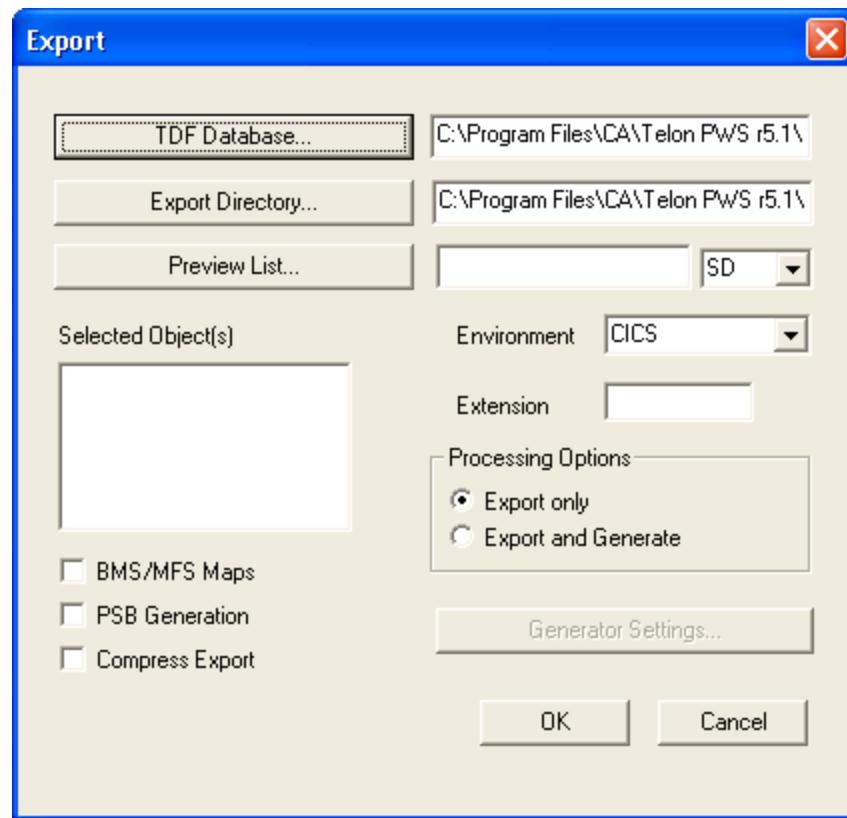
This section describes how to export CA Telon programs and panels from the TDF.

Export CA Telon Programs and Panels

The Export utility is designed to bring one or more CA Telon programs or panels from the TDF database into a source file. You can export a program or panel, or export and then generate a program.

Export Dialog

The Export dialog lets you select the CA Telon programs or panels that you want to export from a TDF database.



To specify the Export processing parameters:

1. Select the TDF database you want to export from and the directory you want to export into.

Note: For more information about selecting TDF databases and directories, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.

2. Select the object type from the drop-down list (SD is the default), then do **one** of the following:

- Enter a program or panel name in the Preview List text box, for example, TRCCVA.
- Enter a wildcard specification, for example, TRCCV*, and click Preview List.

The Select Telon Objects dialog lists the programs or panels in the TDF that match the wildcard specification. From this list, you can select the CA Telon programs or panels that you want to export, then click OK. You can select multiple objects by holding the Ctrl key while clicking on the list members you want to export.

Note: When entering wildcards in the Preview List text box, you can use the asterisk wildcard character (*) anywhere in the string.

3. Select the environment that you want to target as the runtime.
4. Specify an extension to be used for the exported CA Telon source file or leave it blank to use the default, EXP.
5. Select BMS/MFS Maps if you want to export mapping specifications (BMS for CICS, MFS for IMS/DC).
6. Select PSB Generation if you want to generate PSB source. The appropriate PSB source will be generated for your program.
7. Select Compress Export if you want to export CA Telon source in compressed format.
8. Select one of the following Processing Options and click OK to start the export process:
 - Export Only—PWS only exports the selected programs or panels. When this option is selected, the Generator Settings button is disabled.
 - Export and Generate—PWS exports, then generates the selected programs. When this option is selected, the Generator Settings button is enabled; click this button if you want to specify Generator options. For more information, see the next section.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.

Generate a COBOL or PL/I Program

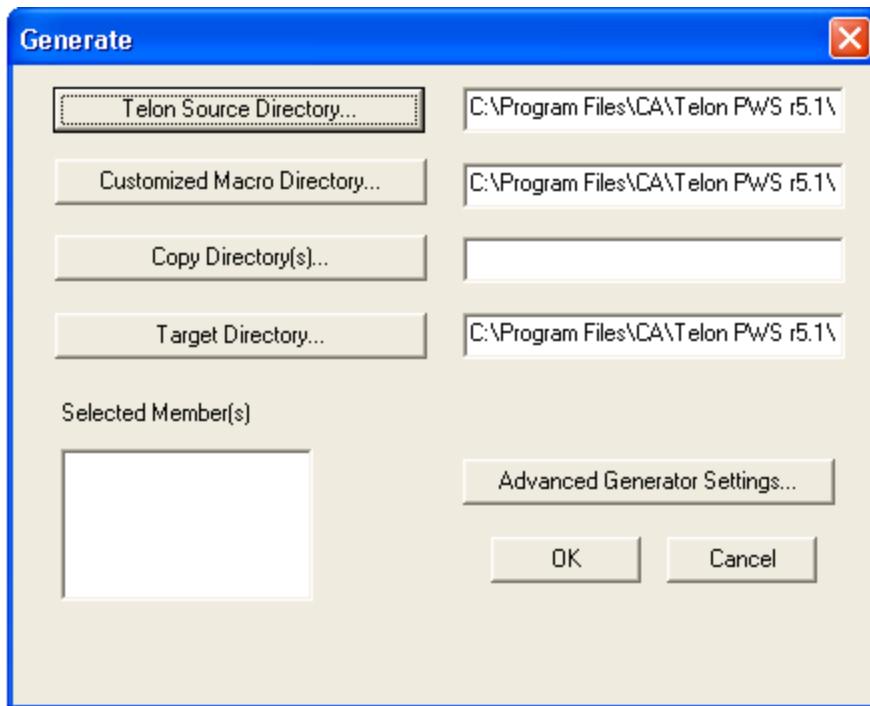
This section describes how to use the Generator to produce COBOL or PL/I programs from exported CA Telon source.

How to Generate Source Code

The Generate option uses exported CA Telon source to produce native COBOL and PL/I programs. The generated files (source code, BMS or MFS source, and PSB) are stored in the target directory.

Generate Dialog

The Generate dialog lets you select the exported CA Telon source that you want to generate into a COBOL or PL/I program.



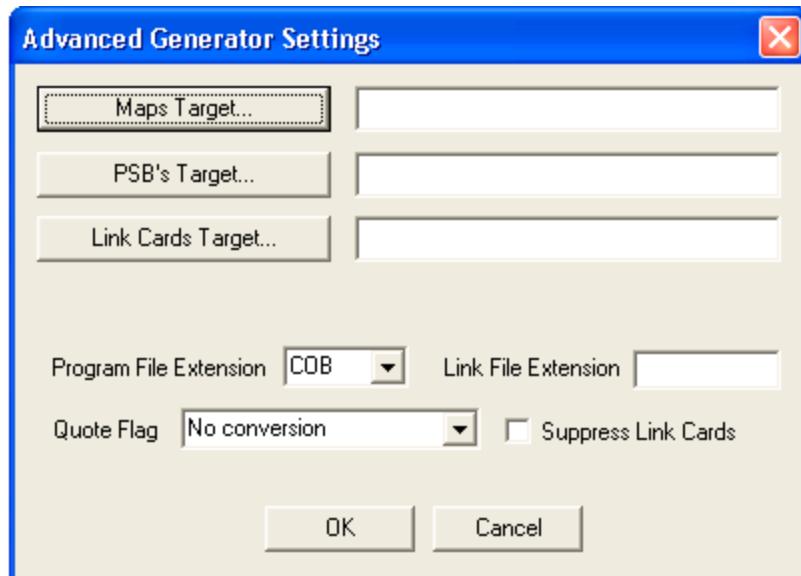
To specify the Generator processing parameters

1. Select the directory where the source files are located and the directory containing your customized CA Telon macros.
Important! Ensure that the appropriate TLNIIS, PGMNAMES, USREDITS, and TELONIIS macros are loaded into the Customized Macro Directory prior to importing the CA Telon source.
2. Select the Copy Directory(s) from which the Generate process will resolve COPY/%INCLUDE statements. The directories are appended to the existing list, separated by semicolons.

3. Select the Target Directory where you want to store your generated programs.
Note: For more information about selecting files and directories, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter. For a description of all the fields on this dialog, press PF1 (Help) to access online help.
4. Click OK to start the Generate process. You can follow the Generate progress by viewing the status bar at the bottom of the PWS main window. When the process is complete, you can view the log for additional messages, links to related files, etc.
For more information about Advanced Generator Settings, see the next section.

Advanced Generator Settings Dialog

Use the Advanced Generator Settings dialog to define different directories in which to store BMS/MFS and/or PSB source. If you do not specify separate link cards directories for any of the source members, the Target Directory that you specified in the Generate dialog is used.



To specify additional processing parameters for the generate

1. Select Maps Target, PSB's Target, and Link Cards Target to specify separate directories.
In the example above, a separate directory (C:\PWS\mycards) is specified for Link Cards Target. Because separate directories are not specified for PSBs or Maps, these files are stored in the target directory specified in the Generate dialog.
2. Select Program File Extension to specify the program file extension that you want to use for the generated program.
3. Select Link File Extension to specify a file extension or leave blank to use the default extension, LNK.
4. (COBOL programs only) Select Quote Flag to specify whether to globally change the text-delimiting quote and apostrophe characters.

5. Select Suppress Link Cards if you want to copy the generated link cards from the temporary directory to the Link Cards Target directory.
Note: For more information about selecting files and directories, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter. For a description of all the fields on this dialog, press PF1 (Help) to access online help.
6. Click OK to return to the Generate dialog, then click OK to start the Generate process. You can follow the Generate progress by viewing the status bar at the bottom of the PWS main window. When the process is complete, you can view the log for additional messages, links to related files, etc.

Test Generated Programs on the PC

When you generate COBOL programs with CA Telon for testing on the PC, the following restrictions apply:

- CICS—Do not specify AUTO for IOASTG, SPASTG, or TPBSTG. CICS does not support the HANDLE NOSTG option.
- IMS and CICS—Use LINEOPT = 2 or 3 (in TLNIIS) and request MFS maps for IMS or BMS maps for CICS. CA Telon mapping and LINEOPT 1 are not supported in PC-based emulation.
- DLIUIB copy member—CA Telon generates a COPY DLIUIB statement in all CICS programs referencing DL/I. This statement gets resolved in the CICS precompile or COBOL compile steps.

Chapter 4: Use the Transport Facility

This chapter describes the Transport Facility and provides some basic examples of how to use it. The information in this chapter supplements, but does not replace the *CA Telon Application Generator Utilities Guide* which describes the Transport Facility in detail.

The Transport Facility can be launched from the PWS main window, or it can be executed in batch mode. For a description of the syntax required for transport processing in batch mode, see the chapter "Using PWS in Batch Mode."

How the Transport Facility Works

The Transport Facility provides a convenient means to migrate data from one TDF to another or from an external source into a TDF. It has two components: transport out and transport in. It uses the following files:

- Transport File—Created by the transport out process and acts as import for transport in.
- Control File—Contains the directives that control the transport process. The selections made in the Transport dialogs determine the contents of the control file.
- Report File—Documents the actions taken by transport and reports any errors that occur during processing. If a Data Administration object (IMSDBD, SQL table or join, etc.) is transported into a TDF, transport also produces a Data Administration report to show what Data Administration to highlight differences between the values in the TDF and those in the transport file.

For additional information and examples, see the *Utilities Guide*.

The Transport dialogs include three tabs, as described below.

Common Tab

The Common tab lets you define basic information about the processing to be performed, including the path and file names you want to use for the transport, control, and report files. It also allows you to select a TDF database and define the processing options you want to associate with the objects being transported in.

Use the fields on this tab to transport in all objects in the transport file or transport out all the objects in a TDF, and apply the same processing options to all of them. If you want to transport a subset of objects, or you want to apply different processing options to specific object types or objects, use the Select Object Types and Edit Objects List tabs, or both, as described below.

Select Object Types Tab

The Select Object Types tab displays a list of the object types from which you can create a subset to be transported. Use this tab to process a subset of the object types displayed or apply different processing options to one or more object types.

The information displayed on this tab is in multi-column format. You can sort the information by any of the columns in ascending or descending order by clicking the column header. A small arrow at the right end of the label indicates the direction of the sort. The default sort order is ascending by object type.

Note: Only object types for the current operation are listed. For example, if your TDF or transport file do not include CICS queues, the CICSQUE object type is not listed.

Edit Object List Tab

The Edit Object List tab displays a list of specific objects (limited to the object types you selected on the Select Object Types tab, if you made selections on that tab) from which you can select a subset to be transported. Use this tab to process only a subset of objects based on object type or to apply different processing options to the objects.

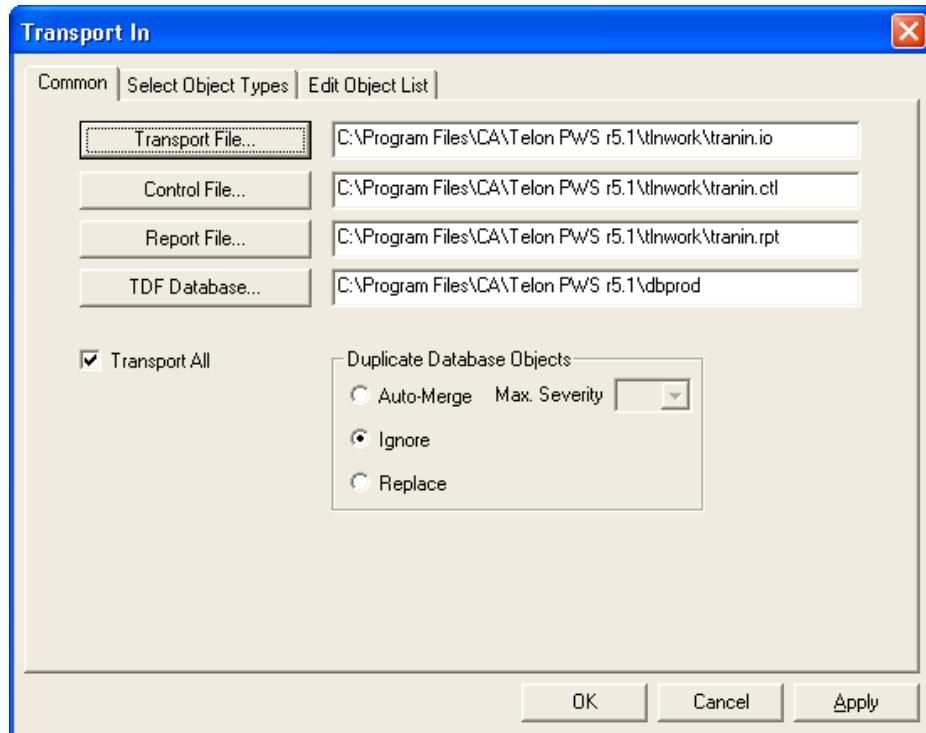
The information on this tab is displayed in multi-column format. You can sort the information in each column in ascending or descending sequence by clicking the column header. A small arrow at the right end of the label indicates the direction of the sort. The default sort order is ascending by object type.

Transport In

Using Transport In, you can transport data from one TDF into another. You can use the three tabs described earlier in this chapter to set up specific data and processing options for the transport in process.

Transporting All Objects and Object Types

Use the Common tab to define basic parameters for transport in.



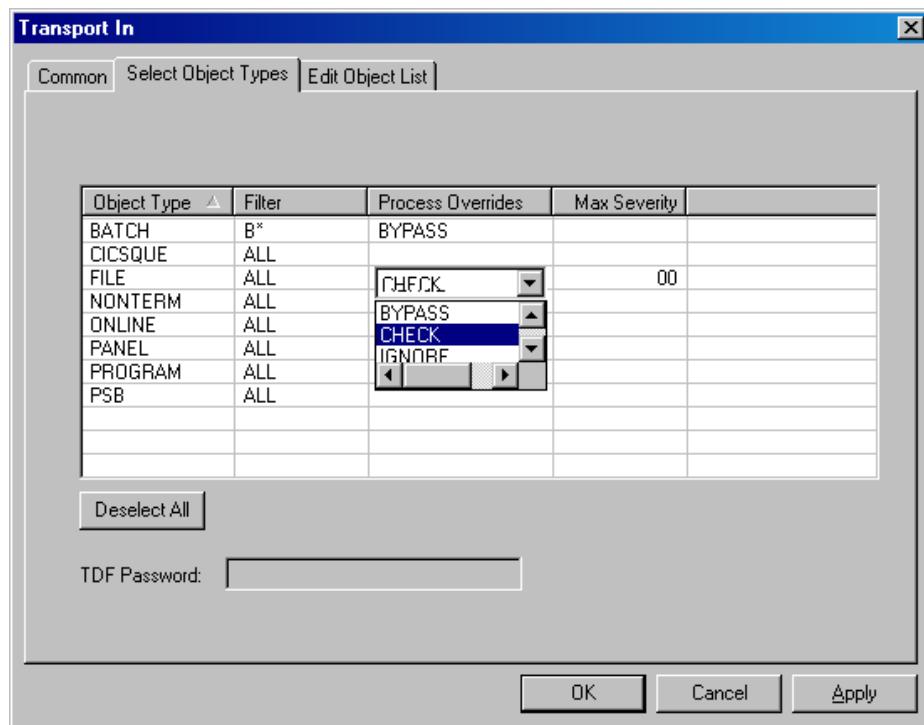
To specify the processing parameters for transport in

1. Select the transport file, control file, report file, and TDF database to be used by the transport in process.
Note: For more information about selecting files and TDF databases, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Select Transport All to process all objects in the transport file. If you select this option, you must also select a processing option for Duplicate Database Objects. The processing option you select applies to the entire file.
3. Select a maximum severity from the Max Severity drop-down list to define the maximum severity you want to allow during the transport in processing. This option is used in conjunction with the auto-merge option.
Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.
4. Do one of the following after you have made all your selections:
 - Click Apply to save the values you specified in the control file. Saving the values allows you to execute the transport in process at a later time.
 - Click Cancel to exit without saving your selections.

- Click OK to launch the transport in process. A series of confirmation dialogs prompt you to overwrite existing files and to execute the transport. Before the transport process begins, the control file is created using the parameters you set. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Transporting Selected Object Types

Use the Selected Object Types tab to transport in a subset of selected object types in the transport file and to apply different processing options to each listed object type.



To specify the processing parameters for transport in

1. Double-click a Filter cell in the second column to select an object type or specify a subset of one. You can use the wildcard character (*) or the enter ALL to select all objects for the object type.

If you want to deselect the filters for all object types, click Deselect All. This option toggles the selection or deselection of all object types by placing or removing ALL in the Filter column for every object type. Deselect All also removes any process overrides you may have selected.

2. Double-click on the process override cell on the same line as the object type to which you want to assign the override to select process overrides.

If you select the CHECK, MERGE, or REFRESH process override, you can also select a Max Severity level for the object type. This value sets the maximum severity allowed for transport in processing.

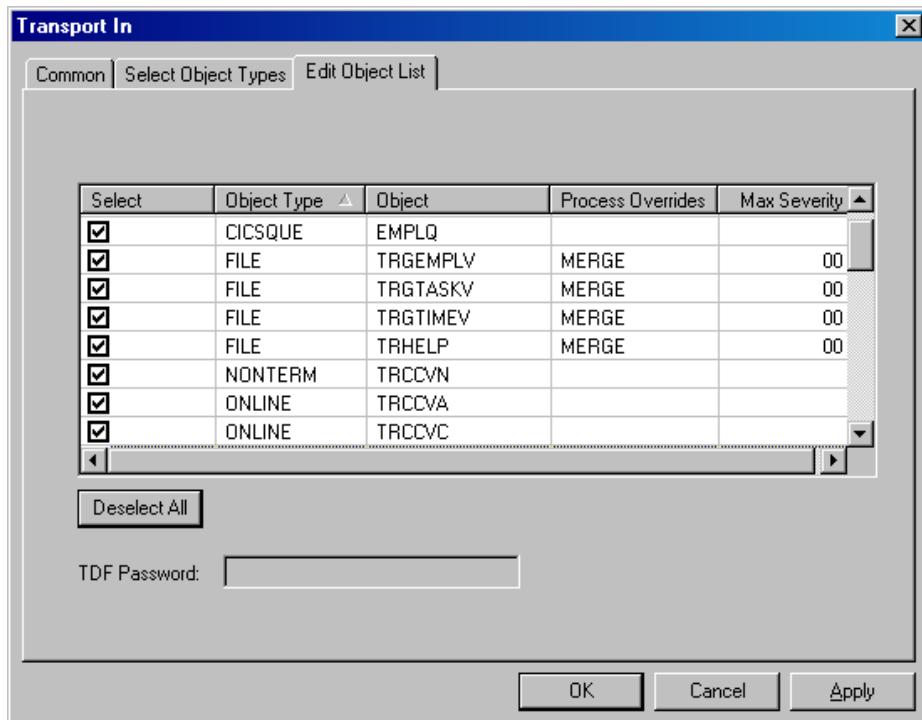
Note: Any process override and max severity values you set on this tab are carried over to the individual objects of that type on the Edit Object List tab.

3. Type the password for the TDF into which you are transporting to transport in a user or installation profile (object types USERPROF or INSTALL). If entered, the encrypted password is carried over to the Edit Object List tab.
Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.
4. Do one of the following after you have made all your selections:
 - Click Apply to save the values you specified in the control file. Saving the values allow you to execute the transport in process at a later time.
 - Click Cancel to exit without saving your selections.
 - Click OK to launch the transport in process. A series of confirmation dialogs prompt you to overwrite any existing files and to execute the transport in. Before the transport process begins, the control file is created using the parameters you set on the three tabs. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Transporting Selected Objects

Use the Edit Object List tab to transport in a subset of selected objects in the transport file and to apply different processing options to each listed object.

Note: If you already defined Process Overrides and Max Severity values in the Select Object Types tab, those values are displayed here.



You can specify the processing parameters for transport in using the Edit Object List dialog.

To specify the processing parameters for transport

1. Do one of the following in the Edit Object List dialog:
 - To remove an object from your processing list, uncheck the Select entry for that object.
 - To select an object, check the Select entry.
 When you first access the Edit Object List tab, all listed objects are selected with a check mark in the Select column.
 If you want to deselect the filters for all object types, click Deselect All. This option toggles the selection or deselection of all object types. Deselect All also removes any process overrides you may have selected.
2. Double-click the appropriate process overrides cell to select a processing override for an object.

If you select the CHECK, MERGE, or REFRESH process override, you can also select a max severity level for the object type. This value sets the maximum severity allowed for transport in processing.

3. Supply the password for the TDF into which you are transporting if you are transporting in a user or installation profile (object types USERPROF or INSTALL) . If entered, the encrypted password is carried over to the Select Object Types tab.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.

4. Do one of the following after you have made all your selections, :

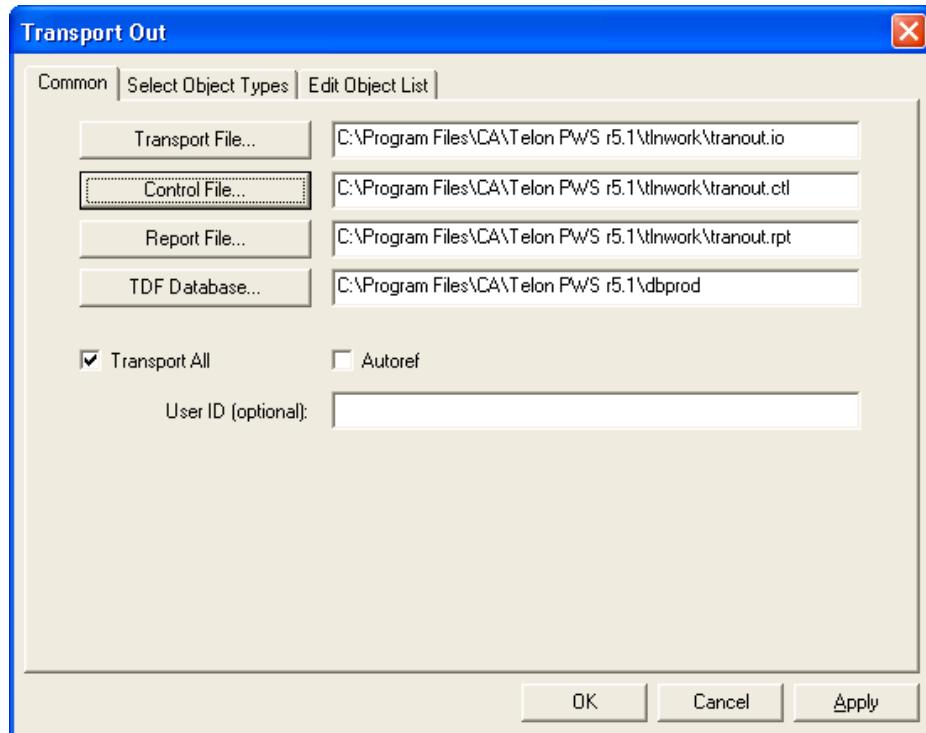
- Click Apply to save the values you specified in the control file. Saving the values allow you to execute the transport in process at a later time.
- Click Cancel to exit without saving your selections.
- Click OK to launch the transport in process. A series of confirmation dialogs prompt you to overwrite any existing files and to execute the transport in. Before the transport process begins, the control file is created using the parameters you set on the three tabs. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Transport Out

Using Transport Out, you can transport data from one TDF into another. You can use the three tabs described earlier in this chapter to set up specific data and processing options for the transport out process.

Transport All Objects and Object Types

Use the Common tab to define basic parameters for transport out.



To specify the processing parameters for transport out

1. Select the transport file, control file, report file, and TDF database to be used by the transport out process.

Note: For more information about selecting files and TDF databases, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Select Transport All to process all objects in the transport file.
3. Select Autoref to enable auto referencing for transport out. Auto referencing ensures that all the Data Administration information (including referenced items) you need for each of your programs is transported out of the TDF.

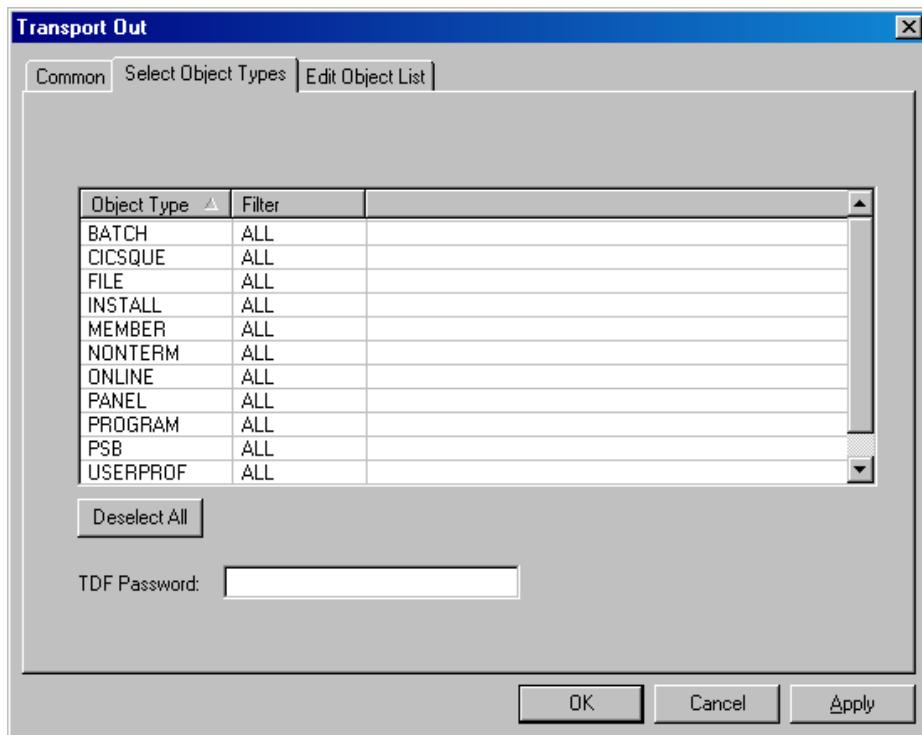
If you select Transport All, you do not need Autoref. If you specify a user ID, the entered value will be displayed in both the transport file's header line and the transport report.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.
4. Do one of the following after you have made all your selections, perform one of the following:

- Click **Apply** to save the values you specified in the control file. Saving the values allow you to execute the transport out process at a later time.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to launch the transport out process. A series of confirmation dialogs prompt you to overwrite any existing files and to execute the transport out. Before the transport process begins, the control file is created using the parameters you set on the three tabs. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Transport Selected Object Types

Use the Selected Object Types tab to transport out a subset of selected object types in TDF and to apply different processing options to each listed object type.



You can specify the processing parameters for transport out using the Select Object Types dialog.

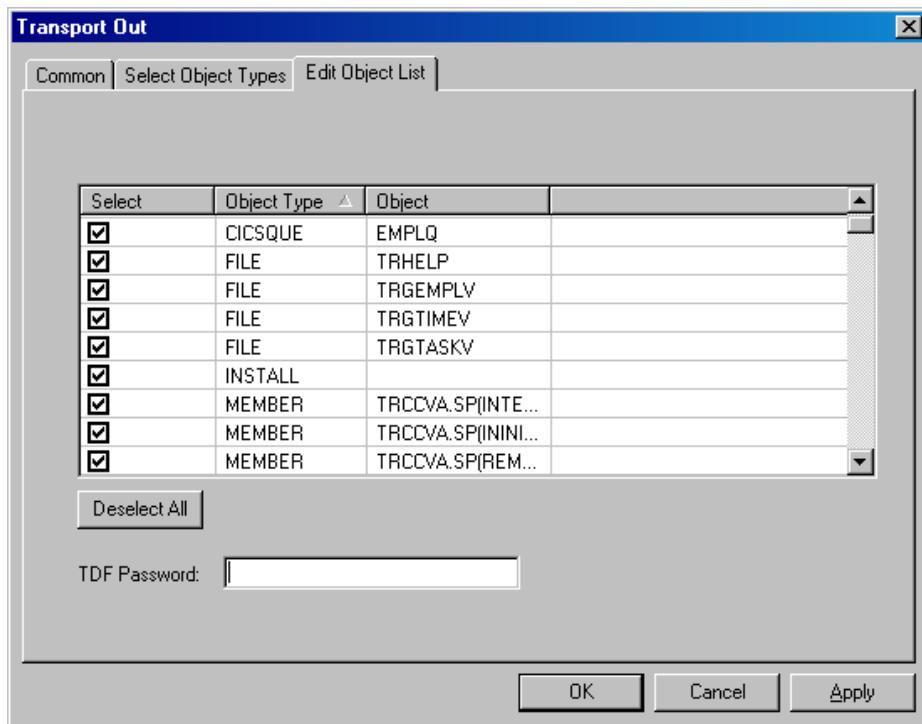
To specify the processing parameters for transport out

1. Double-click a Filter cell in the second column to select an object type or specify a subset of one. You can use the wildcard character (*) or enter ALL to select all objects for the object type.
If you want to deselect the filters for all object types in the TDF, click Deselect All. This option toggles the selection or deselection of all object types by placing or removing ALL in the Filter column for every object type.
2. Type the password for the TDF into which you are transporting to transport out a user or installation profile (object types USERPROF or INSTALL). If entered, the encrypted password is carried over to the Edit Object List tab.
Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.
3. Do one of the following after you have made all your selections:
 - Click Apply to save the values you specified in the control file. Saving the values allow you to execute the transport out process at a later time.

- Click Cancel to exit without saving your selections.
- Click OK to launch the transport out process. A series of confirmation dialogs prompt you to overwrite any existing files and to execute the transport out. Before the transport process begins, the control file is created using the parameters you set on the three tabs. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Transport Selected Objects

Use the Edit Object List tab to transport out a subset of selected objects in TDF and to apply different processing options to each listed object.



You can specify the processing parameters for the transport out using the Edit Object List tab.

To specify the processing parameters for transport out

1. Do one of the following:

- To remove an object from your processing list, uncheck the Select entry for that object;
- To select an object, check the Select entry.

When you first access the Edit Object List tab, all listed objects are selected with a check mark in the Select column.

To deselect all objects, click Deselect All. This option toggles the selection or deselection of all objects.

2. Type the password for the TDF from which you are transporting if you are transporting in a user or installation profile (object types USERPROF or INSTALL). If entered, the encrypted password is carried over to the Select Object Types tab.

Note: For a description of all the fields on this dialog, press PF1 (Help) to access online help.

3. Do one of the following after you have made all your selections:
 - Click **Apply** to save the values you specified in the control file. Saving the values allow you to execute the transport out process at a later time.
 - Click **Cancel** to exit without saving your selections.
 - Click **OK** to launch the transport out process. A series of confirmation dialogs prompt you to overwrite any existing files and to execute the transport out. Before the transport process begins, the control file is created using the parameters you set on the three tabs. When the process is completed, a message displays the results of the process in the status bar at the bottom of the PWS main window.

Chapter 5: Use the Utilities

This chapter describes how to use the PWS utilities. The utilities are grouped into two categories:

- TDF Database Utilities—Specific to managing the database, including initializing the database, and maintaining and viewing the database contents.
- Miscellaneous Utilities—Performs text manipulation, saves and loads the Telon.ini file, and provides database reporting.

These utilities are discussed in detail on the following pages.

How TDF Databases Work

The TDF database is comprised of both production and work-in-progress (WIP) files. The underlying data access method used by these databases is the Btrieve Workstation Engine.

Production Files

The production database includes the following production files (Btrieve):

- TNTDF—Contains panel images, panel definitions, and program definitions (that is, screen, batch, driver, nonterm, report definitions, and stored procedures.)
- TNTDD—Contains Data Administration objects, including DL/I databases, VSAM and sequential files, PSBs, file groups, CICS queues and journals, user and installation profiles, and presentation stores.
- TNTDX—Contains SQL tables and joins.
- TNTCCL—Contains custom code and presentation stores.

WIP Files

WIP files hold temporary data during a TDF session. As you update a program, panel, or custom code, your changes are stored in the appropriate WIP database file. When you save your work, the contents of WIP files are copied to the production files. The WIP database includes the following files:

- TNTDFW—Contains panel images, panel definitions, and program definitions (that is, screen, batch, driver, nonterm, report definitions, and stored procedures.)
- TNTDDW—Contains Data Administration objects, including DL/I databases, VSAM and sequential files, PSB's file groups, CICS queues and journals, user and installation profiles, and custom code and presentation stores.
- TNTDXW—Contains SQL tables and joins.
- TNHOLD—When you activate more than one session in the TDF, all the information from one session is stored in this file when you swap to another and is restored when you swap back. This information is temporary and is deleted when you end the session or exit the TDF.

Other TDF Database Files

In addition, the TDF database contains user data and help information:

- TNUSER—Contains user data that provides information about user TDF sessions.
- TNHELP—Contains help information, including TDF online help messages.

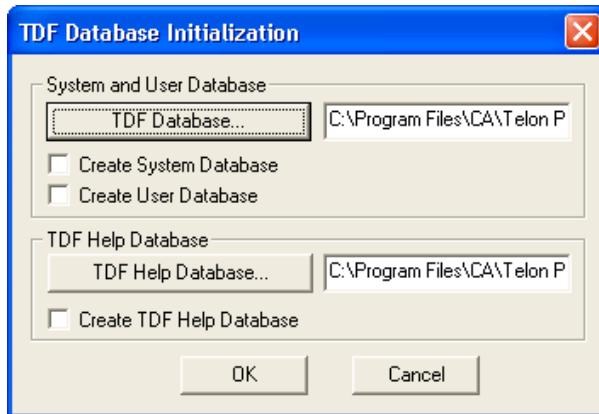
TDF Database Utilities

PWS provides the following TDF Database utilities. These utilities are discussed in the following sections.

- TDF Database Initialization
- TDF Database Object Delete
- TDF Database WIP Cleanup
- TDF Database Key Report
- TDF Database PI Print
- TDF Database Delete Orphan
- Load CA Telon Design Facility Help

Initialize TDF Databases

The TDF Database Initialization utility creates and initializes the requested CA Telon system database, user database, and TDF help database.



To specify the processing parameters used to create and initialize TDF database files

1. Identify the path of the Btrieve TDF database.
2. Specify whether you want to create system database files, user database files, or both:
 - Create System Database—Creates production and WIP database files.
 - Create User Database—Creates a user database file that tracks multiple sessions for a single user ID.

For more information about the contents and the names of the files, see "How TDF Databases Work."
3. Select the TDF Help Database.
4. Select Create a TDF Help Database if you want to create a TDF help database file.

Note: You can use long file and directory names when you specify the path for the TDF database and TDF help database, but you cannot use embedded spaces in the directory or file names.

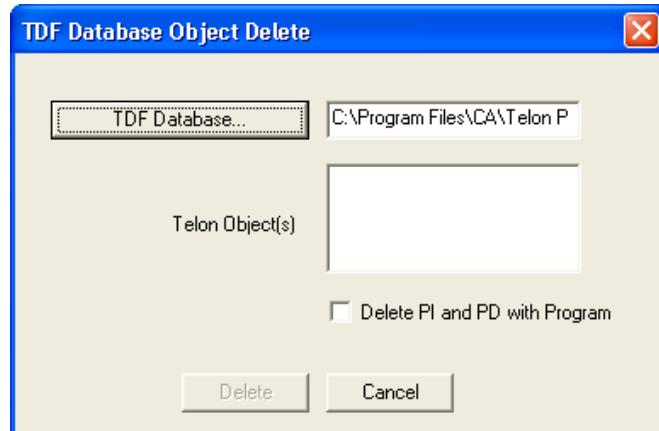
For more information about selecting TDF databases, see Select Files, Directories, and TDF Databases in the chapter "Introduction." For a description of all the fields on this dialog, press PF1 (Help) to access online help.

5. Click OK after making your selections.

When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the TDF database files were initialized.

Delete TDF Database Objects

The TDF Database Object Delete utility deletes programs and panels directly from the TDF database.



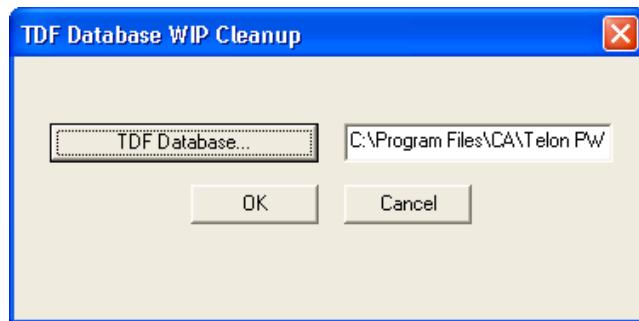
To specify the processing parameters to delete objects from the TDF database

1. Select the TDF database. After you select the TDF database, the Telon Object(s) list box displays the contents of the selected TDF database.
For more information about selecting TDF databases, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Select the objects you want to delete from the Telon Object(s) list box.
Note: If you check Delete PI and PD with Program, the PI and PD names are removed from the list of Telon objects. When you select a program that has an associated PI and PD, all three objects (that is, PI, PD and SD) will be deleted. For example, when TRCCVA.SD is deleted, the TRCCVA.PI and TCCVA.PD objects are also deleted.
For a description of all the fields on this dialog, press PF1 (Help) to access online help.
3. Click Delete after making your selections.
When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the selected objects were deleted.

Clean Up WIP Files

The TDF Database WIP Cleanup utility deletes then recreates the WIP system database files. WIP cleanup is required only when objects are left on the WIP because users exited the TDF in a non-standard way.

Important! Do not run this utility while users are accessing the TDF database. You can use the TDF Database Key Report of Users (TNUSER) to list users currently accessing the TDF during the current session.



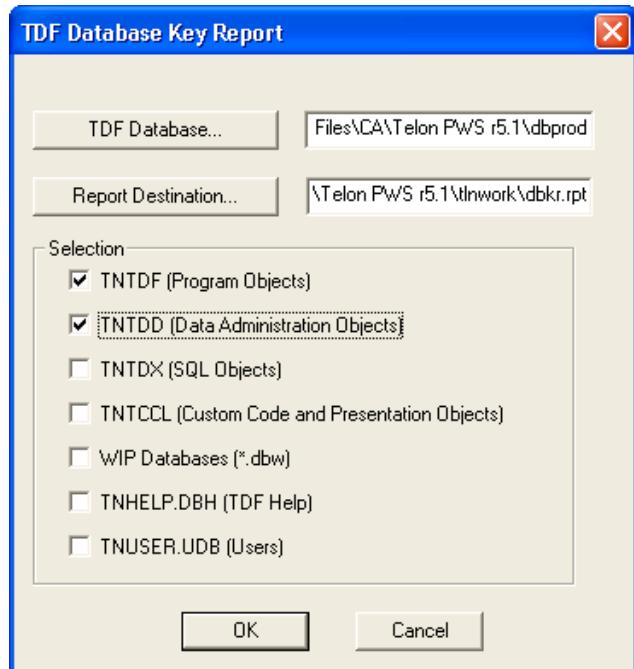
To clean up WIP files, select the TDF Database and click OK.

Note: For more information about selecting TDF databases, see Selecting Files, Directories, and TDF Databases in the "Introduction" chapter.

When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating that the WIP database files were deleted and recreated.

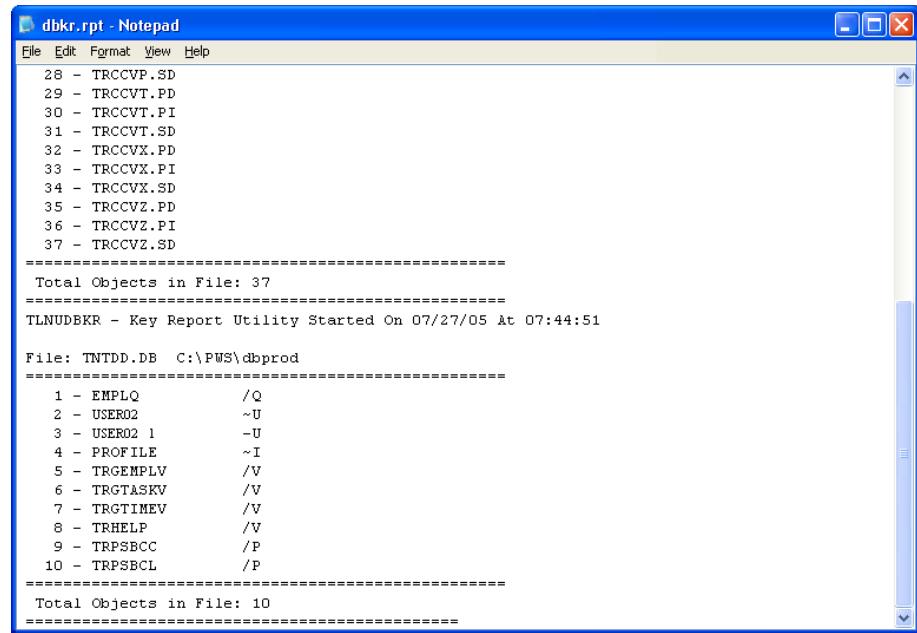
Create the TDF Database Key Report

The TDF Database Key Report utility produces one or more TDF Database Key reports listing the object keys for the specified TDF database files.



To produce one or more TDF database key reports

1. Select the TDF Database and Report Destination.
For more information about selecting TDF databases and files, see Select Files, Directories, and TDF Databases in the chapter "Introduction."
2. Select the files (described earlier) you want to include in the report.
For a description of all the fields on this dialog, press PF1 (Help) to access online help.
3. Click OK after making your selections.
The key report process creates the report and automatically displays it using Notepad. It also stores the report in the Report Destination file.



dbkr.rpt - Notepad

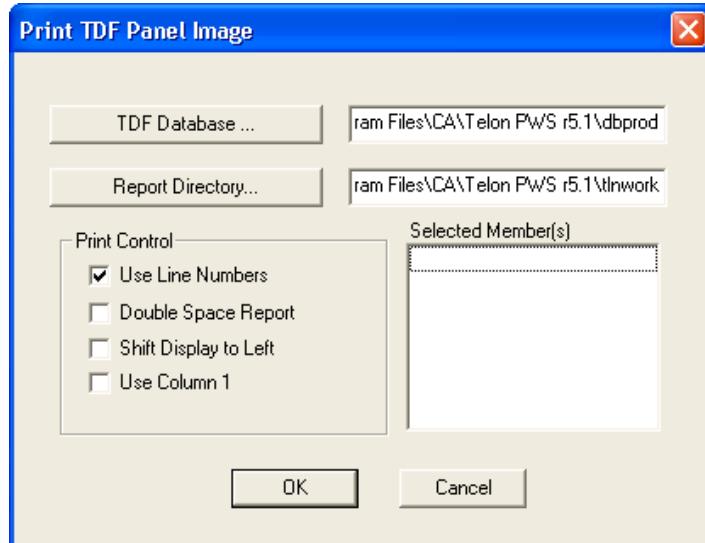
File Edit Format View Help

```
28 - TRCCVP.SD
29 - TRCCVT.PD
30 - TRCCVT.PI
31 - TRCCVT.SD
32 - TRCCVX.PD
33 - TRCCVX.PI
34 - TRCCVX.SD
35 - TRCCVZ.PD
36 - TRCCVZ.PI
37 - TRCCVZ.SD
=====
Total Objects in File: 37
=====
TLNUDBKR - Key Report Utility Started On 07/27/05 At 07:44:51

File: TNTDD.DB  C:\PWS\dbprod
=====
1 - EMPLQ      /Q
2 - USER02     ~U
3 - USER02 1   -U
4 - PROFILE    ~I
5 - TRGEMPLV   /V
6 - TRGTASKV   /V
7 - TRGTIMEV   /V
8 - TRHELP     /V
9 - TRPSBCC    /P
10 - TRPSBCL   /P
=====
Total Objects in File: 10
=====
```

Create the TDF Database PI Print Report

The TDF Database PI Print utility prints one or more panel images.



You can use this dialog to specify the processing parameters to be used to print the requested panel images.

To create the TDF Database PI Print report

1. Select the TDF Database and Report Directory. After you select the TDF Database, the list box displays the panel images of the selected TDF Database.
For more information about selecting TDF databases and directories, see [Select Files, Directories, and TDF Databases](#) in the chapter "Introduction."
2. Select Use Line Numbers if you want the panel image lines to be numbered. If selected, line numbers are printed before each panel line, and the entire panel is surrounded by asterisks.
3. Select Double Space Report if you want the panel image to be printed double-spaced. If selected, a blank line is inserted between each line of the panel image, and the entire panel is surrounded by asterisks. This option only works with Use Line Numbers; if that option is not selected, this one is ignored.
4. Select Print Characters in Column 1 if you want to print the characters in column 1 with the rest of the panel image. This option is often used with batch panel images, which can use column 1 for attribute bytes and carriage controls.
5. Select Use Column 1 if you do not want to print the characters in column 1 but to use blanks in place of column 1 characters.

6. Select the panel images you want to print from the list of all panel images in the current TDF displayed in the list box.

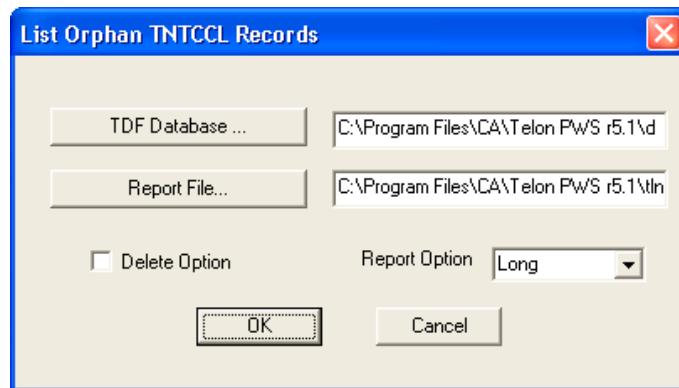
For a description of all the fields on this dialog, press PF1 (Help) to access online help.

7. Click OK after making your selections.

PWS creates the report and automatically displays it using Notepad. It also stores the report in the report directory.

Delete Orphan TNTCCL Entries

The TDF Database Delete Orphan utility produces a report that identifies and optionally deletes orphaned custom code records found in the TNTCCL database.



You can use this dialog to specify the processing parameters to produce a report to identify and optionally delete orphaned custom code records found in the TNTCCL database.

To delete orphan TNTCCL entries

1. Select the TDF Database and Report File.

For more information about selecting TDF databases and files, see Select Files, Directories, and TDF Databases in the chapter "Introduction."

2. Select Delete Option if you want to delete orphaned custom code records found in the TNTCCL database.
3. Select a Report Option to specify whether to produce a report listing only custom code records deleted by this process or all custom code records, including the deleted ones.

For a description of all the fields on this dialog, press PF1 (Help) to access online help.

4. Click OK after making your selections.

PWS creates the report and automatically displays it using Notepad. It also stores the report in the report directory.

Load TDF Help

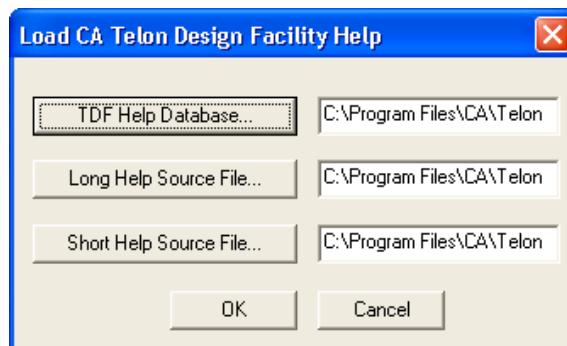
The Load TDF Help utility loads the long and short help messages into the TNHELP file. Use this utility only if you have initialized the help database and you want to load new help messages into it.

Note: For more information about initializing the TDF help database, see Initializing TDF Databases.

The delivered TDF help database already contains all long and short help messages that can be displayed in the CA Telon Design Facility. It is loaded at installation into the \dbprod subdirectory or database under the product root. Reloading it into this directory deletes what was already installed.

If you recreate the TDF help database without reloading it, TDF help is not available and the following message is displayed:

NO HELP ON DATABASE



To load the long and short help message text into the TNHELP file

1. Select the TDF Help Database.
2. Select the Long Help Source File (longmsg.txt), the Short Help Source File (shortmsg.txt), or both. If you want to load only one form of message text, blank out the path and file name for the message text you do not want to load.

For more information about selecting TDF databases and files, see Select Files, Directories, and TDF Databases in the chapter "Introduction."

For a description of all the fields on this dialog, press PF1 (Help) to access online help.

3. Click OK after making your selections.

When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the TDF help was successfully loaded.

Miscellaneous Utilities

PWS provides the following additional utilities. These utilities are discussed in the following sections.

- Load TelonINI File
- Save TelonINI File
- Find/Change
- Autodoc

Save and Load the TelonINI File

The Save TelonINI File utility is used in conjunction with the Load TelonINI File utility to facilitate the use of multiple Telon.ini files. When developing multiple applications using a single PWS workstation, the saving and loading of session information can be beneficial. These utilities use standard Windows dialogs and perform the following:

- Save TelonINI File—Saves a copy of the active Telon.ini file for loading at a later time.
- Load TelonINI File—Copies a previously saved version of Telon.ini and makes it active.

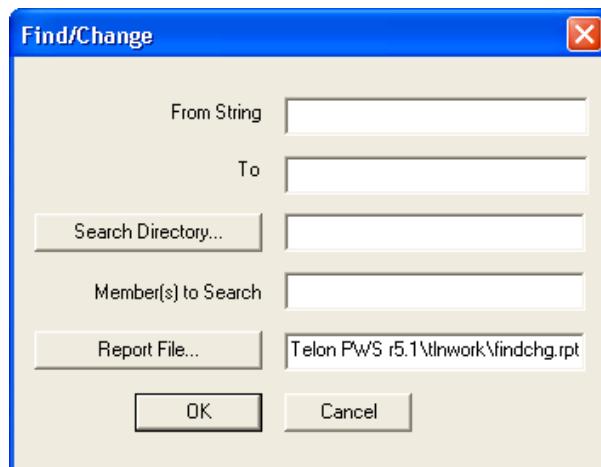
The active Telon.ini file is located in the user directory (for example, in C:\PWS\TLNUSERS\username). See the appendix "Telon.ini" for a detailed description of the Telon.ini file.

Run the Find/Change Utility

The Find/Change utility changes text strings in any ASCII text file and produces a report that documents the changes. You can invoke the Find/Change utility from the PWS Windows application or from a command line as described in the chapter, "Using PWS in Batch Mode."

The following conventions should be observed when using the Find/Change utility:

- Apostrophes ('') or quotes ("") can be used to delimit the From and/or To strings containing spaces or commas. You must use the same delimiter to begin and end the string:
 - To embed quotes inside a string, you must use apostrophes as the delimiters
 - To embed apostrophes inside a string, you must use quotes as the delimiters
- Any leading spaces not within delimiting quotes are stripped from the front of the find/change entry.
- The search and replace process is case-sensitive.



To specify processing parameters for the find/change process

1. Specify the From String to be changed and the To replacement string using the conventions discussed previously.
2. Select the Search Directory.
3. Specify Member(s) to Search criteria.

Note: You can specify a fully-qualified member name or you can use the wildcard characters, * and ?, to search for the desired member. For example, *.txt or tn*.exp. However, you should avoid using global file extension masks, such as [name mask].*, *.* , or [name mask].???. Using global file extension masks may result in files being processed multiple times.

4. Select the Report File you want to use to record the results of the Find/Change process. You can view the report in Notepad.
For more information about selecting directories and files, see Select Files, Directories, and TDF Databases in the chapter "Introduction."
For a description of all the fields on this dialog, press PF1 (Help) to access online help.
5. Click OK after making your selections.
When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the Find/Change was done.

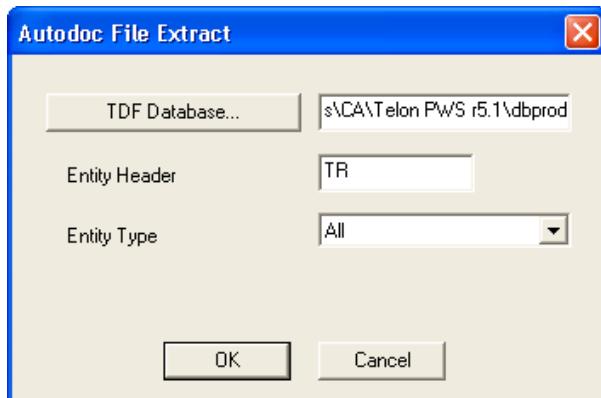
Autodoc File Extracts and Reports

The CA Telon Automated Documentation (Autodoc) utility describes the contents of the TDF database in a variety of reports. The Autodoc utility has two options:

- Report File Extracts—Extracts data from the TDF database that is needed to produce the reports.
- Autodoc Reports—Indicates the report to be produced.

Create Report File Extracts

The Report File Extracts option extracts data from the TDF database that is needed to produce a report.



To specify processing parameters for the TDF database data extract

1. Select the TDF Database.

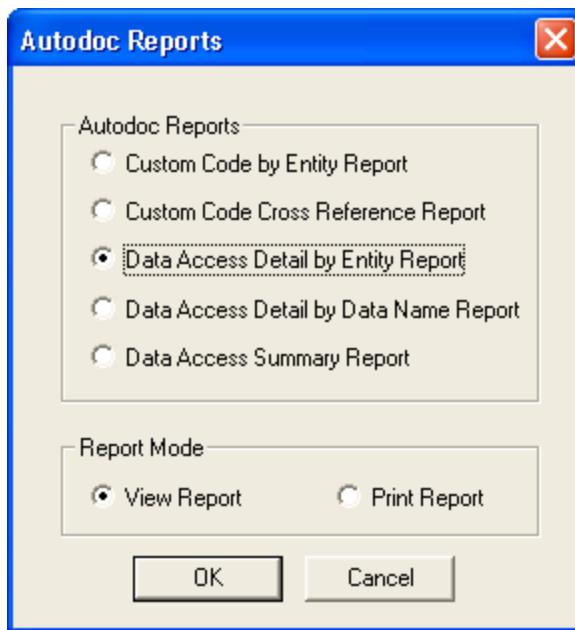
For more information about selecting TDF databases, see Select Files, Directories, and TDF Databases in the chapter "Introduction."

2. Specify the Entity Header. The entity header is the one- to five-character header portion of the entity name of a TDF object. The entity name is a six-character field consisting of a header and an ID. The remaining characters comprise the entity ID.
3. Select an Entity Type to extract all program information or to extract specific program information.
For a description of all the fields on this dialog, press PF1 (Help) to access online help.
4. Click OK after making your selections.

When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the Autodoc File Extract was produced.

Create Autodoc Reports

The Autodoc Reports option creates reports that detail the data extracted from the TDF database.

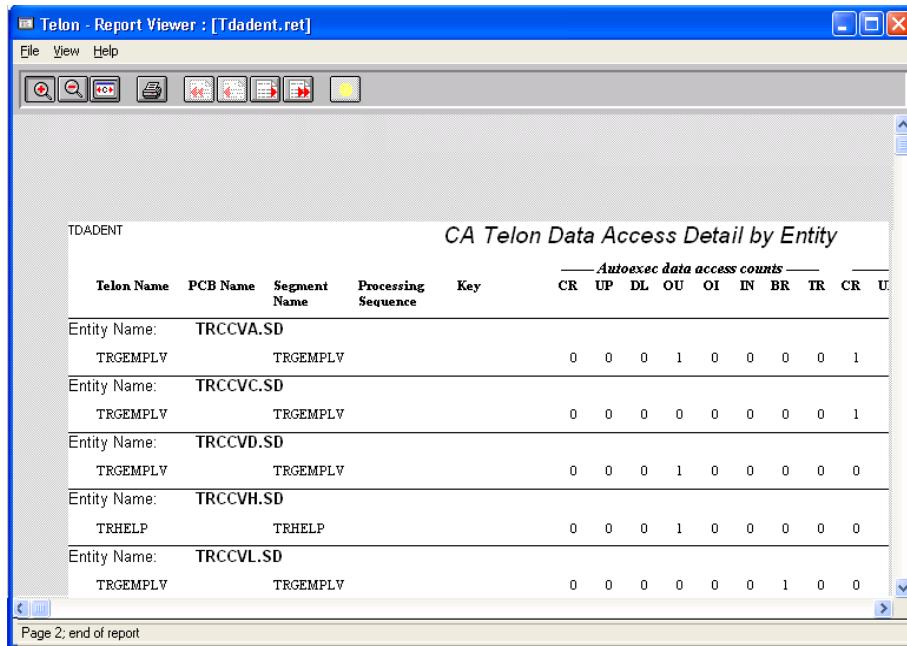


To specify processing parameters for Autodoc reports

1. Select the type of report you want to create:
 - Custom Code by Entity Report—Lists custom code members for each entity, with statistics; it is sorted by entity name and custom code name.
 - Custom Code Cross Reference Report—Lists entities for each custom code exit point name, with statistics; it is sorted by custom code exit point name and entity name.
 - Data Access Detail by Entity Report—Lists data access names for each program entity, with use counts; it is sorted by entity and data access name.
 - Data Access Detail by Data Name Report—Lists program entities for each data access name, with use counts; it is sorted by data access name and entity name.
 - Data Access Summary Report—Lists data access names for each program entity, with use counts and TPPCB information; it is sorted by entity and data access type.
2. Specify whether you want to View Report or Print Report, and click OK.
Print Report prints the report on the default printer.
View Report displays the report in the Telon - Report Viewer, shown next.

Telon - Report Viewer Toolbar

The Telon - Report Viewer toolbar provides options for viewing the report results.



Toolbar buttons that let you view, print, and navigate through the report are described below:

Button	Function
	Zooms in to normal view.
	Zooms out to page view.
	Centers report on the screen.
	Prints the report.
	Goes to the first page of the report.
	Goes to the previous page of the report.

Button	Function
	Goes to the next page of the report.
	Goes to the last page of the report.
	Cancels a report preview.

File Menu

From the File menu, you can:

- Close the Telon - Report Viewer.
- Export the report to a file in Rich Text Format (RTF), ASCII (TXT), or HyperText Markup Language (HTM).
- Print the report.
- Modify print setup.
- Go to Properties and toggle display of the toolbar and the status bar.

View Menu

From the View menu, you can:

- Display the report in Normal view (full screen with horizontal and vertical scroll bars for accessing data).
- Display the report in Page View (similar to Print Preview).
- Center the screen on the page (centered screen with horizontal and vertical scroll bars for accessing data).

Help Menu

From the Help menu, you can:

- Access Help contents.
- Search for Help on a topic.
- Obtain information on how to use Help.
- View information about this version of Telon - Report Viewer.

Do one of the following:

- Optionally, you can export a report to a file using Export the Report to a File from the File menu. When you click Save on the Export Report to File dialog, the report is saved to the file specified, and the Telon - Report Viewer window opens.
- Select Close from the File menu to close the Telon - Report Viewer. The PWS main window opens, and a message displays in the status bar indicating PWS is ready for your next transaction.

Chapter 6: Set Preferences

This chapter describes the preferences you can define and how they are used in PWS.

Telon Preferences Dialog

The Telon Preferences dialog lets you define the preferences used by PWS, primarily by the CA Telon processes, including:

- Import CA Telon programs
- Import IMS DBDs (database definitions) and PSBs (program specification blocks)
- Export or Generate CA Telon programs and panels
- Transport data from one TDF into another

The preferences you define serve as default controls for the dialogs related to the CA Telon processes listed above. Each time you start a PWS session, the preferences are loaded. If you change dialog controls during a session, PWS displays the session-specific values until you exit the session. The next time you launch PWS, the preferences defined in the Telon Preferences dialog are once again loaded and displayed.

When you change a preferences setting and click OK, a dialog prompts you to Load preferences now? If you click Yes, the new settings are put into effect. If you click No, the old setting is retained until you click OK in this dialog or you exit PWS and then launch a new session, which automatically reloads the preferences.

The Telon Preferences Dialog is accessed from the Telon menu. It includes four tabs, as described below:

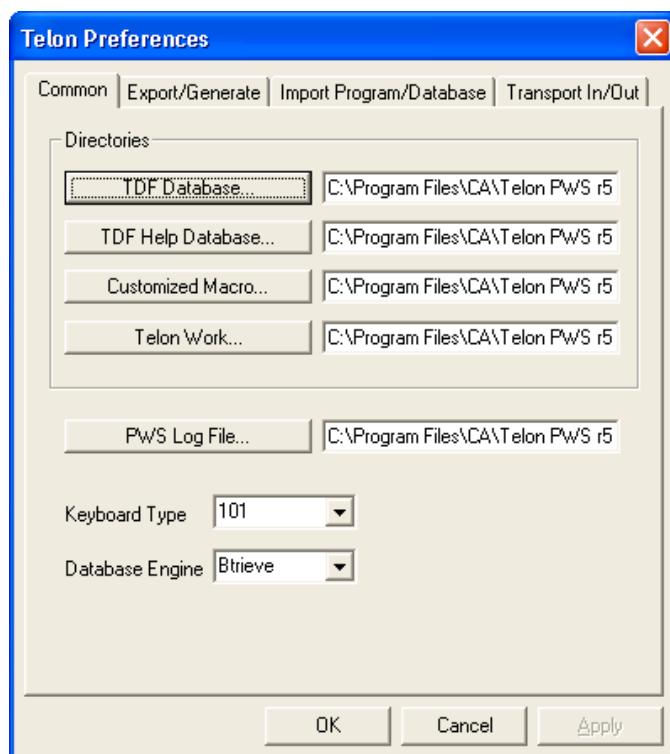
- Common Tab—Provides default controls for several commonly-used directories, including the TDF database, the TDF help database, the customized macro directory, and the CA Telon work directory. This tab also defines the database engine, the directory and file name for the PWS log file, and the keyboard type used in the TDF.
- Export/Generate Tab—Provides default controls specific to the Export/Generate processes, including directories for generated programs, maps, PSBs, and link cards.

- Import Program/Database—Provides default controls specific to the Import function for both programs and database objects.
- Transport In/Out—Provides default controls specific to the Transport In and Transport Out processes, including the directories and file names used for the Transport In file, Transport Out file, Control file, and Report file.

Each tab is described in the following sections.

Common Tab

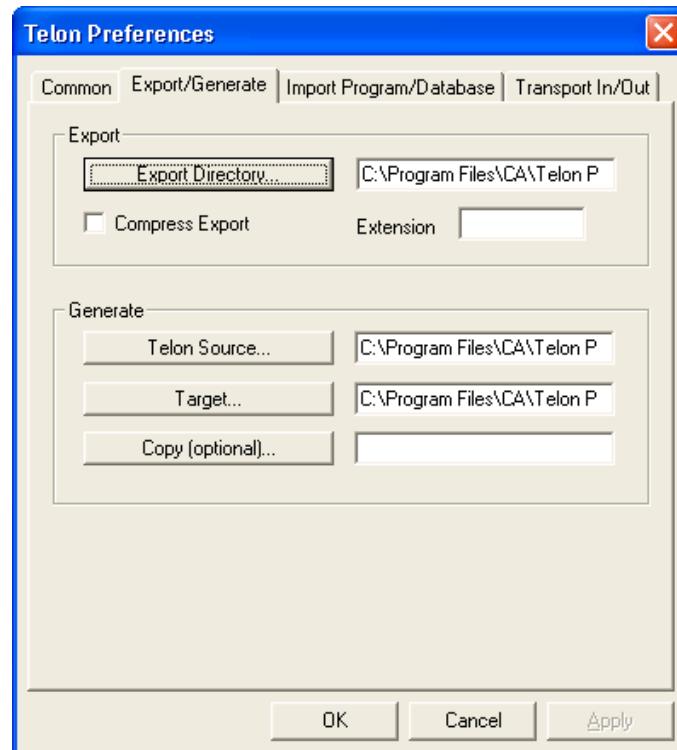
The Common tab lets you identify parameters that are common to multiple PWS processes, such as the location of the TDF database, TDF help database, customized generator macros, Telon work directory, database engine, PWS log file, and keyboard type.



For more information about selecting TDF databases, directories, and files, see [Select Files, Directories, and TDF Databases](#) in the chapter "Introduction." For more information about the parameters on this dialog, access the online help by pressing PF1 (Help) from this dialog.

Export/Generate Tab

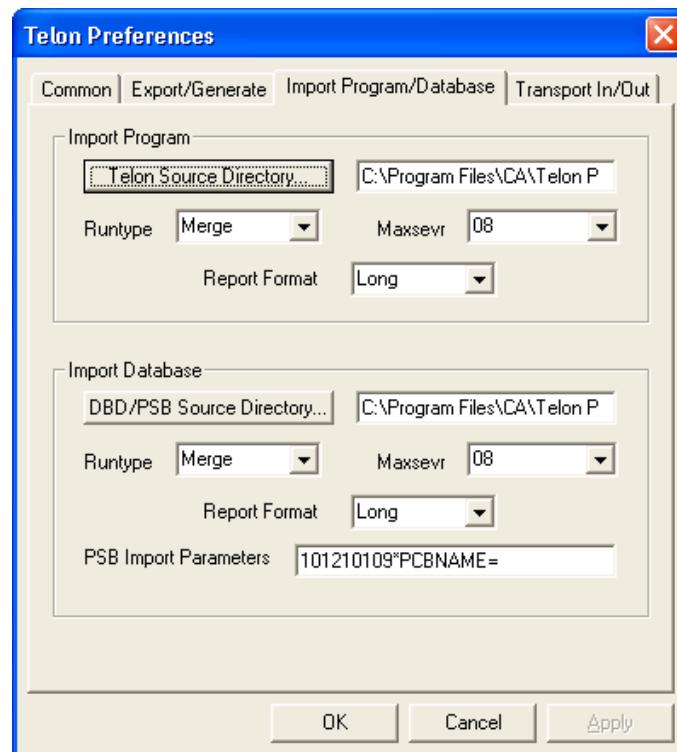
The Export/Generate tab lets you identify parameters used by the Export and Generate processes, such as the location of the directories for exported source, generated programs, copy books, and a default target directory used if any of the other directory settings are left blank. It also lets you choose whether the CA Telon source is in compressed format, and specify the file extension used for generated programs.



Note: For more information about the parameters on this dialog, see the chapter "Import, Export, and Generate Programs."

Import Program/Database Tab

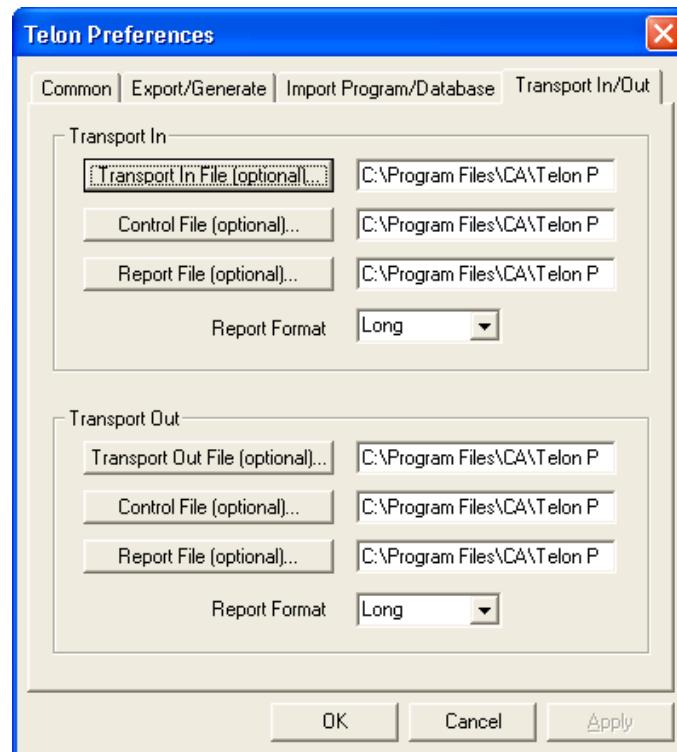
The Import Program/Database tab lets you define parameters specific to the Import process for both programs and database objects, such as the source directories where the program or database object is located, the runtype option that will be applied for the import, and the maximum severity level used along with the runtype. It also lets you specify the format (long or short) of the Import Report.



Note: For more information about the parameters on this dialog, see the chapter "Import, Export, and Generate Programs."

Transport In/Out Tab

The Transport In/Out tab lets you define parameters specific to the Transport processes, such as the directories where the transport, control, and report files are located, and the names of the files. It also lets you specify the format (long or short) of the Transport Report.



Note: For more information about the parameters on this dialog, see the chapter "Using the Transport Facility."

Chapter 7: Work with Generator Macros

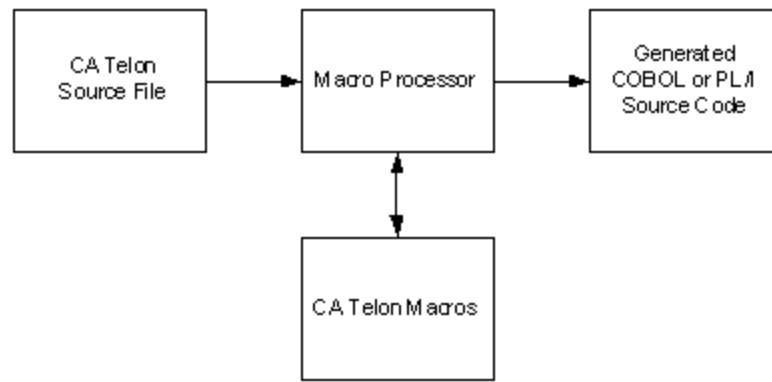
This chapter discusses the Assembler macros that comprise the PWS Generator. It also discusses the macro processor and related utilities.

Generator Components

The PWS Generator consists of two major components:

- The CA Telon Assembler macros
- The macro processor

The following diagram illustrates the relationship between these components and exported CA Telon source:



The exported CA Telon source file contains the values and parameters defined in the TDF. This information is used as input to the macro processor.

The CA Telon source file directs the macro processor to execute specific macros, passing parameters that determine the generation process. The end result is a COBOL or PL/I source program with the characteristics you defined in the TDF.

Maintain the Macro Library

For most users, modifying macros in the macro library is done only once after installation, or perhaps not at all. However, if done, it requires an understanding of the following concepts:

- How to test modified macros
- Search path hierarchy for macro library directories

Modify Macros

Before modifying a macro, you first copy the macro to the test macro directory (default is \maclibt) and then modify the test copy.

Modify

To modify the macro, edit the macro with any ASCII text editor. Be sure to adhere to the proper rules of syntax for 370 Assembler macros. Usually, you will only add, change, or delete parameters that are already in place for you.

For more information about customizing specific Generator macros, see the *Implementation Guide*.

Note: Be sure to use an editor in fixed font mode to maintain the maximum record length at 80 characters.

Backup

Once the macro is tested, make a backup of the unmodified (production) macro and copy the modified macro back into the production macro directory, \maclibe.

WARNING! When you modify Generator macros, consider the following implications:

- Support issues may arise as a result of the changes.
- CA, Inc. cannot be responsible for problems created by unauthorized changes made to any macros.
- New versions of PWS may overwrite the modified macros.

Customizable Macros

PWS provides the following Generator macros referred to as customizable macros. These are the only macros that customers are authorized to modify.

- TLNIIS
- TELONIIS
- PGMNAMES
- USREDITS

You must conform to unique system, environmental, and module naming conventions when configuring these macros. PWS provides a Windows interface to support the maintenance of the parameter settings in three of these macros: TLNIIS, PGMNAMES, and USREDITS. To modify TELONIIS, use an ASCII text editor.

The repository for the parameter settings for the TLNIIS, PGMNAMES, and USREDITS macros is the Macro.ini file. This file contains a series of sections, each related to a major category in these customizable macros:

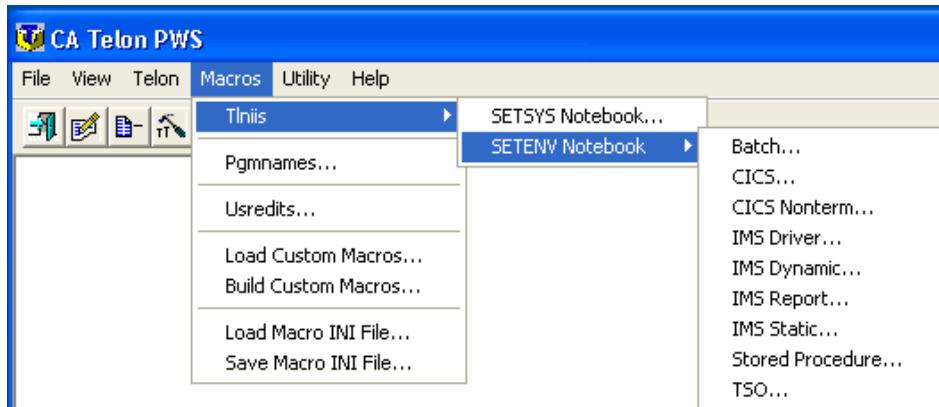
- SETSYS
- SETENV for each environment
- PGMNAMES
- EDIT for each user edit
- DFNWKFLD for each edit work field

For more information about the Macro.ini file, see the appendix "Macro.ini."

Customizable macro processing is divided into three functions:

- Extraction of customizable macro settings from other CA Telon versions (for example, earlier releases, MVS, and so on).
- The Load Custom Macro process described below accomplishes this. In this process, the TLNIIS, PGMNAMES, and USREDITS macros are parsed, and the parameter settings are loaded into a Macro.ini file.
- Maintenance of the parameter settings by the PWS application. In this process, edit rules for each parameter are applied, and the resulting information is updated in the Macro.ini file.
- Creation of the customizable macros TLNIIS, PGMNAMES, and USREDITS from the information stored in the Macro.ini file through use of the Build Custom Macro process described below. Note that it is only when the customizable macros are built and loaded into the customizable macro directory, \maclibt, that they are available to the Generator; simply storing the information in Macro.ini is not sufficient.

The following sections describe the Macro menu and dialogs that PWS provides for maintaining customizable macro parameters. The Macro menu consists of the items shown below:



Each of these menu items is discussed in detail in the following sections.

TLNIS

The TLNIS menu item is divided into SETSYS and SETENV submenu items. SETENV is further divided into a series of submenu items for each target environment supported by CA Telon.

SETSYS

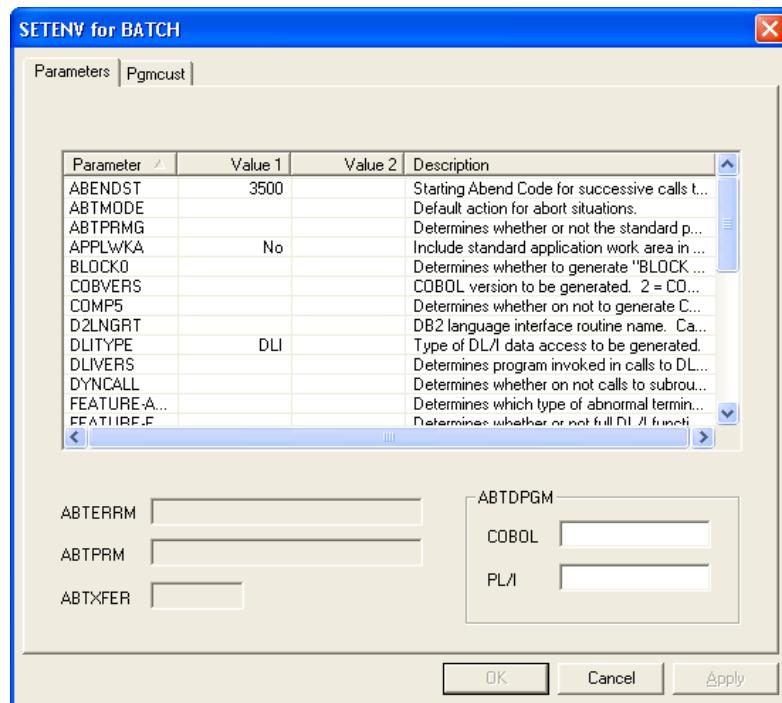
Access the SETSYS notebook from the SETSYS menu item. It is divided into two tabs, with the parameters listed in alphabetical order in the first tab and PGMCUST Custom Code exit points listed in the second. For more information about the SETSYS parameters, see the *Implementation Guide*.

SETENV

Access the SETENV notebook from any of the SETENV submenu items. It is also divided into two tabs, with the parameters listed in alphabetical order in the first tab and PGMCUST custom code exit points listed in the second. Note that only those parameters that are available for a particular environment are listed. For more information about the SETENV parameters, see the *Implementation Guide*.

Parameters Tab

The Parameters tab functions the same way for SETSYS and SETENV. SETSYS is used in this example.



To use the Parameters tab

1. Double-click in the Value 1 field to enter or change a value for a parameter. If the parameter has a limited set of options, a drop-down list containing the options is displayed. If the value to be entered is freeform, you can enter a value in the Value 1 field.

Note: The parameters PAGEF and PAGEB require entries in both the Value 1 and Value 2 fields. Parameters DB2DATE and DB2TIME require a format string in Value 2 only when Value 1 is set to LOC.

The Abnormal Termination (ABT) fields at the bottom of the dialog are dependent on the value of the ABTMODE or ABTPRMG parameter as follows:

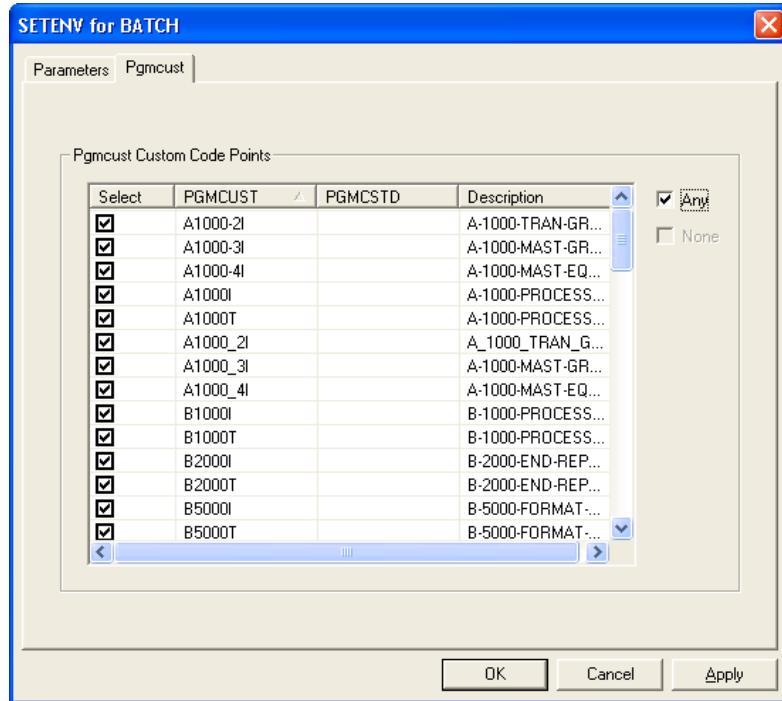
- The ABTXFER field is enabled when the value for the ABTMODE parameter is XFER.
- The ABTERRM field is enabled when the value for the ABTMODE parameter is ERRM.
- The ABTPRM field is enabled when the value for the ABTPRMG parameter is Yes.

2. Do one of the following after you have made all your selections, perform one of the following operations:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

Pgmcust Tab

The Pgmcust tab functions the same way for SETSYS and SETENV. SETSYS is used in this example.



You can use the Any and None check boxes as follows:

- None does not let you specify any PGMCSTD entries.
- Any lets you enter a PGMCSTD value for all PGMCUST Custom Code Points.

Note: When Any is checked, a check mark appears in the Select column to the left of all PGMCUST entries. If Any is not checked, you can select PGMCUST values by checking this box.

To specify a PGMCSTD value

1. Double-click in the PGMCSTD field for the particular PGMCUST entry.

Note: For SETENV, only those PGMCUST custom code points applicable to the selected environment are listed.

If PGMCUST is not defined for the selected environment, the SETSYS value (from the Pgmcust tab in the Setsys dialog) is used. However, if no value is set for SETSYS or the relevant SETENV, PGMCUST is set to None. If any change is made to PGMCUST, not including changes made to PGMCSTD, the PGMCUST value is stored with the current environment.

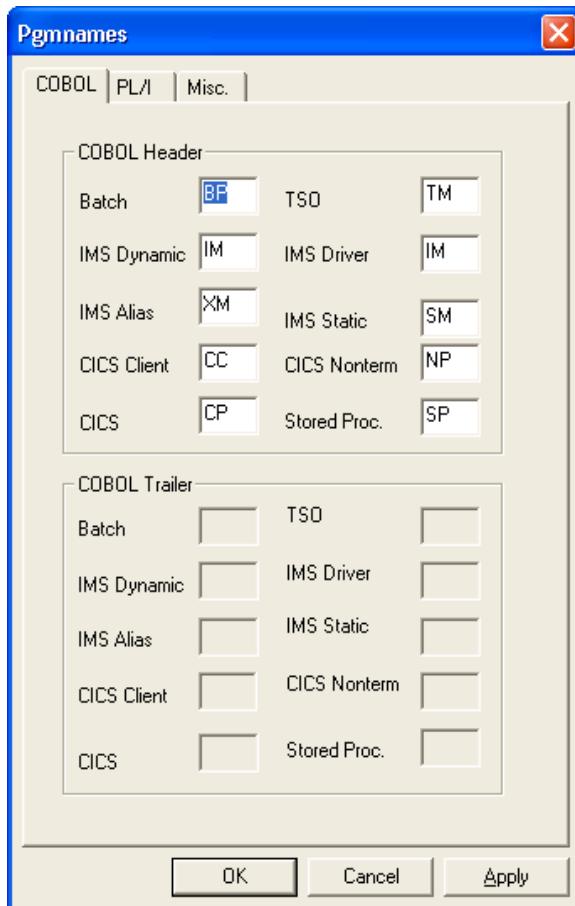
2. Do one of the following after you have made all your selections:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

PGMNAMEs

The PGMNAMEs notebook is accessed from the PGMNAMEs menu item. It is divided into three tabs: COBOL, PL/I, and Miscellaneous settings. For more information about these settings, see the *Implementation Guide*.

COBOL Tab

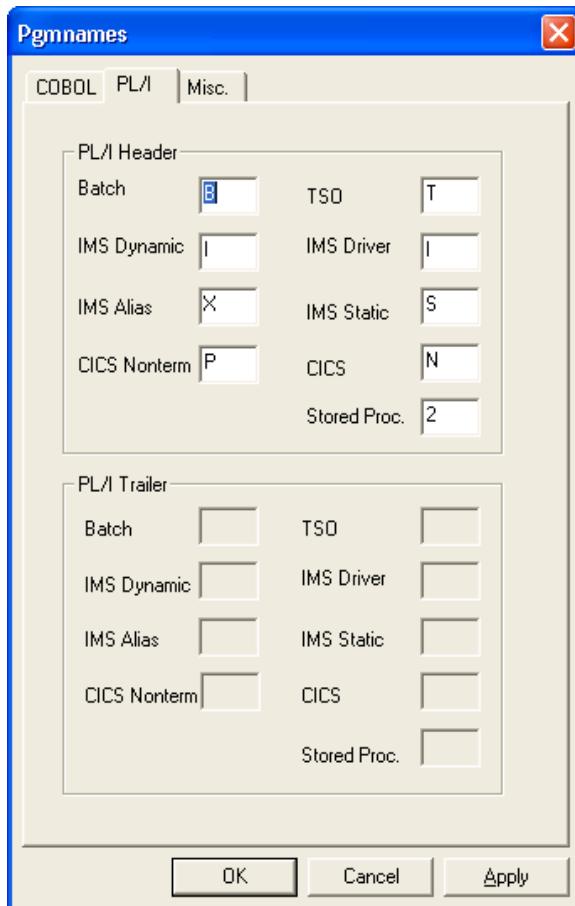


There are two characters shared by the Header and Trailer fields. If two characters are specified for Header, the corresponding Trailer control becomes unavailable. If one character is specified for Header, one character is available for Trailer, and if two characters are specified for Trailer, the corresponding Header control becomes unavailable.

When you have made all your selections, do one of the following operations:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

PL/I Tab

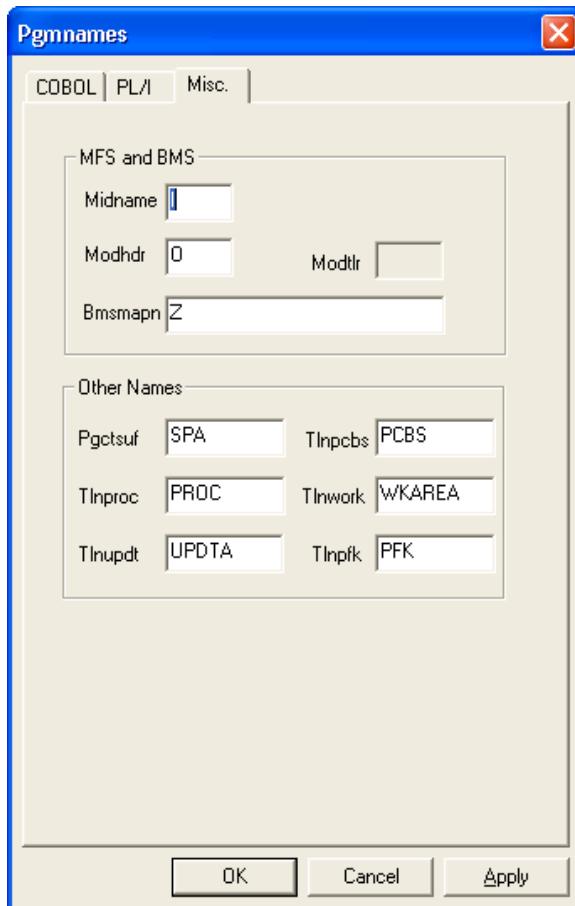


There is only one character available for the Header and Trailer. If one is specified for Header, the corresponding Trailer control becomes unavailable. Similarly, if one character is specified for Trailer, the corresponding Header control becomes unavailable.

When you have made all your selections, do one of the following operations:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

Misc. Tab



There is only one character available for the Modhdr and Modlrl. If one is specified for Modhdr, the corresponding Modlrl control becomes unavailable. Similarly, if one character is specified for Modlrl, the corresponding Modhdr control becomes unavailable.

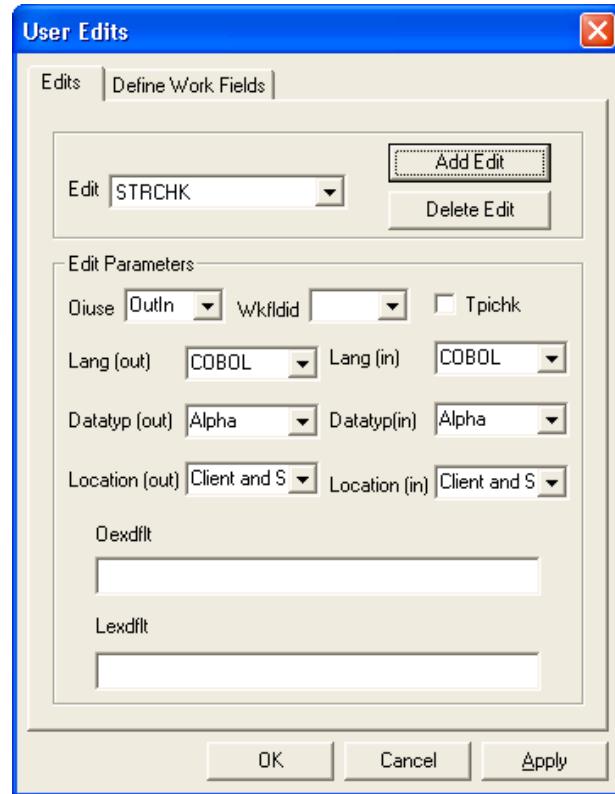
When you have made all your selections, do one of the following operations:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

USREDITS

The USREDITS notebook is divided into two tabs: one for settings for a particular edit and the second for the DFNWKFLD (define work field) settings. For more information about these settings, see the *Implementation Guide*.

Edits Tab

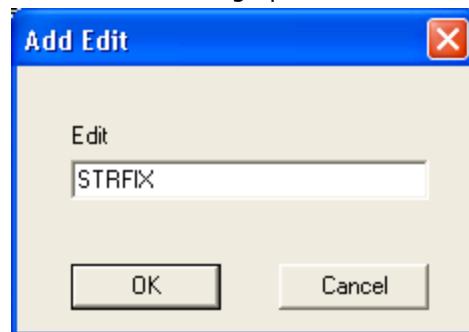


The Edit drop-down list lets you select the edit you want to modify.

To specify a new edit

1. Click Add Edit.

The Add Edit dialog opens.

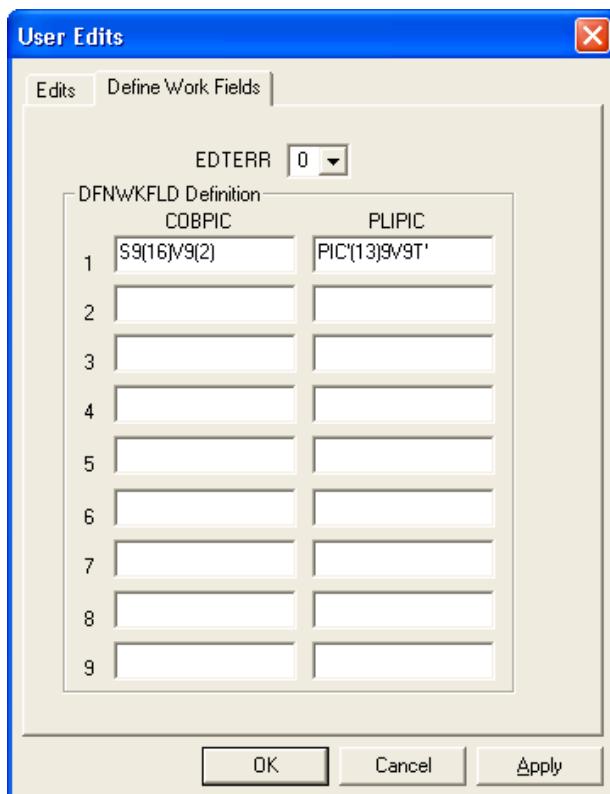


2. Define the edit name and click OK to return to the Edits dialog.

The default values for the controls are displayed for the edit name you defined.

3. Perform one of the following operations after you have made all your selections:
 - Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
 - Click **Cancel** to exit without saving your selections.
 - Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

Define Work Fields Tab



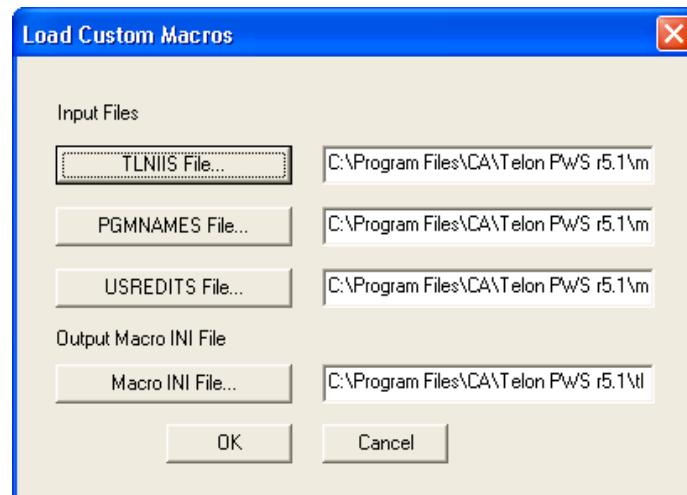
When you have made all your selections, perform one of the following operations:

- Click **Apply** to save the settings you specified in the Macro.ini file. The dialog remains open.
- Click **Cancel** to exit without saving your selections.
- Click **OK** to save the settings you specified in the Macro.ini file. When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the settings were made.

Load Custom Macros

Load Custom Macros takes existing customizable macros (TLNIIS, PGMNAMES, and USREDITS), and parses them to produce a Macro.ini file containing the parameter settings for each of these macros. Typically, Load Custom Macros is used to migrate customizable macros from previous releases of CA Telon or from the z/OS version of the product.

Load Custom Macros is accessed from the Macros menu.



To load custom macros

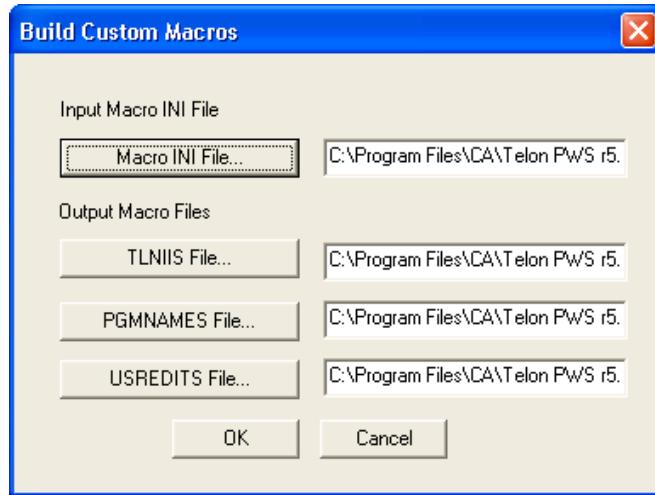
1. Select the macro input files and Macro.ini output file. If you have changed the default directory or file name, the value is changed in the Telon.ini file.
For more information about selecting files, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Click OK after making your selections to load the macros and create the Macro.ini file.

When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the macro was loaded.

Build Custom Macros

The Build Custom Macro process uses the information from Macro.ini to build the three customizable macros TLNIIS, PGMNAMES, and USREDITS.

Build Custom Macros is accessed from the Macros menu.



To build custom macros

1. Select the Macro.ini input file and the macro output files. If you have changed the default directory or file name, the value is changed in the Telon.ini file.
For more information about selecting files, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.
2. Click OK after making your selections, click OK to build the custom macros from the Macro.ini file.
When the process is completed, a message is displayed in the status bar at the bottom of the PWS main window, indicating the Macro.ini file was created.

Save and Load the Macro INI File

The Save Macro INI File utility is used in conjunction with the Load Macro INI File utility to facilitate the use of multiple Macro.ini files. When developing multiple applications using a single PWS workstation, the saving and loading of Macro.ini information can be beneficial. These utilities use standard Window dialogs and perform the following:

- **Save Macro INI File**—Saves a copy of the active Macro.ini file for loading at a later time.
- **Load Macro INI File**—Copies a previously saved version of Macro.ini and makes it active.

The active Macro.ini file is located in the user directory (for example, in C:\PWS\TLNUSERS\username). For more information about the Macro.ini file, see the appendix "Macro.ini."

Chapter 8: Implement Security

PWS security is controlled by a matrix of user types and access rights. As installed, PWS grants all user types full access to all TDF functions and all dialogs launched from the Telon and Utility menus in the PWS main window.

PWS includes three user types: Controllers (C), Analysts (A), and Programmers (P). If you want, you can customize default security settings by changing the access rights for a given user type. If the standard security features are not adequate for your needs, you can also adopt or create a user-defined security module to support your site-specific needs.

This chapter describes how to:

- Customize standard PWS security
- Implement a user-defined security module

Customize Standard Security

You can customize standard PWS security by modifying the user/access rights matrix stored in the TDF. The following procedures are provided to customize security access:

- Customize Access to TDF Functions—Describes how to change access rights to the menus and functions contained in the TDF.
- Customize Access to PWS Menus and Dialogs—Describes how to change access rights to the menus and dialogs included in the TDF main window.

Customize Access to TDF Functions

To customize TDF security

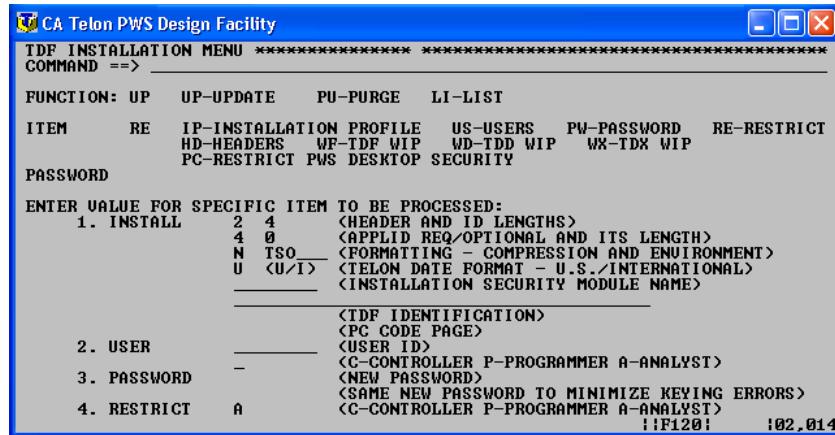
1. Select Telon, CA Telon Design Facility to open the CA Telon Design Facility dialog. Specify the TDF database and TDF help database you want to use, and click OK.

For more information about selecting TDF databases, see *Select Files, Directories, and TDF Databases* in the "Introduction" chapter.

After you specify the path for the TDF and help databases, the TDF Main Menu opens.

2. Enter Install on the command line and press Enter.

The Installation Menu opens.



3. Type the following and press Enter to update access to TDF functions:

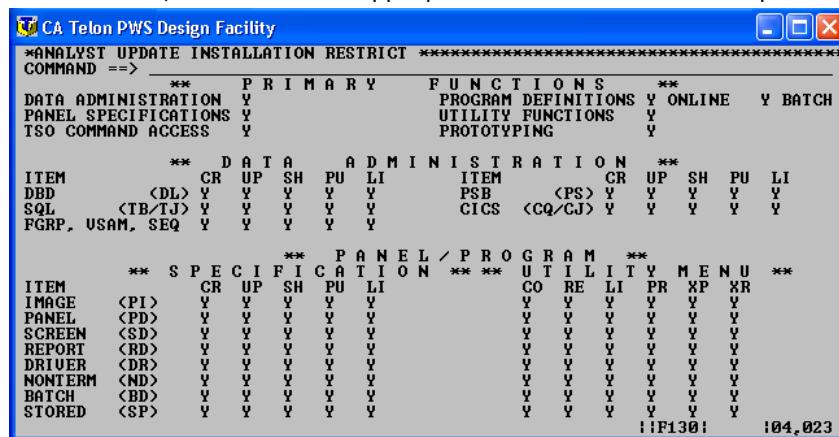
- UP (Update) in the Function field
- RE (Restrict) in the Item field
- Your TDF password (CSIMK is the default)
- The code (A, C, or P) for the user type you want to update in the Restrict field

After you make your selections, the Update Installation Restrict (F130) screen is opened.

4. Use this screen to restrict access to TDF functions.

You can restrict access for any of the primary TDF functions (for example, Data Administration, Utility functions, etc.), specific Data Administration functions (for example, Create, Update, Show, Purge, List for SQL, PSBs, etc.), and specific Panel/Program functions on a specific menu (for example, Create, Update, Show, Purge, List for a panel image or batch program) or on the Utility menu (for example, Copy Rename, List, Print, Export for Screen or Driver programs).

As installed, all user types have access to all TDF functions. To restrict access to a function, enter N in the appropriate row and column and press Enter.



ANALYST UPDATE INSTALLATION RESTRICT *****													
COMMAND -->													
** P R I M A R Y F U N C T I O N S **													
DATA ADMINISTRATION Y					PROGRAM DEFINITIONS Y ONLINE Y BATCH								
PANEL SPECIFICATIONS Y					UTILITY FUNCTIONS Y								
TSO COMMAND ACCESS Y					PROTOTYPING Y								
** D A T A A D M I N I S T R A T I O N **													
ITEM	CR	UP	SH	PU	LI	ITEM	CR	UP	SH	PU	LI		
DBD	<DL>	Y	Y	Y	Y	PSB	<PS>	Y	Y	Y	Y		
SQL	<TB/TJ>	Y	Y	Y	Y	CICS	<CQ/CJ>	Y	Y	Y	Y		
FGRP, USAM, SEQ	Y	Y	Y	Y	Y								
** S P E C I F I C P A N E L / P R O G R A M **													
ITEM	CR	UP	SH	PU	LI	ITEM	CO	RE	LI	PR	XP	M E N U	XR
IMAGE	<PI>	Y	Y	Y	Y	IMAGE	Y	Y	Y	Y	Y	Y	Y
PANEL	<PD>	Y	Y	Y	Y	PANEL	Y	Y	Y	Y	Y	Y	Y
SCREEN	<SD>	Y	Y	Y	Y	SCREEN	Y	Y	Y	Y	Y	Y	Y
REPORT	<RD>	Y	Y	Y	Y	REPORT	Y	Y	Y	Y	Y	Y	Y
DRIVER	<DR>	Y	Y	Y	Y	DRIVER	Y	Y	Y	Y	Y	Y	Y
NONTERM	<ND>	Y	Y	Y	Y	NONTERM	Y	Y	Y	Y	Y	Y	Y
BATCH	<BD>	Y	Y	Y	Y	BATCH	Y	Y	Y	Y	Y	Y	Y
STORED	<SP>	Y	Y	Y	Y	STORED	Y	Y	Y	Y	Y	Y	Y

5. Exit the PDF to put the new access rights into effect and restart it.

Customize Access to PWS Menus and Dialogs

Use the following procedure to customize access to PWS main window menus and dialogs.

To customize access to PWS main window and dialogs

1. Select Telon, CA Telon Design Facility to open the CA Telon Design Facility dialog.
2. Specify the TDF database and TDF help database you want to use and click OK.

Note: For more information about selecting TDF databases, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.

After you specify the path for the TDF and TDF help databases, the TDF Main Menu opens.

3. Enter Install on the command line and press Enter.

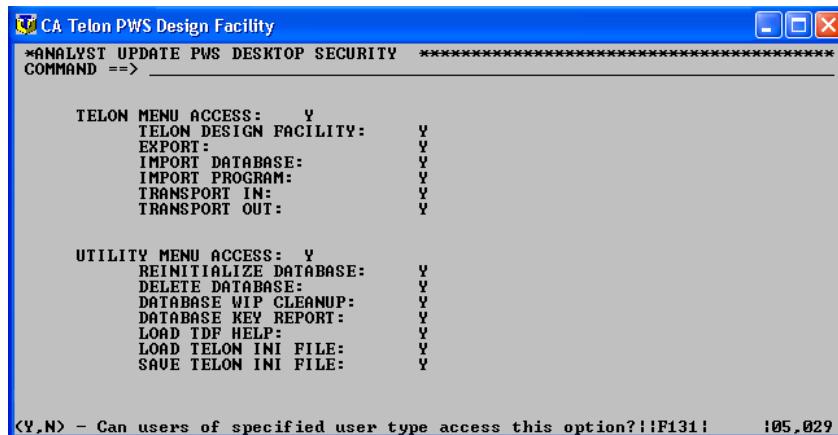
The TDF Installation Menu opens.

4. Type the following and press Enter to update access to TDF functions:

- UP (Update) in the Function field
- PC (Restrict PWS Desktop Security) in the Item field
- Your TDF password (CSIMK is the default)
- The code (A, C, or P) for the user type you want to update in the Restrict field

After you make your selections, the Update PWS Desktop Security screen opens. You can use this screen to restrict access to options included on the Telon and Utility menus and to the menus themselves on the TDF main window.

If you restrict access to an entire menu, none of the menu items is accessible to users defined to the user type for which you are updating security, even if the indicator for a specific menu item is set to Y. However, if you enable access to an entire menu, you can still restrict access to a menu item by setting its indicator to N.



5. Exit the TDF to put the new access rights into effect and restart it.

Important! If you inadvertently restrict your access to the Telon Menu or to the CA Telon Design Facility, you can reinstate it using a batch utility. For more information, see the chapter "Using PWS in Batch Mode."

Implement a User-Defined Security Module

You can implement a user-defined security module that enables you to determine which users can access specific items in the TDF. Typically, such a module enables you to implement more restrictive security than the standard security described earlier in this chapter. For example, with a user-defined security module, you could restrict specific programmer user IDs from accessing particular headers in the TDF.

At runtime, the security module is called by the TDF security interface module from:

- TDF main menu
- TDF submenus
- TDF list screens
- Import, export, and transport processes

With the supplied source module TNMCSCUR.COB (included in the \SOURCE directory), you can modify and then build and customize it. You can give the program any name, as long as the third character of the name is an "M."

Note: The parameter list for TNMCSCUR cannot be modified.

The parameters are described in detail in the *CA Telon Application Generator Implementation Guide*.

After you create your security module, you must update the TDF Installation Menu (F120) screen.

To update the TDF Installation Menu screen

1. Choose the CA Telon Design Facility option from the Telon menu to open the CA Telon Design Facility dialog. Specify the TDF database and TDF help database you want to use and click OK.

Note: For more information about selecting TDF databases, see Select Files, Directories, and TDF Databases in the "Introduction" chapter.

After you specify the path for the TDF and TDF help databases, the TDF comes up. This gives you access to all the TDF functions and menus. To access the TDF Installation Menu (F120), enter Install on the command line and press Enter. The TDF Installation Menu opens. Use this screen to install your user-defined security module.

2. Type the following to connect your security module to the security module:
 - UP (Update) in the Function field
 - IP (Installation Profile) in the Item field
 - Your TDF password (CSIMK is the default)
 - Your security module name in the Installation Security Module Name field
3. Press Enter to complete the process and exit the TDF, and then restart it.

Chapter 9: Use PWS in Batch Mode

PWS provides batch processing for functions available in the Windows application, including:

- Accessing the TDF
- Initializing the TDF database
- Loading TDF help
- Importing, exporting, and generating
- Transporting in and out
- Deleting database objects
- Deleting Orphan TNTCCL entries
- Printing TDF panel images
- Cleaning up WIP files
- Creating Macro.ini from customized macros
- Building custom macros from Macro.ini
- Creating compressed macros
- Performing global find/change operations

PWS also provides batch processing to perform functions that are not available within the Windows application, including:

- Displaying the current user name
- Using the SET function to modify Telon.ini settings
- Initializing the TDF installation profile

This chapter discusses these functions and provides the information you need to execute them.

Run Process in Batch Mode

You must execute TN3BKRUC from within the base product \BIN directory. This program uses the following syntax:

```
tn3bkruc <function> [</parameters> ]
```

Where the optional parameters are identified by a slash (/) as follows:

Parameter	Description
/b-	Identifies a file to test for the end of a process
/i-	Identifies the Telon.ini file to use
/m-	Identifies the Mult File containing the specific Telon objects to process
/s-	Identifies a string for the SET function

Note: Batch commands are not case-sensitive; PWS converts commands to uppercase internally.

The following table defines the functions that are initiated by TN3BKRUC.

Function	Description
CCCK	Delete orphan TNTCCL entries
DBIN	Telon database initialization
DDEF	Delete definition
EXP	Export
GEN	Generate
IMPD	Import database
IMPP	Import program
LHLP	Load TDF help
LMACINI	Load Macro.ini file
LTLNTNI	Load Telon.ini file
MINI	Create Macro.ini from existing TLNIIS, PGMNAMES, and USREDITS
MMAC	Create TLNIIS, PGMNAMES, and USREDITS from Macro.ini
PRNT	Print TDF panel images

Function	Description
SMACINI	Save Macro.ini file
STLNINI	Save Telon.ini file
TDF	Bring up the TDF
TRNI	Transport In
TRNO	Transport Out
WIPC	WIP file clean-up

If the /i parameter setting is not used, then the batch process uses the options defined in the Telon.ini file located in the \TLNUSERS\userid subdirectory.

Similarly, if the /m parameter setting is not used, then the batch process uses the objects listed in the appropriate Mult File located in the \TLNUSERS\userid subdirectory.

The following sections define the use of the parameters, Mult File and Flag File in more detail.

Use the Mult File Parameter

The Mult File parameter identifies a file that lists CA-Telon objects to be processed. This parameter is required regardless of whether you are processing one or more than one CA-Telon object. By default, the PWS Windows application uses specific file names (shown in the table below) to identify Mult Files; however, you can assign other file names in batch mode. Batch commands are not case-sensitive; PWS converts commands and file names within the Mult File to uppercase internally.

The following table summarizes the format for the Mult File parameter by function. Note that *hh* indicates a header, *iiii* indicates a program, and *dd* indicates a definition type.

Function	Default File Name	Content Description	Example
DDEF	MULTDDEF.FIL	<i>hhiiii.dd</i> , where <i>dd</i> is definition type	TRCCVA.PD
EXP	MULTEXP.FIL	<i>hhiiii.dd</i>	TRCCVA.SD
GEN	MULTGEN.FIL	<i>hhiiiid.ext</i> , where <i>ext</i> is file extension	TRCCVASD.EXP
IMPD	MULTIMPD.FIL	Name of DBD or PSB source file (with extension)	TRGDBDV1.EXP

Function	Default File Name	Content Description	Example
IMPP	MULTIMPP.FIL	Name of Telon Source file (with extension)	TRCCVASD.EXP
PRNT	MULTPRNT.FIL	<i>hhiiii.PI</i>	TRCCVA.PI

The following example illustrates the use of a Mult File with a user-defined Telon.ini file. The generate process uses a Mult File named build5.fil and a Telon.ini file named build5.ini. Both files are in the C:\PWS\tlnwork directory.

```
tn3bkruc gen /m-c:\PWS\tlnwork\build5.fil /i-c:\PWS\tlnwork\build5.ini
```

Use the Flag File Parameter

The Flag File parameter lets you sequence the functions within a batch file. By including this parameter at the end of the TN3BKRUC command, you direct PWS to create a flag file signaling that the run unit has completed. In the following example, the flag file ensures that the Generate completes before the COBOL compile (identified as cobol) begins.

```
tn3bkruc gen /m-c:\PWS\tlnwork\build5.fil /i-c:\PWS\tlnwork\build5.ini  
/b-c:\PWS\tlnwork\build5.dat  
:flag  
if not exist c:\PWS\tlnwork\build5.dat goto :flag  
cobol...  
cobol...
```

A related flag file with the name desktop.fil is produced in the user subdirectory under \tlnusers whenever a PWS Desktop session is completed. If you want to delay a batch process until the PWS Desktop work is finished, you can code something similar to the following batch file:

```
rem must be connected to the user subdirectory under \tlnusers  
if exist desktop.fil erase desktop.fil  
c:\PWS\bin\tn3menu  
:deskloop  
if not exist desktop.fil goto deskloop
```

Display the Current User Name

The Display User batch utility lets you display the current Windows user name in effect on a particular workstation along with the names of the server and local base directories and the user directory. The \tlnusers subdirectory contains information about PWS users. Tlnusers contains a subdirectory for each PWS user, based on the user name passed from Windows.

To invoke this utility, enter the following command:

```
tn3dpusr
```

You must execute TN3DPUSR from within the base product \BIN directory, or else you must specify a fully qualified path and file name.

If you supply a parameter to TN3DPUSR, the display is made in the form of a SET statement, with the environmental variable containing the name of the parameter being set. For example, if you enter the following for user USER123:

```
tn3dpusr myname
```

The display is:

```
set myname=USER123
set myname_ServerDir=c:\PWS\
set myname_LocalDir=c:\PWS\
set myname_UserDir=c:\PWS\tlnusers\USER123
set myname_CurrDir=c:\PWS\tlnwork
```

You can pipe the output of this display to a batch file and then call that batch file to implement the setting. For example:

```
tn3dpusr myname > setit.bat
call setit
```

The call to SETIT.BAT loads the environmental variable myname with the value USER123, as well as the other directory-related environmental variables.

Use the SET Function to Modify Telon.ini Settings

The SET function is available only in batch mode. Use it to modify the contents of the Telon.ini file, including source and target directories, and various process parameters. See the appendix "Telon.ini" for a complete description of the settings. To run the SET function, enter the following at the command line:

```
tn3bkruc set /s-<function>,<key>=<value> [</i-setting>]
```

where:

- <function> is one of the valid PWS r5 sections
- <key> is a valid key for the indicated function
- <value> is the setting for that key
- </i-setting> is an optional specification of the Telon.ini file to update

Note that the *<function>* and *<key>* parameters must be separated by a comma, with no embedded spaces. For example:

```
tn3bkruc set /s-gen,src_dir=g:\exprtpds /i-c:\PWS\tlnwork\build5.ini
```

This changes the *src_dir* setting in the [Telon-GEN] section of the Telon.ini information contained in build5.ini to point to the g:\exprtpds directory.

If the */i* parameter setting is not used, the SET process updates the options defined in the Telon.ini file located in the \TLNUSERS\userid subdirectory.

Perform Global Find/Change Operations

The Find/Change utility lets you change text strings in one or more ASCII text files and generate a report of the changes. The search and replace processes are case-sensitive. When specifying members to search, you can use the wildcard characters * and ?.

You can launch the utility from the PWS Windows application or from the command line.

To launch Find/Change from the command line, enter the following:

```
tn3fnchg Change_from Change_to Members_to_change [Report_file]
```

where:

- *Change_from* identifies text string to change.
- *Change_to* identifies replacement string (to specify a null string, use "").
- *Members_to_change* identifies fully qualified (or not fully qualified) member selection criteria.
- *Report_file* identifies location of the report; if not specified, no report is produced.

Use Control Files with Find/Change

An alternative way to use Find/Change utilizes two control files for input. The first contains the changes to make to a list of files, and the second contains the list of files to change. Each control file must have a file extension of .DAT. Each FIND/CHANGE parameter file name must be prefixed with an AT (@) sign.

Example

```
tn3fnchg @CHANGES @FILELIST [Report_file]
```

where @CHANGES is a file (CHANGES.DAT) containing one or more lines of text to change and the revised text and @FILELIST is a file (FILELIST.DAT) containing one or more lines, each indicating a file to process.

The format of the lines in CHANGES.DAT is:

```
Change_from,Change_to
```

The comma delimiter is required. Commas or blanks can be included in the from or to string by enclosing the string in single or double quotes. For example:

```
#SRCCPY,'C:\COPYLIB "D:\CICSCOPY" D:\IMSCOPY'  
#MACLIBT,'C:\TESTMAC;D:\MACLIBT'
```

The format of the lines in the FILELIST.DAT file is:

```
FILENAME.EXT  
TN3*.C??
```

Conventions

The following conventions should be observed when using the Find/Change utility.

- You can use apostrophes (') or quotes ("") to delimit the FROM or TO strings (or both) containing spaces or commas. You must use the same delimiter to begin and end the string.
- To embed quotes inside a string, use apostrophes as the delimiters.
- To embed apostrophes inside a string, use quotes as the delimiters.

– Example 1:

```
#WHAT,'WHERE'S MY DOG?' #WHAT is replaced with WHERE"S MY DOG?
```

– Example 2:

```
#WHAT,"WHERE'S MY DOG?" #WHAT is replaced with WHERE'S MY DOG?
```

- Example 3:
#WHAT, 'MY "DOG" IS BIGGER THAN YOUR DOG' #WHAT is replaced with MY "DOG" IS BIGGER THAN YOUR DOG
- Example 4:
#WHAT, "MY 'DOG' IS BIGGER THAN YOUR DOG" #WHAT is replaced with MY 'DOG' IS BIGGER THAN YOUR DOG
- Any leading spaces not within delimiting quotes are stripped from the front of the find/change entry.

Report and Messages

When Find/Change concludes, you can browse the report file to see what changes were made. As shown in the following sample report, the line containing the change-from text is prefaced with F>, and the line containing the change-to text is prefaced with T>.

```
— Find/Change results for member MAKEBAT.BAT —
— Find/Change results for member TLNSESS.BAT —
— Find/Change results for member UNSET24.BAT —
— Find/Change results for member SET24.BAT —
— Find/Change results for member EXPORT.BAT —
F>REM #SRCEXP Path where the CA-Telon exported source resides.
T>REM l:\dev\pws24t\srcexp Path where the CA-Telon exported source resides.
F>REM #TLNWORK Path where CA-Telon work files reside.
T>REM l:\dev\t Path where CA-Telon work files reside.
F>IF '%TNEXPORT%' == '' SET TNEXPORT=#SRCEXP
T>IF '%TNEXPORT%' == '' SET TNEXPORT=l:\dev\pws24t\srcexp
F>IF '%TLNWORK%' == '' SET TLNWORK=#TLNWORK
T>IF '%TLNWORK%' == '' SET TLNWORK=l:\dev\t
— Find/Change results for member TLNCLEAN.BAT —
— Find/Change results for member TLNXDEF.BAT —
F>REM #TLNWORK Path where CA-Telon work files reside.
T>REM l:\dev\t Path where CA-Telon work files reside.
F>IF '%TLNWORK%' == '' SET TLNWORK=#TLNWORK
T>IF '%TLNWORK%' == '' SET TLNWORK=l:\dev\t
```

Initialize the TDF Installation Profile

As described in the chapter "Implementing PWS Security," it is possible to restrict your access to the Telon menu and CA-Telon Design Facility menu item. If this happens, you are locked out of the TDF and unable to reinstate your access using the PWS Windows application. Through batch processing, you can restore access by initializing the installation profile stored in the TDF. The PRFI function lets you reset the installation profile to the default values assigned when the TDF database was created. If you made changes to the profile after you created the TDF database, you must reapply them after initializing it. To invoke PRFI, enter the following command:

```
tn3bkruc prfi
```

When you issue this command, you are prompted to supply the TDF password before you can proceed.

Standalone RESLVCBL, RESLVPLI

Standalone versions of the RESLVCBL (Resolve Cobol COPY statements) and RESLVPLI (Resolve PL/I INCLUDE statements) executables are included with PWS r5 to provide compatibility with the previous releases.

To invoke RESLVCBL, enter the following:

```
Reslvcl <input file> <output file> [<copy lib1>, <copy lib2>,...]
```

Where:

- <input file> is a text file containing COPY statements.
- <output file> is the resulting output file containing the inserted text for each copy statement.
- <copy lib1> and so on are the directories where RESLVCBL should search for copy members.

Note the following:

- Each directory specification must end with a backslash ("\").
- RESLVCBL only considers members in the specified directories with file extensions of COB, CBL, and CPY.
- RESLVCBL does not support long file and directory names.

To invoke RESLVPLI, enter the following:

```
Reslvpli <input file> <output file> [<copy lib1>, <copy lib2>, ...]
```

Where:

- <input file> is a text file containing INCLUDE statements.
- <output file> is the resulting output file containing the inserted text for each include statement.
- <copy lib1> and so on are the directories where the RESLVPLI program should search for include members.

Note the following:

- Each directory specification must end with a backslash ("\").
- RESLVPLI only considers members in the specified directories with file extensions of PLI and PL1.
- RESLVPLI does not support long file and directory names.

Chapter 10: Use PWS with Mainframe CA Telon

When off-loading your CA Telon development from the mainframe to the PC, you may need to do some or all of the following tasks:

- Download customized macros to the PC
- Download CA Telon source files
- Download copy members
- Migrate TDF program and database information

This chapter discusses considerations related to uploading and downloading, and describes ASCII/EBCDIC conversion issues.

Download Customized Macros to the PC

If you have been using CA Telon on the mainframe, you probably have some customized generator macros that you would like to use on the PC. For example, the following macros are commonly customized:

- TLNIIS.MAC (installation defaults)
- PGMNAMES.MAC (program naming conventions)
- USREDITS.MAC (user field edit information)
- TELONIIS.MAC (application-ID logic)

To use these macros on the PC, download them using any standard communications software with file transfer capability. When downloading, be sure to specify conversion from EBCDIC to ASCII using the syntax appropriate to your communications software.

Download CA Telon Source Files

You can download exported CA Telon source files from the mainframe to the PC where you can continue to develop them. (CA Telon source files are also known as Export files or exported source files, or Import files, depending on the direction in which the transfer is being done. They are also sometimes called CA Telon definition files.)

CA Telon source files contain all of the information necessary to describe a single program developed in the TDF. Once exported, these files are used to direct the generation of your COBOL or PL/I code. CA Telon source files are standard 80 column files that can be easily downloaded to the PC and used to generate programs in the PC environment. No special conversion (other than EBCDIC to ASCII) is necessary to use these files on the PC or the mainframe.

Performing a standard Export from the TDF creates CA Telon source files. On the mainframe, exports can also be performed using JCL (JUXDEF) provided with the CA Telon mainframe product, as described in the *CA Telon Application Generator Implementation Guide*.

CA Telon source files can be downloaded using any standard communications software with the file transfer capability. When downloading from the mainframe to the PC, be sure to specify conversion from EBCDIC to ASCII using the syntax appropriate to your communications software.

Once downloaded, the CA Telon source file (with an extension of .EXP) should reside in an export directory. Once there, the file can be imported into your PWS TDF.

Download Copy Members

When you download CA Telon source files from the mainframe, you should also download all external copybook members required by your program. Copy members are resolved by PWS as part of the generation process.

Download external copy members to the copy library directory on your PC. COBOL Copy members must have file extensions of .COB, .CPY, or .CBL. PL/I Copy members must have file extensions of .PLI or .PL1. When downloading from the mainframe to the PC, be sure to specify conversion from EBCDIC to ASCII using the syntax appropriate to your communications software.

Note: If your custom code contains any special characters, you can use the PCCONVRT utility to enable the proper translation of those characters. A full discussion of PCCONVRT is included in the section Uploading COBOL or PL/I Source.

Migrate TDF Program and Database Information

To download a TDF database from the mainframe to the PC, use one of the following methods:

- **Export and Import**—This method is appropriate for migrating a single CA Telon source file. Use the procedures described in Download CA Telon Source Files. For more information, see the chapter "Import, Export, and Generate Programs."
- **Transport**—This method is appropriate for migrating multiple CA Telon source files in one step. The Transport Facility is a batch process that allows you to tailor the type of information you want to migrate from one TDF to another. For more information, see the chapter "Use the Transport Facility."

Use CA Telon PWS with z/OS

If you intend to upload your generated COBOL or PL/I code to the mainframe, review the following topics:

- Creating the CA Telon mainframe execution environment
- Uploading COBOL or PL/I source

Create the CA Telon Mainframe Execution Environment

To run CA Telon-generated programs on the mainframe, CA Telon for z/OS must be installed. Several proprietary subprograms must be available to your program at link-time to handle such things as field edits, abnormal termination, line optimization, and CA Telon screen mapping.

Upload COBOL or PL/I Source

If your target environment is z/OS, we recommend that you upload the CA Telon source and regenerate the CA Telon definition file for the following reasons:

- The large size of a fully resolved and generated CA Telon COBOL or PL/I program may take a long time to transmit.
- Embedded hex codes may not translate correctly when transmitted to the mainframe.

If you are unable to regenerate the CA Telon definition file, PWS provides a conversion procedure called PCCONVRT. This program, which runs from the command line, converts the source file from ASCII to EBCDIC and can handle the conversion of any embedded hexadecimal literals contained within the program.

The CA Telon Generator does not generate embedded hex literals in COBOL or PL/I programs. However, users may have entered hex literals into custom code modules. If this is the case, you must insert special tokens as comments immediately preceding source lines containing hex literal codes in COBOL or the PL/I source code. The tokens direct the conversion process and have the following format:

* !@!ASCIIfex!EBCDIChex!

Example:

* !@!F3CF!C1DC!

where:

- * !@! is a marker for the PCCONVRT process. It tells PCCONVRT.EXE that the next line contains information that needs to undergo special conversion.
- F3CF is the ASCII text (in hex) that needs special conversion. PCCONVRT.EXE looks for F3CF on the next line.
- C1DC is the EBCDIC text to which the ASCII text must be converted. The C1DC value is exchanged with the previous ASCII value.

The exclamation marks (!) serve as delimiters between the ASCII and EBCDIC text.

You cannot convert ASCII into EBCDIC text of a different size.

CA Telon automatically handles all CA Telon-generated special cases; however, if you want to use this special conversion process for custom code and user-created hex literals, you must know the hexadecimal representations for both the ASCII and EBCDIC values.

Special conversions using the *!@! tokens work for only ASCII to EBCDIC conversions.

Using the PCCONVRT Program

You must execute PCCONVRT from within the base product \BIN directory, or else you must specify a fully qualified path and file name. To invoke it, enter the following at a command line prompt.

```
PCCONVRT pgmpath\name [tblpath] [/E]
```

where:

- PCCONVRT is the program that converts the source files.
- *pgmpath\name* is the path and file name of the program source file you want converted.
- *tblpath* is the optional path where the ASCII to EBCDIC file (ASCIEBCD.TBL) can be found.

For additional information on this file, see Maintaining the ASCII to EBCDIC File later in this chapter.

If you do not specify a path, the system defaults to the current directory.

- */E* is an EBCDIC to ASCII conversion. You must type the 'E' in upper case. If you do not specify anything, the system defaults to an ASCII to EBCDIC conversion.

In the following example, the TRIMCTDA.CBL program in path C:\IMSCOB is converted from ASCII to EBCDIC using the conversion file in the C:\TELON directory.

Example:

```
PCCONVRT C:\IMSCOB\TRIMCTDA.CBL C:\TELON
```

For ASCII to EBCDIC conversions, the source file is converted to EBCDIC and the result is written to the same path and file name as the input file, but with an extension of BIN. In the previous example, the converted file would be TRIMCTDA.BIN. The TRIMCTDA.BIN file must then be transmitted to the mainframe as a binary file.

For EBCDIC to ASCII conversions, the source file is converted to ASCII and written to the same path and file name, but with a file extension of TXT.

Maintain the ASCII to EBCDIC File

During PWS installation, ASCIEBCD.TBL and ASCIEBCD.DAT are copied to the \BIN subdirectory. Together with the TBLGEN.EXE program, these files are all you need to maintain in the ASCII to EBCDIC table. The ASCIEBCD.DAT text file contains the hexadecimal representation of ASCII to EBCDIC values. TBLGEN.EXE uses this file to generate the ASCIEBCD.TBL file. ASCIEBCD.TBL is issued by the PCCONVRT utility to determine ASCII/EBCDIC conversion values.

ASCIEBCD.TBL contains the necessary information to convert ASCII values to EBCDIC. This table is in binary format that normal text processors cannot edit.

ASCIEBCD.DAT Format

Any PWS text editor can view or update the ASCIEBCD.DAT file. The format of this file is:

Columns	Value
1 – 2	ASCII character or value in hex
3	Blank
4 – 5	EBCDIC character or value in hex
6	Blank
7 – 80	Comments on what hex represents

In the following example, 20 is the ASCII hex value for a space, and 40 is the EBCDIC hex value for a space. The comment space tells you that the two hex values represent the conversion of the space character.

Example:

"20 40 space"

At the end of the ASCIEBCD.DAT file are 25 sets of 00 with the comment open. You can change these ASCII and EBCDIC conversion entries and add your own conversion values. You can enter the ASCII to EBCDIC conversion value entries in any order.

You must change one of the open entries to add your own value set. You cannot add an entry at the bottom of the file. The file is a fixed size, so you cannot change the number of entries in it.

Generate an ASCIEBCD.TBL

To generate a new ASCIEBCD.TBL, enter the following at a command line prompt:

```
TBLGEN [tblpath]
```

Where:

- TBLGEN is the program used to generate the ASCII to EBCDIC table.
- *tblpath* is the optional path where the ASCIEBCD.DAT file can be found and the ASCIEBCD.TBL file is created. If you do not specify a path, the system defaults to the current directory.

Appendix A: Telon.ini

The Telon Initialization file (Telon.ini) contains information about the PWS session and related server processing. When a function is launched from the Windows application or in batch, the settings within Telon.ini that relate to that function are used.

Telon.ini includes the following sections:

Section	Function Setting
[Telon-AUTO]	Autodoc extract
[Telon-CCCK]	Delete orphan TNTCCL entries
[Telon-COMMON]	Multiple processes
[Telon-DBIN]	TDF database initialization
[Telon-DBKR]	TDF Database Key Reports
[Telon-DDEF]	TDF database object delete
[Telon-EXP]	Export
[Telon-FCHG]	Find/change
[Telon-GEN]	Generate
[Telon-IMPD]	Import database
[Telon-IMPP]	Import program
[Telon-LHLP]	Load help
[Telon-MINI]	Load custom macros
[Telon-MMAC]	Build custom macros
[Telon-PREFERENCES]	Default settings for dialogs
[Telon-PRNT]	Print TDF panel images
[Telon-TRNI]	Transport in
[Telon-TRNO]	Transport out

A default Telon.ini file is installed in the \TLNUSERS subdirectory. When a new user starts PWS, a copy of the default Telon.ini file is loaded into a \username subdirectory under the \TLNUSERS directory. The *username* copy of Telon.ini controls PWS processing for the user.

Telon.ini is maintained both through the Windows application and the command line (using SET). You can modify it using a text editor; however, do so with caution. The changes that you make to Telon.ini settings have processing ramifications.

The following pages describe each section of Telon.ini and provide the name, size, and meaning of the section keys. The default settings are shown, based on a Workstation installation. In the actual installed file, the #TLNSERVER entry is replaced by the server root directory, and the #TLNLOCAL entry is replaced by the local root directory.

Telon-AUTO

This section of Telon.ini contains parameters for the Report File Extract dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Header	5	Entity header value for Autodoc extract
Type	2	Entity type value for Autodoc extract

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Header	Blank, or 1 to 5 characters	(same)	Optional
Type	All, Batch, Driver, Nonterm, Report, Screen, Stored	**, BD, DR, ND, RD, SD, SP	Optional

Default Settings

```
[Telon-AUTO]
HEADER=
TYPE=
```

Telon-CCCK

This section of Telon.ini contains parameters for the Delete Orphan TNTCCL Entries dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Del_flag	1	Delete flag (0=report only, 1=report and delete)
Rpt_file	128	Delete Orphan TNTCCL Report name
Rpt_option	1	Report option (L=long, S=short)

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Del_flag	Check box	1 if checked, otherwise 0	
Rpt_file	Fully qualified file name	(same)	Required; OK to overwrite message if exists
Rpt_option	Drop-down list: Long, Short	L, S	

Default Settings

```
[Telon-CCCK]
DEL_FLAG=0
RPT_FILE=#TLNLOCAL\tlnwork\ccck.rpt
RPT_OPTION=L
```

Telon-COMMON

This section of Telon.ini contains parameters for multiple dialogs. There are two keys of special importance: Tndbprod and Tndbhelp.

Tndbprod is used in the following dialogs:

- CA Telon Design Facility
- Export
- Import Program
- Import Database
- Transport In
- Transport Out
- TDF Database Initialization
- TDF Database Object Delete
- TDF Database WIP Cleanup
- TDF Database Key Report
- Print TDF Panel Image
- List Orphan TNTCCL Records
- Report File Extracts

Tndbhelp is used in the following dialogs:

- TDF Database Initialization
- Load CA Telon Design Facility Help

Parameters

Name	Size	Description
Debug	1	Flag specifying debug information desired
Keyboard_type	3	Keyboard mapping options
Log_file	128	Log file name
Mac_dir	128	Default customizable macro directory
Tlnwork	128	Default work directory
Tndbhelp	128	Default TDF help directory
Tndbprod	128	Default TDF database

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Debug	(no dialog access)	Blank, Y, or D	Y for intermediate debugging; D for detailed
Keyboard_type	Drop-down list: 101, PWS, 101, PWS, 3270 Right Ctrl		
Log_file	Fully qualified filename	(same)	If blank, no log written
Mac_dir	Fully qualified directory	(same)	Directory must contain customizable macros
Tlnwork	Fully qualified directory	(same)	If blank, default taken
Tndbhelp	Fully qualified directory	(same)	Directory must contain TNHELP database file
Tndbprod	Fully qualified directory	(same)	Directory must contain TNTDF, TNTDD, and so on: all needed Telon database files

Default Settings

```
[Telon-COMMON]
DEBUG=
KEYBOARD_TYPE=101
LOG_FILE=#TLNLOCAL\tlnwork\telon.log
TLNWORK=#TLNLOCAL\tlnwork
TNDBHELP=#TLNSERVER\dbprod
TNDBPROD=#TLNSERVER\dbprod
```

Telon-DBIN

This section of Telon.ini contains parameters for the TDF Database Initialization dialog. This dialog also uses the Tndbprod and Tndbhelp settings in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Help_db_flag	1	Initialize TDF help flag
Prod_wip_flag	1	Initialize TDF database flag

Name	Size	Description
User_db_flag	1	Initialize user database flag

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Help_db_flag	Check box	Y if checked, otherwise N	
Prod_wip_flag	Check box	Y if checked, otherwise N	
User_db_flag	Check box	Y if checked, otherwise N	

Default Settings

```
[Telon-DBIN]
HELP_DB_FLAG=N
PROD_WIP_FLAG=Y
USER_DB_FLAG=Y
```

Telon-DBKR

This section of Telon.ini contains parameters for the TDF Database Key Report dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Rpt_file	128	Key Report file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Rpt_file	Fully qualified file name	(same)	Required; OK to overwrite message if exists

Default Settings

```
[Telon-DBKR]
RPT_FILE=#TLNLOCAL\tlnwork\dbkr.rpt
```

Telon-DDEF

This section of Telon.ini contains parameters for the TDF Database Object Delete dialog. This dialog also uses the Tndbprod and Tndbhelp settings in the [Telon-COMMON] section of Telon.ini. In addition, this dialog builds the MULTDDEF.FIL that contains the names of selected objects.

Parameters

Name	Size	Description
Deftype	2	CA Telon source definition type
Del_all	1	Delete all objects flag (batch only)
Header_ID	6	Entity header and ID combination (<i>hhiiii</i>)

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Deftype	BD, DR, ND, PI, PD, RD, SD, SP	(same)	
Del_all	(not on dialog)	0, 1	1 causes all objects in TDF database to be deleted
Header_ID	(any value)	(same)	Six characters maximum

Default Settings

```
[Telon-DDEF]
DEL_ALL=0
```

Telon-EXP

This section of Telon.ini contains parameters for the Export dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini. In addition, the dialog builds the MULTEXP.FIL that contains the names of selected objects.

The Tnexport setting in this section is in effect when the TDF is in operation. It determines the destination for exported source.

Parameters

Name	Size	Description
Compress	1	Export compress setting
Deftype	2	CA Telon source definition type
Env	1	Export environment
Header_ID	6	Preview button wildcard for header ID
Map	1	Export BMS/MFS map setting
Psb	1	Export PSB setting
Run_type	1	Run type: (1=export only; 2=export and generate)
Tln_src_ext	3	Extension for exported CA Telon source file
Tnexport	128	Directory for exported CA Telon source

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Compress	Check box	Y if checked, otherwise N	
Deftype	BD, DR, ND, PI, PD, RD, SD, SP	(same)	
Env	Drop-down list: Batch, CICS, CICS Client/Server, IMS, TSO	(same)	
Header_ID	(any value)	(same)	Six characters maximum
Map	Check box	Y if checked, otherwise N	

Parameter	Dialog Values	INI File Values	Edit Rules
Psb	Check box	Y if checked, otherwise N	
Run_type	Radio buttons: Export only, Export and Generate	1,2	
Tln_src_ext	(any value)	(same)	Three characters maximum; if not specified, EXP is used
Tnexport	Fully qualified directory	(same)	Directory must exist

Default Settings

```
[Telon-EXP]
COMPRESS=Y
ENV=CICS
MAP=N
PSB=N
RUN_TYPE=1
TLN_SRC_EXT=
TNEXPORT=#TLNSERVER\export
```

Telon-FCHG

This section of Telon.ini contains parameters for the Find/Change dialog.

Parameters

Name	Size	Description
From_string	1	From string
Rpt_file	128	Find/Change Report file name
Search_dir	128	Search directory plus wildcard specification
To_string	40	To string

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
From_string	(anything)	(same)	Cannot be blank
Rpt_file	Fully qualified file name	(same)	Optional; OK to overwrite message if exists; if not specified, no report produced
Search_dir	Combination of fully qualified Search Directory and Files to Search	(same)	Directory must exist
To_string	(anything)	(same)	Can be blank

Default Settings

```
[Telon-FCHG]
FROM_STRING=
RPT_FILE=#TLNLOCAL\tlnwork\findchg.rpt
SEARCH_DIR=
TO_STRING=
```

Telon-GEN

This section of Telon.ini contains parameters for the Generate and Advanced Generator Settings dialogs. In addition, the Generate dialog builds the MULTGEN.FIL that contains the names of selected CA Telon source members.

Parameters

Name	Size	Description
Adpccard_sysin	128	Adpccard Sysin file name
Cobvers_flag	1	COBOL version
Cpy_dir	256	Copy directories (directories are separated by a semicolon)
Lang_ext	3	File extension for generated program
Link_ext	3	Extension for generated link cards
Link_suppress	1	Flag to indicate suppression of link card

Name	Size	Description
		generation
Mac_dir	256	Macro directories
Quote_flag	1	Quote/apostrophe option
Src_dir	128	CA Telon source directory
Target_dir	128	Output target directory for generated program
Target_lnk	128	Optional target directory for generated link cards
Target_map	128	Optional target directory for generated BMS/MFS map files
Target_psb	128	Optional target directory for generated PSBs

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Adpccard_sysin	Fully qualified file name	(same)	Use <tlnbase>\bin\dummy, if nothing supplied
Cobvers_flag	COBOL II, COBOL for z/OS	2, 3	Defaults to COBOL for z/OS, if not specified
Cpy_dir	Fully qualified directory(s), separated by semicolon if multiple	(same)	256 byte limitation
Lang_ext	Drop-down list: COB, CBL, or PLI	(same)	
Link_ext	Up to 3 characters	(same)	Optional; defaults to LNK
Link_suppress	Check box	Y if checked, otherwise N	
Mac_dir	Fully qualified directory	(same)	Issue warning message if TLNIIS.MAC and PGMNAMES.MAC not found in this directory
Quote_flag	Apostrophes to quotes, No Conversion, quotes to apostrophes	1, 2, 3	Defaults to No Conversion, if not specified
Src_dir	Fully qualified directory	(same)	Required
Target_dir	Fully qualified directory	(same)	Required
Target_lnk	Fully qualified directory	(same)	Optional

Parameter	Dialog Values	INI File Values	Edit Rules
Target_map	Fully qualified directory	(same)	Optional
Target_psb	Fully qualified directory	(same)	Optional

Default Settings

```
[Telon-GEN]
ADPCCARD_SYSIN=#TLNSERVER\bin\dummy
CPY_DIR=
LANG_EXT=COB
LINK_SUPPRESS=
MAC_DIR=#TLNSERVER\maclibt
SRC_DIR=#TLNSERVER\samples\srcexp
TARGET_DIR=#TLNSERVER\srclib
TARGET_LNK=#TLNSERVER\srclib
TARGET_MAP=#TLNSERVER\srclib
TARGET_PSB=#TLNSERVER\srclib
QUOTE_FLAG=
COBVERS_FLAG=3
LINK_EXT=
```

Telon-IMPD

This section of Telon.ini contains parameters for the Import Database dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini. In addition, the dialog builds the MULTIMPD.FIL that contains the names of selected DBD or PSB source members.

Parameters

Name	Size	Description
Mac-dir	256	Macro directories
Max-sev	2	Numeric maximum severity allowed
Rpt-fmt	1	Report format flag (L=long,S=short)
Run-type	1	Run type: (C=compare, O=overlay, M=merge, I=ignore)
Src-dir	128	PSB/DBD source directory
Tnpcpcbn-parm	100	Tnpcpcbn parameter value

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Mac_dir	Fully qualified directory	(same)	Issue warning message if TLNIIS.MAC and PGMNAMES.MAC not found in this directory
Max_sev	Drop-down list: 00, 02, 04, 08, 12, 16	(same)	
Rpt_fmt	Drop-down list: Short, Long	S,L	
Run_type	Drop-down list: Compare, Merge, Overlay, Ignore	C,M,O,I	
Src_dir	Fully qualified directory	(same)	Issue message if no .EXP files found
Tnppcpcbn_parm	Text string parameter	(same)	

Default Settings

```
[Telon-IMPD]
MAC_DIR=#TLNSERVER\maclibt
MAX_SEV=08
RPT_FMT=L
RUN_TYPE=0
SRC_DIR=#TLNSERVER\samples\srcexp
TNPCPCBN_PARM=101210109*PCBNAME=
```

Telon-IMPP

This section of Telon.ini contains parameters for the Import Program dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini. In addition, the dialog builds the MULTIMPP.FIL that contains the names of selected CA Telon source members.

Parameters

Name	Size	Description
Adpccard_sysin	128	Adpccard Sysin file name

Name	Size	Description
Mac-dir	256	Macro directories
Max-sev	2	Numeric maximum severity allowed
Rpt-fmt	1	Report format flag (L=long, S=short)
Run-type	1	Run type: (C=compare, M=merge, I=ignore)
Src-dir	128	CA Telon source directory

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Adpccard_sysin	Fully qualified file name	(same)	Use <tlndbase>\bin\dummy, if nothing supplied
Mac_dir	Fully qualified directory	(same)	Issue warning message if TLNIIS.MAC and PGMNAMES.MAC not found in this directory
Max_sev	Drop-down list: 00, (same) 02, 04, 08, 12, 16		
Rpt_fmt	Drop-down list: Short, Long	S,L	
Run_type	Drop-down list: Compare, Merge, Ignore	C,M,I	
Src_dir	Fully qualified directory	(same)	Issue message if no .EXP files found

Default Settings

```
[Telon-IMPP]
ADPCCARD_SYSIN=#TLNSERVER\bin\dummy
MAC_DIR=#TLNSERVER\maclibt
MAX_SEV=08
RPT_FMT=L
RUN_TYPE=M
SRC_DIR=#TLNSERVER\samples\srcexp
```

Telon-LHLP

This section of Telon.ini contains parameters for the Load CA Telon Design Facility Help dialog. This dialog also uses the Tndbhelp setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Long_file	128	Help long message file name
Run_type	1	Run type: (1=long, 2=short, 3=both)
Short_file	128	Help short message file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Long_file	Blank, or fully qualified file name	(same)	Optional
Run_type	(no dialog access)	1, 2, 3	
Short_file	Blank, or fully qualified file name	(same)	Optional

Default Settings

```
[Telon-LHLP]
LONG_FILE=#TLNSERVER\bin\longmsg.txt
RUN_TYPE=3
SHORT_FILE=#TLNSERVER\bin\shortmsg.txt
```

Telon-LMACINI

This section of Telon.ini contains the specification of the file to copy into the active Macro.ini file location in the \username subdirectory of \tlnusers.

Parameters

Name	Size	Description
Ini_file	128	Source Macro.ini file to copy

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	Must be a valid Macro.ini file

Default Settings

```
[Telon-LMACINI]
INI_FILE=#TLNLOCAL\tlnwork\macro.ini
```

Telon-LTLNINI

This section of Telon.ini contains the specification of the file to copy into the active file location in the \username subdirectory of \tlnusers.

Parameters

Name	Size	Description
Ini_file	128	Source Telon.ini file to copy

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	Must be a valid Telon.ini file

Default Settings

```
[Telon-LTLNINI]
INI_FILE=#TLNLOCAL\tlnwork\telon.ini
```

Telon-MINI

This section of Telon.ini contains parameters for the Load Custom Macros dialog.

Parameters

Name	Size	Description
Ini_file	128	Output Macro.ini file name
Pgmnames_file	128	Input PGMNAMES file name
Run_selection	1	Run flag: (1-iis/o, 2-iis/e, 3-pgm/o, 4-pgm/e, 5-usr/o, 6-usr/e, 7-all, where /o indicates open for output, and /e indicates open extend)
Tlniis_file	128	Input TLNIIS file name
Usredits_file	128	Input USREDITS file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	Required
Pgmnames_file	Blank, or fully qualified file name	(same)	Optional
Run_selection	(no dialog access)	1, 2, 3, 4, 5, 6, 7	
Tlniis_file	Blank, or fully qualified file name	(same)	Optional
Usredits_file	Blank, or fully qualified file name	(same)	Optional

Default Settings

```
[Telon-MINI]
INI_FILE=#TLNSERVER\tlnwork\macro.ini
PGMNAMEFILE=#TLNSERVER\maclib\pgmnames.mac
RUN_SELECTION=7
TLNIISFILE=#TLNSERVER\maclib\tlniis.mac
USREDITSFILE=#TLNSERVER\maclib\usredits.mac
```

Telon-MMAC

This section of Telon.ini contains parameters for the Build Custom Macros dialog.

Parameters

Name	Size	Description
Ini_file	128	Input Macro.ini file name
Pgmnames_file	128	Output PGMNAMES file name
Run_selection	1	Run flag: (1-iis, 2-pgm, 3-iis/pgm, 4-usr, 5-iis/usr, 6-pgm/usr, 7-all)
Tlniis_file	128	Output TLNIIS file name
Usredits_file	128	Output USREDITS file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	Required
Pgmnames_file	Blank, or fully qualified file name	(same)	Optional
Run_selection	(no dialog access)	1, 2, 3, 4, 5, 6, 7	
Tlniis_file	Blank, or fully qualified file name	(same)	Optional
Usredits_file	Blank, or fully qualified file name	(same)	Optional

Default Settings

```
[Telon-MMAC]
INI_FILE=#TLNSERVER\tlnwork\macro.ini
PGMNAMEFILE=#TLNSERVER\maclibt\pgmnames.mac
RUN_SELECTION=7
TLNIISFILE=#TLNSERVER\maclibt\tlniis.mac
USRDITSFILE=#TLNSERVER\maclibt\usredits.mac
```

Telon-PRNT

This section of Telon.ini contains parameters for the Print TDF Panel Image dialog. The dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini. In addition, this dialog builds the MULTPRNT.FIL that contains the names of selected PI objects.

Parameters

Name	Size	Description
Dblspc_flag	1	Double space flag for screen prints
Deftype	2	CA Telon source definition type
Header_id	6	Header ID for screen to be printed
Linenum_flag	1	Line number flag for screen print
Prt_dir	128	Directory for print screen files
Shift_flag	1	Determines whether to ignore column 1 for screen prints
Usecol1_flag	1	Use of column 1 flag for screen flags

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Dblspc_flag	Check box	Y if checked, otherwise N	
Deftype	BD, DR, ND, PI, PD, RD, SD, SP	(same)	Must be PI for screen prints
Header_id	(any value)	(same)	Six characters maximum
Linenum_flag	Check box	Y if checked, otherwise N	
Prt_dir	Fully qualified directory	(same)	Directory must exist
Shift_flag	Check box	Y if checked, otherwise N	
Usecol1_flag	Check box	Y if checked, otherwise N	

Default Settings

```
[Telon-PRNT]
DBLSPC_FLAG=
LINENUM_FLAG=
PRT_DIR=#TLNLOCAL\tlnwork
SHIFT_FLAG=
USECOL1_FLAG=
```

Telon-SMACINI

This section of Telon.ini contains the specification of the file to load with the contents of the active file located in the \username subdirectory of \tlnusers.

Parameters

Name	Size	Description
Ini_file	128	Target Macro.ini file to load

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	

Default Settings

```
[Telon-SMACINI]
INI_FILE=#TLNLOCAL\tlnwork\macro.ini
```

Telon-STLNINI

This section of Telon.ini contains the specification of the file to load with the contents of the active file located in the \username subdirectory of \tlnusers.

Parameters

Name	Size	Description
Ini_file	128	Target Telon.ini file to load

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ini_file	Fully qualified file name	(same)	

Default Settings

```
[Telon-STLNINI]
INI_FILE=#TLNLOCAL\tlnwork\telon.ini
```

Telon-TRNI

This section of Telon.ini contains parameters for the Transport In dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Ctrl_file	128	Transport in control file name
Duplicate_flag	1	Duplicate object selection flag
Rpt_file	128	Transport report file name
Rpt_fmt	1	Report flag: (L=long, S=short)
Src_file	128	Input Transport file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Ctrl_file	Fully qualified file name	(same)	Default name supplied if not specified
Duplicate_flag	Radio buttons: Replace, Ignore, Auto-Merge	1, 2, 3	
Rpt_file	Fully qualified file name	(same)	Required; OK to overwrite message if exists
Rpt_fmt	(no dialog access)	S, L	
Src_file	Fully qualified file name	(same)	Required, must exist

Default Settings

```
[Telon-TRNI]
CTRL_FILE=#TLNLOCAL\tlnwork\tranin.ctl
DUPLICATE_FLAG=
RPT_FILE=#TLNLOCAL\tlnwork\tranin.rpt
RPT_FMT=L
SRC_FILE=#TLNLOCAL\tlnwork\tranin.io
```

Telon-TRNO

This section of Telon.ini contains parameters for the Transport Out dialog. This dialog also uses the Tndbprod setting in the [Telon-COMMON] section of Telon.ini.

Parameters

Name	Size	Description
Autoref-flag	1	Auto reference flag
Ctrl_file	128	Transport out control file name
Rpt-file	128	Transport report file name
Rpt-fmt	1	Report flag: (L=long, S=short)
Src-file	128	Output Transport file name

Edit Rules

Parameter	Dialog Values	INI File Values	Edit Rules
Autoref_flag	Radio buttons: Autoref, Noref	Y, N	AUTOREF if Y; NOREF if N
Ctrl_file	Fully qualified file name	(same)	Default name supplied if not specified
Rpt_file	Fully qualified file name	(same)	Required; OK to overwrite message if exists
Rpt_fmt	(no dialog access)	S, L	
Src_file	Fully qualified file name	(same)	Required

Default Settings

```
[Telon-TRNO]
AUTOREF_FLAG=Y
CTRL_FILE=#TLNLOCAL\tnwork\tranout.ctl
RPT_FILE=#TLNLOCAL\tnwork\tranout.rpt
RPT_FMT=L
SRC_FILE=#TLNLOCAL\tnwork\tranout.io
```


Appendix B: Macro.ini

The Macro.ini file contains information about customizable macro parameter settings. The contents of this file are used along with the Build Custom Macros dialog to produce copies of the TLNIIS, PGMNAMES, and USREDITS customizable macros. The information contained in this file is maintained by the TLNIIS, PGMNAMES, and USREDITS notebook dialogs, as described in the chapter "Working with Generator Macros."

The Macro.ini file can originate in two different ways. A default Macro.ini file is supplied with the product. A customized Macro.ini file with TLNIIS, PGMNAMES, and USREDITS information from earlier releases can be migrated using the Load Custom Macro function.

The Macro.ini file has the following sections:

Section	Contents
[SETSYS]	Settings applicable to all environments
[SETENV-Batch]	SETENV settings for batch environment
[SETENV-CICS]	SETENV settings for CICS environment
[SETENV-IMSDRV]	SETENV settings for IMS driver environment
[SETENV-IMSDYN]	SETENV settings for IMS dynamic environment
[SETENV-IMSRPT]	SETENV settings for IMS report environment
[SETENV-IMSSTAT]	SETENV settings for IMS static environment
[SETENV-NONTERM]	SETENV settings for CICS nonterm environment
[SETENV-STORED]	SETENV settings for stored procedures
[SETENV-TSO]	SETENV settings for TSO environment
[PGMNAMES]	Settings for naming programs
[DFNWKFLD_n]	Settings for the nth defined USREDITS work field
[EDIT_n]	Settings for the nth user edit

The following pages describe each section of Macro.ini and provide the name and description of the parameters. Sample settings are included for each section to serve as an example. Individual parameters are discussed when needed. See the *Implementation Guide* for a detailed discussion of all parameters.

In the case of SETENV, DFNWKFLD, and EDIT, there are multiple sections with the same set of parameters. In the case of SETENV, there is a defined set of sections as shown in the table above. For DFNWKFLD, there are ten possible sections, with a suffix varying from 0 to 9 (for example, DFNWKFLD-0, DFNWKFLD-1). In the case of EDIT, the number of these sections varies, depending upon the user requirements for the Generator.

SETSYS

The SETSYS section of Macro.ini contains parameter settings for the TLNIIS macro. In most cases, the parameters are mapped directly between the SETSYS notebook and the Macro.ini file.

Parameters

Parameter	Contents
ABTMODE	Drop-down list: <None>, ABEND, ERRM, XFER
ABTDPGM	Expressed as (lang,program[,lang,program])
ABTERRM	Text
ABTPRM	Expressed as (parm1,parm2,,)
ABTPRMG	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
ABTXFER	Text
ALARM	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
BRCSRCK	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
CLISERV	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
COB88LV	Drop-down list: <None>, Single, Multiple; mapping to <blanks>, SINGLE, MULTIPLE
COBVERS	Drop-down list: COBOL II, VS-COBOL, COBOL z/OS; mapping to 1, 2, 3

Parameter	Contents
CONFCPY	Text
DB2DATE	Drop-down list: USA, EUR, ISO, JIS, LOC; expressed as (###,date-format) if LOC
DB2TIME	Drop-down list: USA, EUR, ISO, JIS, LOC; expressed as (###,time-format) if LOC
DCPTCMA	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
DFLTLOC	Drop-down list: Client and Server, Client only, Server only; mapping to B,C,S
DLIVERS	Drop-down list: AIBTDLI, CBLTDLI, PLITDLI, CEETDLI
DRIVSSA	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
DYNCALL	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
EOFKEY	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
FEATURE_PGMSTRUCT	Drop-down list: 1, 2, 3
FEATURE_MFSPSWD	Drop-down list: 1, 2, 3
FEATURE_FULLLDLI	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
FEATURE_ABNORMALT	Drop-down list: 0, 1, 2, 3
GENDTES	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
HELPDSP	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
INTCURR	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
INTDATE	Drop-down list: USA, Int'l; mapping to U, I
IOPCBM	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
JCOLNMS	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
LANG	Drop-down list: COBOL,PL/I; mapping to COB,PLI
LINEOPT	Drop-down list: 1, 2, 3

Parameter	Contents
NXCSRCK	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
OCSQLCD	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
OUTATTR	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
OUTIFIL	Drop-down list: NULL, SPACE, UNDERLINE
PAGE999	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PCBCODE	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PGMCSTD	Expressed as a paired list (section1,copyname1, ...[sectionn,copynamen])
PGMCUST	Expressed as a single entry without parentheses or a comma-separated list enclosed within parentheses.
PIOALGN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PLIVERS	Drop-down list: 1,2
PSBPCBN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
REFRESH	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
SEDTERR	Drop-down list: 0, 4, 16; mapping to 00, 04, 16
SPNMCOPY	Text
STGCSTD	Text
SYSLOW	Drop-down list: 0,1
TRCSRCK	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
USETYPE	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
WNDWLNK	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
WNDWYR	Two-digit numeric
XFRCSTD	Text

Typical Settings

```
[SETSYS]
LANG=COB
REFRESH=Y
EOFKEY=Y
ALARM=N
OUTIFIL=SPACE
CONFCPY=None
INTDATE=U
PGMCUST=ANY
ABTMODE=ABEND
DRIVSSA=N
FEATURE_PGMSTRUCT=3
FEATURE_MFSPSWD=1
FEATURE_FULLDLI=Y
FEATURE_ABNORMALT=1
COB88LV=MULTIPLE
LINEOPT=2
PCBCODE=Y
BRCSRCK=N
DB2DATE=USA
DB2TIME=USA
SPNMCOPY=None
WNDWYR=30
```

SETENV-<env-name>

The SETENV sections of Macro.ini contain parameter settings for the TLNIIS macro. The Macro.ini contains a separate section for each target environment. In most cases, the parameters are mapped directly between the SETENV notebook for the selected environment and the corresponding section in the Macro.ini file.

Parameters

Parameter	Comments
ABENDST	Four-digit numeric
ABTPGM	Expressed as (lang,program[,lang,program])
ABTERRM	Text
ABTMODE	Drop-down list: <None>, ABEND, ERRM, XFER
ABTPRM	Expressed as (parm1,parm2,,)
ABTPRMG	Drop-down list: <None>, Yes, No; mapping to

Parameter	Comments
	<blank>, Y, N
ABTXFER	Text
APPLWKA	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
BLOCK0	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
BMS	Drop-down list: No, No/Call, No/Link, Yes; mapping to N, NC, NL, Y
CHAPLID	Text
CLIPFKS	Expressed as (parm1,parm2,,)
CLISECT	Expressed as (parm1,parm2,,)
COBENT	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
COBVERS	Drop-down list: COBOL II, VS-COBOL, COBOL for z/OS; mapping to 1, 2, 3
CONVERS	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
CSOCKET	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
CURPOSN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
CURSCLS	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
D2LNGRT	Drop-down list: DFSL1000, DSNCLI, DSNELI, NONE
DEVICEP	Text
DEVICET	Text
DIBUFSZ	Numeric
DLITYPE	Drop-down list: DLI, EXECDLI
DLIVERS	Drop-down list: AIBTDLI, CBLTDLI, CEETDLI, PLITDLI
DOBUFSZ	Numeric
DYNCALL	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
FEATURE_PGMSTRUCT	Drop-down list: 1, 2, 3

Parameter	Comments
FEATURE_MFSPSWD	Drop-down list: 1, 2, 3
FEATURE_FULLDLI	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
FEATURE_ABNORMALT	Drop-down list: 1, 2, 3
GENDTES	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
GENPCBS	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
GENXPCB	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
HOLDSTG	Drop-down list: Main,Auxilary; mapping to M,A
IDIRLNK	Drop-down list: <None>,Yes, No; mapping to <blank>, Y, N
INITPKS	Drop-down list: <None>,Yes, No; mapping to <blank>, Y, N
INLINE	Drop-down list: <None>,Yes, No; mapping to <blank>, Y, N
IOASTG	Drop-down list: Automatic, Statis; mapping to AUTO, STATIC
IOPCBM	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
JCOLNMS	Drop-down list: <None>,Yes, No; mapping to <blank>, Y, N
LINKDYN	Drop-down list: <None>,Yes, No; mapping to <blank>, Y, N
LINKOPT	Drop-down list: Dynamic, Static; mapping to D, S
MAPALGN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
MBUFSIZ	Numeric
MFSALFA	Text
MFSEJCT	Drop-down list: BGNPP, ENDPP, BGNMSG, ENDMSG
PAGE999	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PAGEB	Expressed as a single number without parentheses or as a comma separated list enclosed within

Parameter	Comments
	parentheses.
PAGEF	Expressed as a single number without parentheses or as a comma separated list enclosed within parentheses.
PGMCSTD	Expressed as a paired list (section1,copyname1, ...[sectionn,copynamen])
PGMCUST	Expressed as a single entry without parentheses or a comma-separated list enclosed within parentheses.
PIOALGN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PLICALL	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
PLIVERS	Drop-down list: 1, 2
PSBPCBN	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
REALDBG	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
RECVAR	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
ROLBIND	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
SPASTG	Drop-down list: Automatic, Static, TS Auxiliary, TS Main; mapping to AUTO, STATIC, AUX, MAIN
STGCSTD	Text
STGPROT	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
TCDEOVR	Text
TMPHOLD	Drop-down list: Yes, No, Automatic; mapping to Y, N
TPBSTG	Drop-down list: Static, Automatic; mapping to STATIC, AUTO
TPICCHK	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
TRACE	Drop-down list: <None>, Yes, No; mapping to <blank>, Y, N
WNDWLNK	Drop-down list: <None>, Yes, No; mapping to

Parameter	Comments
	<blank>, Y, N
WNDWYR	Two-digit numeric
XFRCSTD	Text

Typical Settings

```
[SETENV-<env-name>]
TRACE=Y
ABENDST=3500
GENPCBS=Y
INLINE=Y
APPLWKA=N
PGMCUST=(MAIN1,MAINLINE,MAINT)
DLITYPE=DLI
TPICCHK=Y
```

PGMNAME

The PGMNAME section of Macro.ini contains parameter settings for the PGMNAME macro. In most cases, the parameters are mapped directly between the PGMNAME notebook and the Macro.ini file.

Parameters

Parameter	Comments
PGMBHDR	Program header for COBOL batch program
PGMDHDR	Program header for COBOL IMS driver program
PGMDTRA	Program trailer for COBOL IMS driver program
PGMTHDR	Program header for COBOL TSO program
PGMIHDR	Program header for COBOL IMS dynamic program
PGMSHDR	Program header for COBOL IMS static program
PGMLHDR	Program header for COBOL IMS alias program
PGCPHDR	Program header for COBOL CICS program
PGCCHDR	Program header for COBOL CICS client program
PGNPHDR	Program header for COBOL CICS nonterm program

Parameter	Comments
PGSPHDR	Program header for COBOL stored procedure program
QGMBHDR	PGMBHDR for PL/I
QGMDHDR	PGMDHDR for PL/I
QGMDTRA	PGMDTRA for PL/I
QGMTHDR	PGMTHDR for PL/I
QGMIHDR	PGMIHDR for PL/I
QGMSHDR	PGMSHDR for PL/I
QGMLHDR	PGMLHDR for PL/I
QGCPHDR	PGCPHDR for PL/I
QGNPHDR	PGNPHDR for PL/I
QGSPhDR	PGSPHDR for PL/I
PGMBTRA	Program trailer for COBOL batch program
PGMTTRA	Program trailer for COBOL TSO program
PGMITRA	Program trailer for COBOL IMS dynamic program
PGMSTRA	Program trailer for COBOL IMS static program
PGMLTRA	Program trailer for COBOL IMS alias program
PGCPTRA	Program trailer for COBOL CICS program
PGNPTRA	Program trailer for COBOL CICS nonterm program
PGSPTRA	Program header for COBOL stored procedure program
QGMBTRA	PGMBTRA for PL/I
QGMTRA	PGMTTRA for PL/I
QGMITRA	PGMITRA for PL/I
QGMSTRA	PGMSTRA for PL/I
QGMLTRA	PGMLTRA for PL/I
QGCPTRA	PGCPTRA for PL/I
QGNPTRA	PGNPTRA for PL/I
QGSPTRA	PGSPTRA for PL/I
MIDNAME	MID name
MODHDR	MOD header
MODTLR	MOD trailer

Parameter	Comments
BMSMAPN	BMS map separation character
PGCTSUF	CICS TS queue suffix
TLNPCBS	PCBS copy member name suffix
TLNPROC	PROC copy member name suffix
TLNWORK	Work area name suffix
TLNUPDT	Update area name suffix
TLNPK	PFKey name suffix

Typical Settings

```
[PGMNAME$]
PGMBHDR=BP
PGMDHDR=IM
PGMTHDR=TM
PGMIHDR=IM
PGMSHDR=SM
PGMLHDR=XM
PGCPHDR=CP
PGCCHDR=CC
PGNPHDR=NP
PGSPHDR=SP
QGMBHDR=B
QGMDHDR=I
QGMTHDR=T
QGMIHDR=I
QGMSHDR=S
QGMLHDR=X
QGCPHDR=P
QGNPHDR=N
QGSPTRA=2
MIDNAME=I
MODHDR=0
BMSMAPN=Z
TLNPCBS=PCBS
TLNPROC=PROC
TLNWORK=WKAREA
TLNUPDT=UPDTA
TLNPK=PFK
```

DFNW KFLD-I

The DFNWKFLD sections of Macro.ini contain parameter settings for the USREDITS macro. The Macro.ini contains a separate section for up to nine work fields defined for the USREDITS macro.

Note that the DFNWKFLD-0 section is unique in that it defines only the EDTERR parameter for USREDITS. The other nine sections define COBPIC and PLIPIC.

Parameters

Parameter	Comments
EDTERR	Used only for DFNWKFLD-0
COBPIC	Used for DFNWKFLD-1 through -9
PLIPIC	Used for DFNWKFLD-1 through -9

Typical Settings

```
[DFNWKFLD-1]
COBPIC='S9(16)V9(2)'
PLIPIC='PIC ''(13)9V9T'''
```

EDIT-<edit-name>

The EDIT sections of Macro.ini contain parameter settings for the USREDITS macro. The Macro.ini contains a separate section for each user edit defined for the USREDITS macro.

Parameters

Parameter	Comments
DATATYPE	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.
IEXDFLT	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.

Parameter	Comments
LANG	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.
LOCATION	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.
OEXDFLT	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.
TPICCHK	Expressed as a single entry without parentheses, or a comma separated list containing two values enclosed in parentheses.
WKFLDID	An index from 1 through 9 pointing to the corresponding DFNWKFLD.

Typical Settings

```
[EDIT-<edit-name>]
OIUSE=INPUT
LANG=ASM
DATATYP=NUM
WKFLDID=1
```


Appendix C: Codes and Messages

This appendix describes the codes and messages issued by PWS. It provides a listing and description of the Server Log error messages.

Server Log Error Messages

This section discusses the error messages loaded into the PWS log file by the PWS server. These messages are interspersed with the logging of server activity, and informational messages produced by processes such as Import, Export, and Transport. These messages are in the format: *process return code message*:

CopyFile 01

Cannot open "from" file

Reason

The "from" file you wanted to copy cannot be found. The Server process that preceded the CopyFile failed.

Action

Rerun the function with the debug switch set. Determine the process prior to the CopyFile that failed.

CopyFile 02

Cannot open "to" file

Reason

The opening of the "to" file in the Copy process failed.

Action

Rerun the function with the debug switch set. Check the paths specified for the function. Ensure that necessary network mappings are in effect.

CopyFile 04

No need to copy file

Reason

An expected file that the Generate process was to produce was not found.

Action

Review CA Telon source and Tlniis settings to determine why the expected generation output was not produced.

Real390 28

No program generated

Reason

The Generate process failed to produce any output files.

Action

Check the SCRDEF section of the CA Telon source used in the Generate to determine if it is a valid file. Make suitable corrections, and rerun.

Real390 32

Cannot find Generator macros in \MACLIBE

Reason

The Generate process did not find the SETSYS macro in the \MACLIBE directory.

Action

Ensure that the \MACLIBE directory has the valid set of CA Telon generator macros.

Real390 36

Unknown Generator function

Reason

A function other than GEN, IMPD, or IMPP was specified for Real390.

Action

Rerun with a valid function of GEN, IMPD, or IMPP.

ReslvCob 02**Invalid copylib path****Reason**

An invalid path was specified for the Resolve COBOL process following generation.

Action

Review CPY_DIR settings in the [Telon-GEN] section of the Telon.ini file.

ReslvCob 03**Cannot write output file****Reason**

The path specified for TARGET_DIR in the [Telon-GEN] section of the Telon.ini file is invalid.

Action

Review TARGET_DIR setting. Ensure that the necessary network mappings are in effect.

ReslvCob 04**Cannot read input file/copy member****Reason**

A file in one of the CPY_DIR paths having a name that corresponds to a COPY statement in the COBOL program being resolved is corrupted in some fashion.

Action

Rerun the function with the debug switch set. Review the files being resolved for bad data.

ReslvCob 05**Cannot open log file****Reason**

Unable to open the file containing the report from the Resolve process.

Action

Rerun the function with the debug switch set. Ensure that the temporary file produced during the Generate process is correctly specified.

ReslvPli 02

Invalid copylib path

Reason

Following generation, an invalid path was specified for the Resolve PL/I process.

Action

Review CPY_DIR settings in the [Telon-GEN] section of the Telon.ini file.

ReslvPli 03

Cannot write output file

Reason

The path specified for TARGET_DIR in the [Telon-GEN] section of the Telon.ini file is invalid.

Action

Review TARGET_DIR setting. Ensure that the necessary network mappings are in effect.

ReslvPli 04

Cannot read input file/copy member

Reason

A file in one of the CPY_DIR paths having a name that corresponds to a COPY statement in the COBOL program being resolved is corrupted in some fashion.

Action

Rerun the function with the debug switch set. Ensure that the temporary file produced during the Generate process is correctly specified.

ReslvPli 05

Cannot open log file

Reason

Unable to open the file containing the report from the Resolve process.

Action

Rerun the function with the debug switch set. Ensure that the temporary file produced during the Generate process is correctly specified.

Tlnwork 98**Tlnwork directory not found****Reason**

The CA Telon work directory specified for TLNWORK in the [Telon-COMMAND] section of Telon.ini is invalid.

Action

Review the TLNWORK specification and correct as needed.

Tn3bkbne 01**Cannot open pgminfo file****Reason**

The Pgminfo file that contains information about the program being generated cannot be found.

Action

Review the \MACLIBT and \MACLIBE directories to ensure that they contain valid PWS (4.0 and newer) macros. Versions of the CA Telon Generator macros prior to 4.0 did not produce a Pgminfo file.

Tn3bkbne 02**Pgminfo file has no records****Reason**

The Pgminfo file that contains information about the program being generated cannot be read.

Action

Review the \MACLIBT and \MACLIBE directories to ensure that they contain valid PWS (4.0 and newer) macros. Versions of the CA Telon Generator macros prior to 4.0 did not produce a Pgminfo file.

Tn3bkbne 03

Cannot open resolve log file

Reason

The Resolve process did not produce an expected log file.

Action

Rerun the function with the debug switch set. Ensure that the temporary file produced during the Generate process is correctly specified.

Tn3bkbne 98

Telon work directory not found

Reason

The CA Telon work directory specified for TLNWORK in the [Telon-COMMON] section of Telon.ini is invalid.

Action

Review the TLNWORK specification and correct as needed.

Tn3bkbne 99

Cannot connect to temp directory

Reason

The temporary directory name dynamically built for the function was incorrectly constructed.

Action

Rerun the function with the debug switch set. Ensure that all portions of the temporary directory name are valid.

Tn3ccard 01

Sysut1 file not opened

Reason

The CA Telon source file could not be opened for the Adpccard process.

Action

Review the directory specified for SRC_DIR in the appropriate section of the Telon.ini file: [Telon-GEN] for Generate or [Telon-IMPP] for Import Program. Ensure that the combination of this directory, the source file name, and the extension constitute an existing file.

Tn3ccard 02

Sysin file not opened

Reason

The Adpccard Sysin file could not be opened.

Action

Ensure that the setting for ADPCCARD_SYSIN in the appropriate section of the Telon.ini specifies a valid file. Sections where ADPCCARD_SYSIN are specified include [Telon-GEN] for Generate or [Telon-IMPP] for Import Program.

Tn3ccard 03

Sysut2 file not opened

Reason

Unable to open the output file in the Adpccard process.

Action

Rerun the function with the debug switch set. Ensure that the temporary file produced during the Generate process is correctly specified.

Tn3ckini 04

Not needed -- Source and Target files the same

Reason

The file name for the target INI file is the same as the source INI file, so no Copy is necessary.

Action

None.

Tn3ckini 16

Not a valid Macro INI file

Reason

The file specified in Load Macro INI is not a valid Macro.ini file.

Action

Rerun the process, specifying a valid Macro.ini file.

Tn3ckini 17

Not a valid Telon INI file

Reason

The file specified in Load Telon INI is not a valid Telon.ini file.

Action

Rerun the process, specifying a valid Telon.ini file.

Tn3ckini 18

Source Macro INI file not found

Reason

No source Macro.ini file was found in the user subdirectory under \tlnusers.

Action

Determine why no Macro.ini file is present in the user subdirectory under \tlnusers.

Tn3ckini 19**Source Telon INI file not found****Reason**

No source Telon.ini file was found in the user subdirectory under \tlnusers.

Action

Determine why no Telon.ini file is present in the user subdirectory under \tlnusers.

Tn3clean 01**Cannot connect to temp directory****Reason**

The temporary directory created for the function cannot be found during the Cleanup process.

Action

Review the network connections to determine if any mappings were lost while the function was executing.

Tn3clean 02**Unable to access file information****Reason**

The temporary directory created for the function does not contain any files for removal.

Action

Rerun the function with the debug switch set. Ensure that the temporary directory is properly created and loaded with temporary files. Also review the network connections to determine if any mappings were lost while the function was executing.

Tn3clean 03

Cannot connect to user directory

Reason

The user directory under the CA Telon Work directory cannot be found.

Action

Rerun the function with the debug switch set. Ensure that the temporary directory is properly created. Also review the network connections to determine if any mappings were lost while the function was executing.

Tn3clean 04

Cannot remove temp directory

Reason

The Cleanup process was unable to remove the temporary directory created for the function.

Action

Review the network connections to determine if any mappings were lost while the function was executing.

Tn3dmain 16

Unsuccessful execution

Reason

A return code of 16 was encountered during processing that involves the use of the TDF Database. Functions that may produce this return code include the following: TDF, Export, Import Program, Import Database, Transport In, Transport Out, Autodoc Extract, Delete Telon Object, Load Help, and Initialize TDF Database.

Action

Review the log file for other messages from the function that may provide further information. Also review any reports or message files that the function produced.

Tn3extrc 16**Source member name not specified****Reason**

A blank record was found in the multi-list file for the function specified.

Action

Review the multi-list file for the function in the User directory under \tlnusers for a blank record. Files include Multgen.fil for Generate, Multimpp.fil for Import Program, and Multimpd.fil for Import Database.

Tn3extrc 17**Source member name has embedded space****Reason**

A record that contained an embedded space was found in a multi-list file.

Action

Review the multi-list file for the function in the User directory under \tlnusers for the erroneous record. Files include Multgen.fil for Generate, Multimpp.fil for Import Program, and Multimpd.fil for Import Database.

Tn3extrc 29**Input file has no records****Reason**

The CA Telon source file could not be opened for the initial Extract process.

Action

Review the directory specified for SRC_DIR in the appropriate section of the Telon.ini file: [Telon-GEN] for Generate, [Telon-IMPP] for Import Program, and [Telon-IMPD] for Import Database. Ensure that the combination of this directory and the source file name constitute an existing file.

Tn3extrc 30

First record input file not ./

Reason

The first record in the CA Telon source file for the Generate process does not contain a file containing a ./ in the first two bytes.

Action

Review the file specified for this process, and determine why it does not contain the ./ record.

Tn3extrc 31

SCRNDEF section not found

Reason

The CA Telon source file for the Generate process does not contain ./ ADD NAME=SCRNDEF as the first record in the file.

Action

Review the file specified for this process, and determine why it does not contain the ./ ADD NAME=SCRNDEF record.

Tn3extrc 33

Premature EOF found in input file

Reason

The SCRNDEF section of the CA Telon source is incomplete.

Action

Review the CA Telon source identified for input to determine why it is incomplete.

Tn3extrc 35**Input file not opened****Reason**

A file specified in a record of a multi-list file was not found.

Action

Review the directory specified for SRC_DIR in the appropriate section of the Telon.ini file: [Telon-GEN] for Generate, [Telon-IMPP] for Import Program, and [Telon-IMPD] for Import Database. Ensure that the combination of this directory and the source file name found in the multi-list file constitute an existing file.

Tn3fnchg 99**Find/Change process unsuccessful****Reason**

The Find/Change process did not produce an output file for one of the following reasons: (1) No files to be scanned met the wildcard specification, (2) a file meeting the wildcard specification could not be opened, (3) a temporary file used during the process could not be opened, or (4) the Report file could not be opened.

Action

Review each possible source of error, correct the problem, and rerun the Find/Change process.

Tn3scs1st 04**MNOTE 4 found****Reason**

The Generate process produced messages with a maximum MNOTE value of 4.

Action

None. Program is successfully generated. However, you may want to review the LST file for the program that was generated.

Tn3sc1st 08

MNOTE 8 found

Reason

The Generate process produced messages with a maximum MNOTE value of 8.

Action

Review the LST file of the generated program. No generated output is produced.

Tn3sc1st 16

MNOTE 16 found

Reason

The Generate process produced messages with a maximum MNOTE value of 16.

Action

Review the LST file of the generated program. No generated output is produced.

Tn3sc1st 20

Real390 error encountered

Reason

A macro error was detected during the Generate process.

Action

Review the LST file of the generated program. No generated output is produced. Make repairs to the erroneous macro.

Tn3sc1st 24

Real390 Lst file not opened

Reason

The Generate process did not occur.

Action

Ensure that the \MACLIE and \MACLIBT directories contain valid macros, and that the CA Telon source used is a valid file.

Tnlogoff 32

Unsuccessful execution

Reason

The logoff process was unsuccessful.

Action

Rerun the function with the debug switch set. Ensure that the temporary directory built during the execution of the function exists. Also review the network connections to determine if any mappings were lost while the function was executing.

Tnlogon 32

Unsuccessful execution

Reason

The logon process was unsuccessful.

Action

Rerun the function with the debug switch set. Ensure that the temporary directory built during the execution of the function was built correctly. Also review the network connections to determine if any mappings were lost while the function was executing.

Tnpcpcbn 16

Source file not found

Reason

The DBD or PSB source file could not be opened.

Action

Review the directory specified for SRC_DIR in the [Telon-IMPD] section of the Telon.ini file for Import Database. Ensure that the combination of this directory, the source file name and the extension constitute an existing file.

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