CA Telon® Application Generator

Release Summary

r5.1

CA Product References

This document references the following CA products:

- CA Telon®
- CA Mainframe Software Manager (CA MSM)

Contact CA

Contact Technical Support

For your convenience, CA provides one site where you can access the information you need for your Home Office, Small Business, and Enterprise CA products. At http://ca.com/support, you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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If you have comments or questions about CA product documentation, you can send a message to techpubs@ca.com.

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Contents

Chapter 1: Introduction

This Release Notes documents information on system requirements, installation considerations, enhancements, documentation, and information about contacting CA Technical Support for installing and using CA Telon r5.1.

This document also provides detailed information about enhancements and changes in functionality made in the prior release r5.0.

This section contains the following topics:

System Requirements

The CICS version of the CA Telon Design Facility is compatible with CICS Transaction Server V1R3 or above.

The installation of CA Telon on z/OS requires at least 6030 tracks.

Installation Considerations

Before installing CA Telon r5.1, read the cover letter that accompanies this tape. For specific instructions on how to perform the base installation, see the *Installation Guide*.

Note: You cannot install CA Telon r5.1 into the same SMP CSI as CA Telon r5.0. You must either create a new CSI or delete all the CA Telon r5.0 FMIDs from the existing CSI.

Known Issues

For current information regarding known issues, visit http://ca.com/support.

Published Fixes in r5.0

The following problems have been corrected for r5.0. For more information about these fixes, see Published Solutions at http://ca.com/support.

Solution	Problem	Description
--	1360	TDF processing has been modified so that the help message for the VSAM/sequential open parameter now lists correct values for these two dataset types.
--	1364	Screen-level help messages for the CREATE/UPDATE TABLE SEGLOOP (p170) and CREATE/UPDATE FILE SEGLOOP (p175) screens have been modified to correct references to obsolete documentation.
RO01913 RO01915	1376	Transport-in processing has been modified so that the descriptions for VSAM and sequential files, file groups, IMS DBDs, CICS queues and journals and DB2 tables and joins are no longer overridden by blanks and 'nn' when transported in with AUTOMERGE.
QO89862 QO89865	1377	TDF processing has been modified so that more informative error messages are now displayed on the install LIST TDF USERS (F121) screen, for errors such as trying to delete your own ID or attempting to add a new user with a value in its zap ('U' or 'Z') parameter.
QO87149 QO87307	1379	TDF processing has been modified so that output segloop parameters (OSEGIDX, OCUST1, OCUST2, OCUST3) are no longer displayed for input-only segloops, and input segloop parameters (ISEGIDX, OCUST1, OCUST2, ICTLNM) are no longer displayed for output-only segloops on the UPDATE TABLE SEGLOOP (P170) and UPDATE FILE SEGLOOP (P175) screens.

Solution	Problem	Description
QO90942	1415	CICS TDF processing has been changed so that extraneous equal signs (=) blank entries are no longer displayed on the UPDATE SQL JOIN - JOIN COLUMNS (D143) screen.
QO87139 QO87228	1416	TDF processing has been changed so that an invalid INCON- SISTENT ORDERBY/OPCODE/WHERE COUNTS error message is no longer raised for SPBROWSE, SPRDNEXT, OR SPTRNACT data access requests, which do not use ORDERBY, OPCODE, or WHERE para- meters. In addition, previews and CPYCALL custom code members are now correctly generated for these data access requests.
QO87141 QO87229	1417	Export processing has been changed so that a severity 16 is raised when an attempt is made to Export a program that calls a stored procedure which is not defined to the TDF. Prior to the implementation of this solution, it was possible to Export a program calling a non-existent stored procedure, but the generation of the calling program would fail.
QO87230	1419	PWS Generator processing has been modified to correct handling of quotes, especially double single quotes. Prior to the implementation of this fix, everything following single double quotes in a consistency edit would be lost.
QO87142	1420	Generator processing has been modified to correct a truncated line in macro CICSPRDF. This caused generation of the CICS nonterminal printer definition table to fail.
QO87144	1421	CICS RDO tables TNRCT, TRRCTC2, and TRRCTP2 have been modified to correct a problem and restore consistency. JCL has been removed from TRRCTC2, and all modules now refer to DB2 subsystem 'D810'. That string can be replaced with your own subsystem name.

Solution	Problem	Description
QO87168 QO87308	1423	The automated documentation extract program has been modified so that Get Diagnostics custom code points GDCUST, GDCLSC, and GDOPNC are now included in the extract when found. DB2 custom code points CPYCALL, CPYKEY, and CPYTERM are also now included.
QO87187 QO87311	1424	Transport processing has been modified so that batch panel parameters are no longer lost, and panels transported into the TDF no longer appear to have groups with no fields when updated.
QO87169	1428	Generator processing has been modified so that the TP-OUTPUT-BUFFER is once again referenced in the rollback call in COBOL IMS DB2 programs. This problem was introduced during Telon r5 development.
QO92161	1429	Generator processing has been modified so that the correct null indicator field name is generated for field edits that take a null indicator as an extension field (signified by the @NULLIND specified on the USREDITS field edit DFNEDIT).
QO90317 QO90318	1430	TDF processing has been changed so that identification of a non-existent DLIDSC on the update DBD (s135) screen in the data group ('DLIDSC NOT FOUND-LOCAL DATA USED') no longer causes the DBD's label to be changed, which would result in a 'DUP SEG/REC/ROW LABEL INVALID' error being raised on the main DATA GROUP (S125) screen.
QO87170	1431	Generator processing has been modified so that the TLMFLD00 error message MNOTE now correctly reflects the fact that the maximum number of fields supported is 2000.

Solution	Problem	Description
QO87171	1432	Import processing has been modified so that attempting to Import a program with more than the maximum allowed fields no longer causes the following error in TNPCEXIM: BAD CALL 3401 II TLMXI005 - ERROR FOUND IN IMPORT - CHECK REPORT PROCESSING ERROR ******** NO IMPORT MESSAGES CONTACT CA TELON TECHNICAL SUPPORT HOTLINE
QO87181	1433	Import processing has been modified so that attempting to Import a program with an ORDERBY clause (in a DB2 data access request) containing 2 adjacent commas receives the severity-4 MNOTE TLMSQL21 instead of the severity-16 MNOTE TLMSQL08. This allows the program to be imported and the problem corrected.
QO87225	1434	Generator processing has been modified so that references to nonexistent VSAM dataset variables DATASET-ALREADYOPEN-LIT, DATASET-ALREADYCLOSE-LIT and DATASET-EMPTYFILE are no longer generated in batch, CICS nonterminal and stored procedure programs.
QO87226	1435	Generator processing has been modified so that references to the 'JULIAN' field edit in a COBOL program with INTDATE=Y specified in TLNIIS no longer get generated as 'OFLOAT' in B-100- when they should be 'OINTLJUL'.
QO87227	1436	Generator processing for COBOL CICS nonterminal programs has been modified so that a 'ASMA003E UNDECLARED VARIABLE SYMBOL' error no longer occurs for variable &SYSCOB in macro CICSBPGM.

Solution	Problem	Description
QO87437	1438	Import processing for programs with journal data access requests has been modified so that 'asma003e undeclared variable symbol' errors no longer occurs for variables ALTCURS, CASTAS, CASTAS2, CASTCOL, FTCHOPT, ISOLATE, JOINOPT, and RETNCUR in macros JOURNAL and PNCHRG.
QO94595	1439	Reverse-gen (Import) Generator processing has been modified so that the one-digit RESLTNR parameter value on a data access request that calls a stored procedure is no longer imported incorrectly if the parm value has only one digit (e.g., RESLTNR=2,...). Prior to the implementation of this fix, the value would be put into the TDF at 10 times its value (for example RESLTNR 20).
QO87886	1441	Import processing has been modified so that attempting to import a program with an unaccompanied DATABAS statement in the data group (that is, no segment) followed by a DB2 table definition no longer gets the following error: 'RETURN CODE 16 FROM IMPORT BAD CALL 285 GE TLMXI005 - ERROR FOUND IN IMPORT - CHECK REPORT PROCESSING ERROR ******** NO IMPORT MESSAGES'
QO88492	1442	Generator processing has been modified so that extraneous commas and colons are no longer generated in some DB2 data access requests.
QO89858 QO89936	1443	TDF processing has been modified so that the 'EXEC SQL' of DB2 data access request CPYCALLs and previews is now generated. With Release 5 SP00, the 'EXEC SQL' was inadvertently suppressed in most calls.

Solution	Problem	Description
QO88496	1444	TDF startup CLIST @TDF has been modified to correct a S913 abend, which could occur when executing the CLIST, if the fix for problem 1409 Telon (QO88496) has been installed.
--	1445	PWS PCCONVRT table source asciebcd.dat has been modified to correct the comments for the numbers (0-9). Prior to the implementation of this fix, number 1 had the comment for 2, etc. This change has no effect on the functioning of the table.
QO89866	1446	PWS ABNORMALT termination 1 module ADGADBER.COB can now be built. Prior to the implementation of this fix, it was not possible to build ADGADBER.COB, because copybook TNDC3TLN.COB was not shipped with the product.
QO92397 QO92844	1447	Import processing has been modified so that the SENCOLS2 parameter (SENCOLS extension) is no longer lost.
QO92403 QO92404	1448	TDF processing has been modified for stored procedure calls SPBROWSE, SPRDNEXT, and SPTRNACT. CPYCALLs and previews of these calls no longer get 2 EXEC SQL lines, and values in unused (and protected) fields such as WHERE, ORDERBY, and OPCODE are blanked out so they do not get extraneous 'INCONSISTENT ORDERBY/OPCODE/WHERE COUNT' messages. In addition, the cursor value for SPRDNEXT is no longer incorrect (for example cursor--0). **Note:** This problem only occurs if solutions QO87139 or QO87228 (for 1416 Telon) and QO89858 or QO89936 (for 1443 Telon) have been applied.

Solution	Problem	Description
QO92400 QO92401	1449	TDF processing has been modified for prototyping so that an incorrect '>1 ? LTH' error message is no longer displayed in the command field for screens that have a field with NEXT-PROGRAM-NAME-ID as the DBNAME and a CONVERT list (for example, the 'M' model training programs).
QO90268	1450	RDO member TELONRT, intended for use with end-user CICS applications, has been modified to include RDO entries for ADCCABT, ADCPABT, ADLAENVL, ADLAPVER, and ADTAPTBL. TELONRT can be found in the #PDSQUAL.TABLES dataset.
QO92183	1451	Find utility ADPAPDSC has been modified so that it no longer abends with a S0C4 when run as part of the automated documentation cross-reference report (JUXXRF/TLNUXXRF).
QO92405	1454	TSO TDF processing has been modified so that panel definition fields no longer seem to disappear during HOLD/SWAP. This problem only occurs when run on a terminal type other than 3278-2. Prior to the implementation of this fix, a hold or swap of the update panel fields (P155) screen switched the number of screen lines from the correct number for the terminal type (for example 32 lines for 3278-3) to 24 lines, but the TDF continued to operate on the premise that it was displaying the correct screen size for the terminal type, so some fields were not displayed.
QO92939	1455	PWS Transport-out processing has been modified so that blank lines in custom code are no longer deleted.
QO92185 QO92186	1456	TSO TDF processing has been modified so that an INTERM custom code member name on the UPDATE SCREEN DEFINITION (S110) screen no longer disappears when a value is entered. Also, when a screen program with an INTERM value is imported, the INTERM value is no longer lost.
QO92187	1457	Generator processing has been modified so

Solution	Problem	Description
		that a DB2 WHERE parameter value with long column and host variable names no longer raise the following MNOTE 16 error:
		TLMPCH01 - THE FOLLOWING VALUE COULD NOT BE PARSED. PROGRAMMER SHOULD EMBED SPACES IF POSSIBLE.
QO92312	1459	Model training programs TRCD10BD and TRPD10BD have been modified to correct the KEYLEN number for DBD TRGDBDV1 in the "data access" area. The KEYLEN value was 9; it is supposed to be 16. This was not a problem until IMS v10, which produces the following error:
		DFS0919I PSB --TRPSBCB -- PCB --TRGDBDV1--
		KEYLEN SPECIFICATION TOO SMALL. KEYLEN SHOULD BE --00016 BYTES.
QO92406	1460	PWS Generator processing has been modified so that an invalid severity-16 MNOTE TLMSSA10 no longer appears when some programs with DL/I data access are generated.
QO92407	1462	PWS Generator processing has been modified so that a 'ASMA101E SUBSCRIPT LESS THAN 1' error is no longer raised When attempting to generate a program with the TLNIIS COMP5 parameter to 'Y'.
QO92408	1463	Generator processing has been modified to correct misalignment of the FORMAT-fldname-LTH field (in the FORMAT-AREA structure).
QO92471	1464	PWS Generator processing has been modified so that the sort definition of a variable length sort file is no longer generated with 'RECORDING MODE IS S' (the correct code is 'RECORDING MODE IS V').
QO93326	1466	Generator processing has been modified to clarify warning message TLMFLD00. This message warned when the number of fields exceeded 2000 but in fact, it must warn about fields and groups, which are also collected in the array being exceeded.

Solution	Problem	Description
QO94273 QO94274	1467	TDF processing has been modified so that a bad where value of a string with single quotes contained in double quotes; for example, "EMPL-ID = ' "" is no longer allowed. The correct way to create this string is 'EMPL-ID = " "' (double quotes within single quotes).
QO93252	1468	TDF processing has been modified so that a SUBSCRIPTRANGE abend no longer occurs when a terminal type 5 is used and you update the pd, then hit PF10 to go to the PI line edit, and then hit PF10 again to go to full-screen edit.
QO92941	1469	Generator processing has been modified to correct INLINE=Y generation. Prior to the implementation of this fix, with INLINE=Y (which should cause transact code to be generated in the C-1000-GET-TRAN section), the transact is generated in a U-100- paragraph (which is what happens with INLINE=N).
QO94277 QO94278	1471	TDF processing has been changed so that problems resulting from the fix for problem 1430 no longer occur. Before the implementation of this fix, the IMSKEYS shown on the SEGM hierarchy on the UPDATE DBD SEGMENT (S135) screen were all the key of the lowest-level segment, and when the SELECT/UPDATE DLIDSCS FOR SEGMENT (D116) screen was transferred to, only the default screen was shown.
QO93833 QO93835	1472	TDF processing has been changed so that incomplete 'move' lines ('MOVE TO .') are no longer produced in a DL/I preview with no keys specified on any of the DLIDSCs.
QO94423	1473	Generator processing has been modified so that a 'RECORD VARYING nn TO nn' clause is no longer generated for a fixed-length sequential sort file.
QO94425	1474	Generator processing has been modified so that a severity-16 MNOTE, 'TLMIIS19 - D2CLSXT AND CURSCLS ARE MUTUALLY EXCLUSIVE,' is raised when both

Solution	Problem	Description
		CURSCLS=Y and D2CLSXT=Y are set on the same invocation.
QO94431	1475	Generator processing has been modified so that the wrong PGMCUST copybook is not copied into a program; i.e., the copybook from the TLNIIS PGMCSTD overrides the PGMCUST value from the program.
QO94191	1476	Generator processing has been modified so that with D2CLSXT=Y and INLINE=N specified in the appropriate TLNIIS SETENV, the "PERFORM U-100-BROWSE-...-CLOSE" is generated in B-100-OUTPUT-SEGLOOP-EXIT instead of in the U-100-BROWSE-... paragraph, which is what D2CLSXT=N, INLINE=N does.
QO94435	1477	COBOL DB2 catalog extract source members #DB2ICOB (TSO TDF) and #DB2ICOC (CICS TDF) have been modified to work with DB2 v8 and newer releases.
RO07169	1478	Generator processing has been modified so that the correct DB2 BROWSE/TRANSACT/READNEXT code is generated for TLNIIS parameters INLINE, D2CLSXT, OCSQLCD, BRCRSCK, TRCSRCK and NXCSRCK, in all combinations.
QO99409	1479	Install members $090, $290, J2CBL, J2CCBL, SQ2BCL, SQ2BPGCL, TLN2CBL and TLN2CCBL have been modified to change parameter HOST(COBOL), which was for OS/VS COBOL, to host(IBMCOB), which is for higher-level COBOL such as enterprise COBOL for z/OS.
RO01280 RO01281	1481	TDF processing has been modified so that using the locate ("L") command on the DB2 list screen (D402) with the qualifier and table name no longer causes a "NAME TOO LONG" error message to be display, and correctly displays table qualifiers and names starting with the entered value (or next value in the list if the entered value is not found).

Solution	Problem	Description
QO99169	1482	install members JASM, JASMN, JCASM, JCASMN, TLNASM, TLNASMN, TLNCASM and TLNCASMN have been modified to reference the Telon macro library in the assembler step to resolve the Telon copyright stamp in macro #TLNMOPT.
QO96266	1483	Runtime module ADTAMAP no longer abends with a S0C7 (under unknown circumstances) in a CICS program generated with HELPDSP=N (non-destructive help) and using Telon mapping.
RO00724	1486	Generator processing has been modified so that PL/I extended attribute fields DEFAULT_COLOR_ATTR and DEFAULT_HIGH_ATTR are now generated correctly in IMS programs with EOFKEY=N.
RO01907 RO01908	1487	TDF processing has been modified so that the preview/CPYCALL for DB2 READ and READNEXT joins are now generated correctly. Prior to the implementation of this fix, part of the WHERE clause would be cut off.
RO00725	1488	Generator processing has been modified so that COBOL IMS driver and report programs generated with ABNORMALT 1 no longer get compiler errors due to references to undeclared fields ABT-CONTROL-INDICATOR and ABT-IN-PROGRESS.
RO01916 RO01918	1490	TDF processing has been modified so that the LANGLVL for Screen, Report Definition, and Driver programs is no longer changed to '4.1' when it should be '5.0'.
RO01920 RO01921	1491	TDF processing has been modified so that a S0C4 abend no longer occurs in Data Administration. This abend occurred when a table with more than 100 columns (that is, filling at least part of page 7) was shown (that is, display only) and an attempt was made to page backward to page 1.
RO01922	1492	Generator processing has been modified so that an ASMA012S 'UNDEFINED

Solution	Problem	Description
		SEQUENCE SYMBO' no longer occurs when a COBOL IMS/DC Driver program with one or more LINKPGMS specified is generated.
RO02087	1494	Generator processing has been modified so that a DL/I browse data access request using an alternate DLIDSC with no OPCODE does not get that DLIDSC substituted with the unqualified SEGLOOP-1-SSA.
RO07154	1496	TDF processing has been modified to clarify an error in the PI editor. The error is raised when PD UNPROTECT is set, the panel contains a long literal (with more than three blanks), and an attempt is made to edit the panel. The new error message clarifies that the edit cannot be done in the PI editor.
RO07165	1497	COBOL DB2 catalog extract source members #DB2ICOB (TSO TDF) and #DB2ICOC (CICS TDF) have received additional modifications so the modules work with v8 and newer releases.
RO05926	1500	Generator processing has been modified so that part of an EXEC SQL declare statement generated for a multi-row fetch is no longer misaligned.
RO07149 RO07152	1501	TDF processing has been modified so that the preview/CPYCALL for a multi-row fetch no longer has the word 'ROWSET' misspelled 'ROWEST'.
RO05258	1502	Generator processing has been modified so that an attempt to generate a CICS client/server program does not result in the following assembler error: ** ASMA012S UNDEFINED SEQUENCE SYMBOL - CICSS/CVC3000; MACRO ABORTED ** ASMA435I RECORD NNN IN <MACLIB>(DSWCVC)...
RO05918	1503	Generator processing has been modified so that the generating a program with DYNCALL=Y but no called subroutines other than field edits and abend routines, an empty 01-level

Solution	Problem	Description
		TELON-DYNAMIC-NAMES, resulting in a compiler error due to the lack of a picture clause.
Not yet confirmed/ published	1504	TDF processing has been modified so letters no longer disappear when multiple page-right and page-left commands (right 80; left 20) are issued on the command line of the panel image line editor.
RO05922	1505	Generator processing has been modified so that the parameter list for the call to DYN-ADRALNKC in section C-300-TERMIO-XFER produced with DYNCALL=Y in TLNIIS is generated twice.
RO05923	1506	Generator processing has been modified so that a COBOL IMS Driver program generated with TLNIIS parameter settings DYNCALL=Y and IDIRLNK=N no longer gets a compiler error due to the lack of a declaration for DYN-ADRALNKC in TELON-DYNAMIC-NAMES.
RO08341	1508	Generator processing has been modified so that an asm101e error no longer occurs while trying to generate a program with an ORDERBY parameter value specified and solution RO07169 installed.
RO08342	1509	TDF processing has been modified so that a S0C4 abend no longer occurs when swapping from the pd editor to the line editor with a batch panel. This problem was introduced by solutions RO01280 and RO01281 (problem 1481 Telon).

Documentation

The guides are provided in Adobe Portable Document Format (PDF) and IBM BookManager (BOO) files at http://ca.com/support. You can download the following guides individually or in a set with a search index:

The PDF guides for this product are as follows:

- Data Administration Guide

- Design Facility Reference

- Implementation Guide

- Installation Guide

- Messages Guide

- CA Datacom Database SQL Option Guide

- CA IDMS Database SQL Option Guide

- Programming Concepts Guide

- PWS Option Administration Guide

- PWS Option Installation Guide

- Release Summary

- Test Facility Guide

- Utilities Guide

- All Guides Including a Searchable Index in HTML Format

- All Guides Including a Searchable Index in PDF Format

To view PDF files, you must download and install the Adobe Reader from the Adobe website if it is not already installed on your computer.

Release Numbers on Documentation

The release number on the title page of a document might not correspond to the current product release number; however, all documentation delivered with the product, regardless of release number on the title page, will support your use of the current product release. The release number changes only when a significant portion of a document changes to support a new or updated product release. If no substantive changes are made to a document, the release number does not change. For example, a document for r4.1 may still be valid for r5.0 or even r5.1.

Chapter 2: New and Changed Features

This section contains the following topics:

New and Changed Features for r5.0

The PWS Option for CA Telon provides the following new and enhanced features:

DB2 Feature Enhancements

The following DB2-focused enhancements build upon features introduced in recent DB2 releases:

Full FETCH Support

An enhanced FETCH command can encompass a variety of features, including the addition of multi-row fetch, fetch orientation and sensitivity, and isolation capabilities. Additionally, alternate cursors can be specified for a data access request.

GET DIAGNOSTICS Support

The GET DIAGNOSTICS statement can significantly enhance the diagnostic capabilities within a DB2 program generated by CA Telon AG. GET DIAGNOSTICS statements for DB2 provide more extensive error and diagnostic checking than the information traditionally provided by the SQLCA.

The GET DIAGNOSTICS statement can be invoked immediately after any EXEC SQL statement to provide more information about the performance of that EXEC SQL command. For details, see the *Design Facility Reference Guide*.

Check for Cursor Open on READNEXT Access

You can now elect to have code generated to make the move of the cursor open value to the cursor status field after the EXEC SQL DECLARE CURSOR

statement of a READNEXT data access request either conditional, or unconditional. Use the NXCSRCK parameter in TLNIIS (SETSYS) to indicate which one you want. Error checking is available following the cursor open for DB2 READNEXT data access requests, matching the capability already available for BROWSE and TRANSACT requests.

Declared Temporary Tables

CA Telon allows you to define temporary tables and generates DECLARE GLOBAL TEMPORARY TABLE statements to support them.

For details, see the Data Administration Guide and the Design Facility *Reference Guide*.

User Defined Data Types

You can use CA Telon to generate CAST statements to re-express SELECT columns with either built-in or user-defined data types.

Outer Join Capability

You can now generate left, right and full outer joins for DB2 in addition to inner joins, which have been supported since release 2.0.

TDF Enhancement

The TDF has been improved in r5 to further enhance the application design processes:

TDF Non-Destructive Help

The replacement of the help character for viewing help screens in the TDF has been added to the TDF screens.

Utility Enhancements

The CA Telon environment has been enhanced to provide additional important functionality:

ADPACOPY Enhancements

This mainframe copybook RESOLVE Utility has been enhanced in two ways:

- By making it LE-compliant, processing time has been greatly reduced.

- By modifying the calls to the Librarian and Panvalet subroutines resolve modules, these two modules are dynamically called by ADPACOPY and as a result, they do not have to be relinked everytime a new version of Panvalet or Librarian is installed.

For more information, see the *Installation Guide* and the *Implementation Guide*.

Custom Code Orphan Records Utility

This utility lists custom code members that do not have a "parent" program in the TDF. This allows you to identify and optionally delete these *orphan* records.

For more information, see the *Implementation Guide* and *PWS Option Administration Guide*.

PWS Print TDF Panel Images

This new utility allows you to specify and print TDF panel images from the PWS Desktop. You can find this option on the Utility menu. For details, see the PWS Option Administration Guide.

Generator Enhancements

CA Telon r5 provides more efficiency and capacity for program generation to save time and reduce costs:

Increased Maximum for PI/PD Fields The number of fields that can be defined on a screen or in a report has been increased to 2000, enabling additional versatility in defining online panels and batch reports.

List Processing by Column

This new feature allows you to change the display order of SEGLOOP iterations. Previously, all SEGLOOPS were displayed in row order (default); now, you may also display them in column order.

For more information, see the *Design Facility Reference Guide*.

Test Control-Indicator Value after Q-1000-PROGRAM-INIT

The Generator now generates code to test the CONTROL-INDICATOR value in batch programs after performance of Q-1000-PROGRAM-INIT. If the CONTROL-INDICATOR is set to END-TRAN in a custom code member copied into the INIT1 or INIT2 custom code point, the new code ends the program rather than proceeding to the next section.

Initiate Fields for Reusability

Suppression of LINK Card Generation in CA Telon PWS Option If the generation of LINK cards is unnecessary, users can suppress them via a simple checkbox in the Generate and Preferences dialog screens.

IMS/DC and Batch

```
ABT-ERMSG-INDICATOR
ABT-ERMSG-TABLE
ABT-CONTROL-INDICATOR
ABT-IN-PROGRESS
```

Batch Only

```
BWA-TRANSACTION-COUNT
BWA-PAGE-COUNT
BWA-ALL-DETAIL-REPORT-COUNT
BWA-ALL-DETAIL-PAGE-COUNT
BWA-BOTTOM-DETAIL-LINE-NBR
BWA-LINE-COUNT
```

IMS and CICS Enhancements

CA Telon r5 provides additional features for maximizing use of the IMS and CICS environments:

AIBTDLI Generation Support

You can request generation of AIBTDLI calls to IMS. This interface allows PCBs to be identified by name rather than by a pointer to the PCB.

PGMNAMES Naming Conventions

It is now possible to use separate naming conventions for IMS driver and dynamic programs.

For more information, see the *Implementation Guide*.

Call Subroutines Directly

A new TLNIIS parameter, IDIRLINK, allows you to choose whether to generate calls in an IMS/DC program to a dynamic program using the Telon-supplied module ADRALNKC, or by direct invocation of the program. For more information, see the *Implementation Guide.*

IMS Eject Option

This new feature allows you to set a new TLNIIS parameter, MFSEJCT, to generate an EJECT command rather than SPACE for an IMS MFS map in the PAGE parameter of a DEV command. This feature is only relevant to IMS/DC programs that have a panel such as IMS static, dynamic and report definition programs. For more information, see the *Implementation Guide*.

RDO Entries for Dynamic Modules

CA Telon provides CICS RDO entries for all Telon-supplied subroutines that could be called dynamically by any user-generated program.

New and Changed Features for r5.1

The CA Telon r5.1 provides the following new features:

- Shared DASD
- Integration to Mainframe Software Manager

Shared DASD Support

This feature provides support for the CA Telon Design Facility database on shared DASD Definition, which allows users to run the TDF from any system that has access to the DASD without causing corruption. The data access will have to be changed to use the RLS option, and all ENQ/DEQs will need to be changed from SYSTEM to SYSTEMS.

Integration to CA MSM

Use CA MSM to acquire, install, and maintain your product. For more information, see the *Best Practices Guide*.

Other

Removal of support for Ingres. <Is this section required?>