

CA 2E

Release Notes

Release 8.7



This Documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by CA at any time. This Documentation is proprietary information of CA and may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA.

If you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2014 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

Product References

This document references the following CA Technologies products:

- CA 2E
- CA 2E Web Option
- CA 2E Toolkit

Contact CA Technologies

Contact CA Support

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

- 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

Providing Feedback About Product Documentation

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

To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at <http://ca.com/docs>.

Contents

Chapter 1: Enhancements to Existing Features 9

Action Diagram Call Prompt Using an External name	9
Allow SQL Record Level Access	10
Allow RLA Access over DDL Database	10
DDL Implementation	10
Allow SQL/DDDL Generation without hard-coded schema name	12
Allow LVLCHK(*YES) for SQL/DDDL indexes having RCDFMT keyword	13
Command Key Processing (Mouse-click and Key-press)	13
Device User Source Substitution Variables	14
Meaningful Names for SQL/DDDL	14
Meaningful Name for Model Files with Valid System Name	16
Controlling Meaningful Names for Table and/or Fields	17
Long Name Scenarios	17
Refresh Action Diagram Statements	19
Select/Omit in DDL Index	19
Suppress Display of NULL Parameters	20
Trigger Error Processing if no Control Data	22
YCPYMDLOBJ New Override Target Model Locks Parameter	23
YCVTSPLF Flexibility	23
Option to Generate RLA against DDL	23
F7=Auxiliaries in the DDL Implementation	24
Support CM Promotion of DDL Objects (Not Switched from DDS)	24
Support CM promotion of DDL objects (DDS to DDL Conversion)	25

Chapter 2: Documentation Updates 27

Documentation Changes	27
End-to-End (E2E) Bookshelf	27

Chapter 3: Published Fixes 29

2E	29
C22E 14	29
C22E 77	29
C22E 79	29
C22E 142	30
C22E 220	30
C22E 404	30

C22E 437	30
C22E 447	30
C22E 449	31
C22E 450	31
C22E 453	31
C22E 454	31
C22E 455	31
C22E 457	32
C22E 458	32
C22E 459	32
C22E 460	32
C22E 461	32
C22E 462	32
C22E 463	33
C22E 464	33
C22E 466	33
C22E 470	33
C22E 471	34
C22E 472	34
C22E 475	34
C22E 476	34
C22E 477	34
C22E 478	35
C22E 479	35
C22E 488	35
C22E 490	35
C22E 491	35
C22E 493	36
C22E 495	36
C22E 497	36
C22E 498	36
C22E 501	36
C22E 502	37
C22E 503	37
C22E 504	37
C22E 505	37
C22E 506	37
C22E 507	38
C22E 508	38
C22E 510	38
C22E 511	38
C22E 512	39

C22E 513	39
C22E 514	39
C22E 515	39
C22E 516	39
C22E 517	40
C22E 520	40
C22E 521	41
C22E 523	41
C22E 524	42
C22E 530	42
C22E 532	42
C22E 535	42
C22E 537	43
C22E 538	43
CA 2E Toolkit	43
C21E 26	43
C21E 54	44
C21E 55	44
C21E 61	44
C21E 65	44
C21E 67	44
C21E 70	45
Web Option	45
C2WEB 241	45
C2WEB 242	45
C2WEB 244	45
C2WEB 249	45
C2WEB 252	45
C2WEB 253	46
C2WEB 254	46

Chapter 4: Known Issues 47

CA 2E	47
Issue with the Select Record Function Compilation	47
Compilation of CBI Functions Fail	47
Issue with the Copy Process for SQL Tables	47
Trigger Loss When Moving to DDL/SQL	48
Web Option	48
Safari for Windows - F5 Key Behavior	48
Internet Explorer, Chrome, Firefox - F5 Key Behavior	49
JIT Displayed When Skeleton Exists	49

HTML Bookshelf Search Results50

Chapter 1: Enhancements to Existing Features

This section contains the following topics:

- [Action Diagram Call Prompt Using an External name](#) (see page 9)
- [Allow SQL Record Level Access](#) (see page 10)
- [Allow RLA Access over DDL Database](#) (see page 10)
- [Allow SQL/DDl Generation without hard-coded schema name](#) (see page 12)
- [Allow LVLCHK\(*YES\) for SQL/DDl indexes having RCDfmt keyword](#) (see page 13)
- [Command Key Processing \(Mouse-click and Key-press\)](#) (see page 13)
- [Device User Source Substitution Variables](#) (see page 14)
- [Meaningful Names for SQL/DDl](#) (see page 14)
- [Refresh Action Diagram Statements](#) (see page 19)
- [Select/Omit in DDL Index](#) (see page 19)
- [Suppress Display of NLL Parameters](#) (see page 20)
- [Trigger Error Processing if no Control Data](#) (see page 22)
- [YCPYMDLOBJ New Override Target Model Locks Parameter](#) (see page 23)
- [YCVTSPLF Flexibility](#) (see page 23)
- [Option to Generate RLA against DDL](#) (see page 23)
- [F7=Auxiliaries in the DDL Implementation](#) (see page 24)
- [Support CM Promotion of DDL Objects \(Not Switched from DDS\)](#) (see page 24)
- [Support CM promotion of DDL objects \(DDS to DDL Conversion\)](#) (see page 25)

Action Diagram Call Prompt Using an External name

CA 2E provides the ability to insert a function call in the Action Diagram by specifying the external or program member name. For example, you can specify the Program Name for the corresponding Function.

The following documentation deliverables were updated for this feature:

- Building Applications

Allow SQL Record Level Access

When generating SQL database files, you have the option to include the RCDFMT keyword, so that the SQL database files can be accessed using RLA (Record Level Access). This functionality is controlled using the model value YSQLFMT. You do not have to recompile existing functions that were functioning correctly against the SQL database files, before the database was regenerated and recompiled to use RCDFMT.

The following documentation deliverables were updated for this feature:

- Administration Guide
- Building Access Paths Guide
- Building Applications Guide
- Command Reference Guide

Allow RLA Access over DDL Database

DDL Implementation

When you want to convert the existing DDS database to DDL database and you continue to use RLA functions that were built using DDS database without regenerating and recompiling them, you have the option to use the generation mode. You have an option to set the generation mode of access paths as:

L(L-DDL) or M(M-MDLVAL with model value YDBFGEN set as *DDL)

Note:

- Irrespective of the value of the YSQLFMT model value and if the generation mode is *DDL, the RCDFMT keyword is generated.
- The current implementation of *DDL supports only *TABLE as data access method.
- When you generate the SQL/DDL with certain column names, they fail to generate and throw error messages. However, using the same field names for the DDS implementation result in successful generation.

Example: If you have a field starting with a number such as "2nd_Order", the SQL/DDL fails to generate a table with such column name with the following error:

"SQL0103 - Numeric constant 2nd_Order not valid."

However, the DDS implementation with the same field name is successfully generated.

Limitations:

- Due to an IBM limitation, date field in *ISO format (DT#) is converted to date format of job, when DDS database containing this date field is converted to DDL database.

Therefore, a decimal data error occurs when RLA function is executed after converting the database from DDS to DDL.

Note: To resolve this issue, contact IBM for the following PTFs:

- SI51190 for V7R1
- SI51290 for V6R1
- The current implementation of the DDL generation mode is not valid for the following cases:
 - Access paths that have virtual fields
 - SPN access path
 - QRY access path
 - Multi-member files

Workaround for Virtual Fields, SPN, and QRY Access Paths: If the earlier generation mode is *DDS, revert to it and regenerate the access path. You need not regenerate the functions that use this access path. If you want to have an SQL type database, regenerate the access path using *SQL generation mode. The functions using this access path must be regenerated.

Workaround for Multi-Member Files: If you want to have more than one member for the access paths, revert to *DDS generation mode.

Note: If you want to change an access path, which is previously defined as *DDS with a MAXMBR compiler override, to *DDL, you must revert to *DDS generation mode and must remove the compiler override, and then change back to *DDL generation mode.

- When you attempt to compile/generate a *DDL based access path which has any of the above limitation scenarios, the source is not generated. Also, the corresponding entry is not added to the Job List.

The following documentation deliverables were updated for this feature:

- Administration Guide
- Building Access Paths Guide
- Building Applications Guide
- Command Reference Guide
- Generating and Implementing Applications Guide
- Implementation Guide
- Release Notes
- Tutorial Guide

Allow SQL/DDDL Generation without hard-coded schema name

When generating SQL/DDDL database files in CA 2E, we now have the option to generate SQL/DDDL database objects which do not contain a hard-coded schema name. This functionality is controlled using the model value YSQLCOL. Using this feature, the generated database object can be compiled into any desired SQL collection or library (as specified in the YSQLLIB model value). This allows for simplification in the deployment environment and also helps provide support for change management environments where the object needs to be recompiled into a different SQL collection/library, without making changes to the previously generated source.

The YEXCSQL command has been modified to cater to these changes.

Limitation:

There is a long standing limitation with CM wherein 2E created SQL objects cannot be promoted by compiling them. The workaround is to promote (move) the objects as 3GL objects, *without* compilation.

Note: When a change in the CM environment is carried out to create objects into a normal library (from the previous target SQL collection), the CM repository of the target environment might have to be refreshed.

The following documentation deliverables were updated for this feature:

- Administration Guide
- Building Access Paths Guide
- Building Applications Guide
- Command Reference Guide
- Implementation Guide

Allow LVLCHK(*YES) for SQL/DDl indexes having RCDfMT keyword

When creating SQL/DDl database files with the RCDfMT keyword in CA 2E, we can now create all SQL/DDl artifacts with LVLCHK(*YES). SQL/DDl tables and views are created with LVLCHK(*YES) by default, irrespective of the RCDfMT keyword. However, SQL/DDl indexes are created with LVLCHK(*NO) when the RCDfMT keyword is generated. A new model value YLVLCHK has been introduced to enable SQL/DDl indexes also to be generated with LVLCHK(*YES). This ensures that the file is protected from data corruption from RLA-type access, if the database changes.

The following documentation deliverables were updated for this feature:

- Administration Guide
- Building Access Paths Guide
- Building Applications Guide

Command Key Processing (Mouse-click and Key-press)

CA 2E Web Option provides access to command keys on the browser interface using mouse-clicks and pressing keys on the keyboard across the browsers listed below:

- Internet Explorer 8 and 9 version.
- Safari 6 or a later version for Mac.
- Safari 5.1.7 or a later version for Windows.
- Chrome 24.0 or a later version.
- Firefox 19.0 or a later version.

Note:

- Internet Explorer version 8 and 9 are the *only* officially supported browsers. Check the compatibility matrix on [CA 2E Product page](#) for the latest information.
- Changes have been made to the YMLSSYNRFP syntax file to support Chrome, Firefox, and Safari. For these changes to take effect, regenerate skeletons for functions that you wish to use in these browsers.

This information is also documented in the following documentation deliverables:

- Web Option User Guide

Device User Source Substitution Variables

CA 2E provides a set of additional substitution variables that can be applied to a Data Description Specification (DDS) user source. The `#*LIB`, `#*FILE`, `#*MBR`, `#*TYPE` and `#*ENT` substitution variables for DDS are enabled.

The following documentation deliverables were updated for this feature:

- Building Applications

Meaningful Names for SQL/DDL

CA 2E now lets you create SQL or DDL database with meaningful names, instead of the implementation or truncated model names. This feature makes it easier to work with the external interfaces such as DB2 and Web Query.

The YSQLVNM model value controls the transition to meaningful names for SQL or DDL database. For more information about the YSQLVNM model value, see the YSQLVNM topic in the *CA 2E Administration Guide*.

Note: For more information about how to move to meaningful names for SQL or DDL database, see the article *How to Move to Meaningful Names for SQL or DDL Database*.

Limitations:

- There is a limitation across the copy process in CA 2E. When a table is regenerated/recompiled with different naming convention (`*SQL`, `*DDS`, `*LNG`, `*LNF`, and `*LNT`), then copying process might fail in a few cases.

The following table shows the areas where copy process works:

	DDS	SQL	LNG	LNF	LNT
DDS	Copy Process works	Copy Process does not work	Copy Process works	Copy Process works	Copy Process works
SQL	Copy Process does not work	Copy Process does not work	Copy Process does not work	Copy Process does not work	Copy Process does not work
LNG	Copy Process works	Copy Process does not work	Copy Process works	Copy Process works	Copy Process works
LNF	Copy Process works	Copy Process does not work	Copy Process works	Copy Process works	Copy Process works
LNT	Copy Process works	Copy Process does not work	Copy Process works	Copy Process works	Copy Process works

Note:

- Consider a table and its view that are created with YSQLVNM as *DDS or *SQL. When YSQLVNM is changed to *LNG and the table and view are regenerated/recompiled, the table and its view that were created with either of *DDS or *SQL naming convention would be deleted, and new table and its view would be created.
- To generate or regenerate a function with RLA code for DDL database, set the YSQLVNM model value to *DDS or *LNG or *LNT, or *LNF and set the YDDLDBA model value to *RLA.

The following documentation deliverables were updated for this feature:

- Administration Guide
- Building Access Paths Guide
- Building Applications Guide
- Command Reference Guide

Meaningful Name for Model Files with Valid System Name

For a table that has a valid system name (less than or equal to 10 bytes), the long name implementation fails. This is due to an IBM i limitation which does not allow the table name and the system name to be different from each other, if both the names are valid system names.

This limitation has been addressed by introducing a file level option, "Enhance SQL Naming" in the Edit File Details panel.

If you meet the following three conditions:

- Change the Enhance SQL Naming option on the Edit File Details panel to **Y**
- Set the model value YSQLVNM to *LNG or *LNT
- Model file name is a valid system name

Then, it generates the table with (underscores) "_"s and "TABLE" as suffix, so that the name of the table becomes more than 10 char long.

Examples:

- CUSTOMER is generated as CUSTOMER_TABLE along with its 2E implementation name.
- CUST is generated as CUST__TABLE along with its 2E implementation name.
- C is generated as C_____TABLE along with its 2E implementation name.

However, if a table that has a valid system name (less than or equal to 10 bytes in length), is generated with YSQLVNM model value set as *LNG or *LNT, and when you set the Enhance SQL Naming option on the Edit File Details panel to **N**, then the following error message is generated in the code:

YSQLVNM as *LNG or *LNT is not allowed for this table

Refer to the section "Long Name Scenarios" in the "Administration Guide"

The following documentation deliverables were updated for this feature:

- Building Access Paths Guide
- Building Applications Guide
- Defining a Data Model Guide
- Generating and Implementing Applications
- Tutorial Guide

Controlling Meaningful Names for Table and/or Fields

CA 2E now lets you generate meaningful names for Table and/or Fields, independently of each other, so you have the flexibility to choose one or both or neither, depending on your environment requirements.

The two new values for the YSQLVNM model value, which are introduced for this feature are as follows:

***LNF**

Generates meaningful names for fields only.

***LNT**

Generates meaningful names for Table only.

The following documentation deliverables were updated for this feature:

- Building Access Paths Guide
- Building Applications Guide
- Defining a Data Model Guide
- Generating and Implementing Applications
- Tutorial Guide

Long Name Scenarios

The following chart depicts the way tables get generated in 2E based on the following three factors and the corresponding impact on the functions.

1. YSQLVNM model values
2. Whether the model file name being generated is a valid system name
3. Whether the file level option “Enhance SQL Naming” flag is set to Y or N

Enhance SQL Name ?	YSQLVNM Value	Model File Name	Table name	Table Implementation Name	Implementation name available for the table?	Table Name used by RLA function	Table Name used by SQL function	Function re-compilation required after enhanced table name?
Y	*LNG	Product	Product_TABLE	UUA2REP	Y	UUA2REP	UUA2REP	N
N	*LNG	Product	Product	UUA2REP	N	UUA2REP	UUA2REP	N/A (*)
Y	*LNG	Purchased_Products	Purchased_Products	UUB2REP	Y	UUB2REP	UUB2REP	N
N	*LNG	Purchased_Products	Purchased_Products	UUB2REP	Y	UUB2REP	UUB2REP	N
Y/N	*SQL	Product	Product	UUA2REP	N	UUA2REP	Product	N
Y/N	*SQL	Purchased_Products	Purchased_Products	N/A	N	UUA2REP	Purchased_Products	N
Y/N	*DDS	Product	N/A	UUA2REP	Y	UUA2REP	UUA2REP	N
Y/N	*LNF	Product	UUA2REP	UUA2REP	Y	UUA2REP	UUA2REP	N
Y/N	*LNF	Purchased_Products	UUB2REP	UUB2REP	Y	UUB2REP	UUB2REP	N
Y	*LNT	Product	Product_TABLE	UUA2REP	Y	UUA2REP	UUA2REP	N
N	*LNT	Product	Product	UUA2REP	N	UUA2REP	UUA2REP	N/A (*)
Y/N	*LNT	Purchased_Products	Purchased_Products	UUB2REP	Y	UUB2REP	UUB2REP	N

(*) E* line generated in the ACP source

Example:

When the YSQLVNM Model value is set to *LNG or *LNT and the model file name is "Product" and the file level option, Enhance SQL naming flag is set to Y, then the table is generated with a suffix "_TABLE" (that is, the table is generated with the name "Product_TABLE"). This table is also accessible using its implementation name, UUA2REP. The functions built over the access paths (Table, views and so on) use the implementation name of the table/views and need not be recompiled when the Enhance SQL Naming flag is switched from N to Y.

Refresh Action Diagram Statements

CA 2E lets you refresh Action Diagram statements when opening an Action Diagram, rather than having to zoom in on individual Call statements to see the refreshed details on that call. A new controlling model value named YRFSACT is added.

The following documentation deliverables were updated for this feature:

- Building Access Paths
- Building Applications
- Command Reference Guide

Select/Omit in DDL Index

When you regenerate the existing database as a DDL database, the select/omit criteria gets generated into the DDL index as a WHERE clause. Any existing RLA function that uses the DDL database, can now access the same records that the RLA function has accessed over the DDS database.

Irrespective of the "Allow select/omit criteria" setting being static or dynamic, the select/omit criteria gets embedded in the DDL index. You do not have to regenerate and recompile the function. The select/omit criteria are generated for all the access path types that DDL supports.

Note: The select/omit criteria, over DDL implementation supports RTV and RSQ access paths.

The following documentation deliverables were updated for this feature:

- Building Access Paths

Suppress Display of NLL Parameters

CA 2E lets you suppress the display of NLL parameters. Earlier you could press F15 in the Edit Action Diagram panel to display undefined parameters. Now this F15 function key is enhanced to toggle the display from ALL PARAMETERS to UNDEFINED PARAMETERS to NON-NLL PARAMETERS then back to ALL PARAMETERS again. Each time F15 is pressed, the screen title changes and its corresponding command key text changes.

The following is the initial enhanced display:

```

Session C - [24 x 80]
File Edit View Communication Actions Window Help

EDIT ACTION DIAGRAM          Edit  MVRMDLY  Products
FIND=>                       2 EDTFIL
I (C,I,S)F=Insert construct   I (X,0)F=Insert alternate case
I (A,E,Q,*,+,-,=,=A)F=Insert action  IMF=Insert message

EDIT ACTION - FUNCTION DETAILS          NON-NLL PARAMETERS
Function file : Products
Function . . . : 2a Compute profit

IOB Parameter                      Obj
Use Typ          Ctx Object Name
I Product code      MAP FLD  CTL Product code
I Product price date  MAP FLD  CTL Product price date
I Product price      MAP FLD  CTL Product price
I Product description 1  MAP FLD  CTL Product description 1
I Product cost        MAP FLD  CTL Product cost

F3=Exit          F5=Reload          F9=Edit parms
F10=Default parms  F12=Previous        F15=All parms
    
```

The following is the display after pressing F15:

```

Session C - [24 x 80]
File Edit View Communication Actions Window Help

EDIT ACTION DIAGRAM          Edit      MVRMDLY  Products
FIND=>                       2 EDTFIL
I(C,I,S)F=Insert construct    I(X,O)F=Insert alternate case
I(A,E,Q,*,+,-,=A)F=Insert action  IMF=Insert message

EDIT ACTION - FUNCTION DETAILS          UNDEFINED PARAMETERS
Function file : Products
Function. . . : 2a Compute profit

F3=Exit          F5=Reload          F9=Edit parms
F10=Default parms  F12=Previous        F15=Non-NLL parms only

MA  c                                                    06/004
1902 - Session successfully started
    
```

The following is the display after pressing F15 again:

```

Session C - [24 x 80]
File Edit View Communication Actions Window Help

EDIT ACTION DIAGRAM          Edit      MVRMDLY  Products
FIND=>                       2 EDTFIL
I(C,I,S)F=Insert construct    I(X,O)F=Insert alternate case
I(A,E,Q,*,+,-,=A)F=Insert action  IMF=Insert message

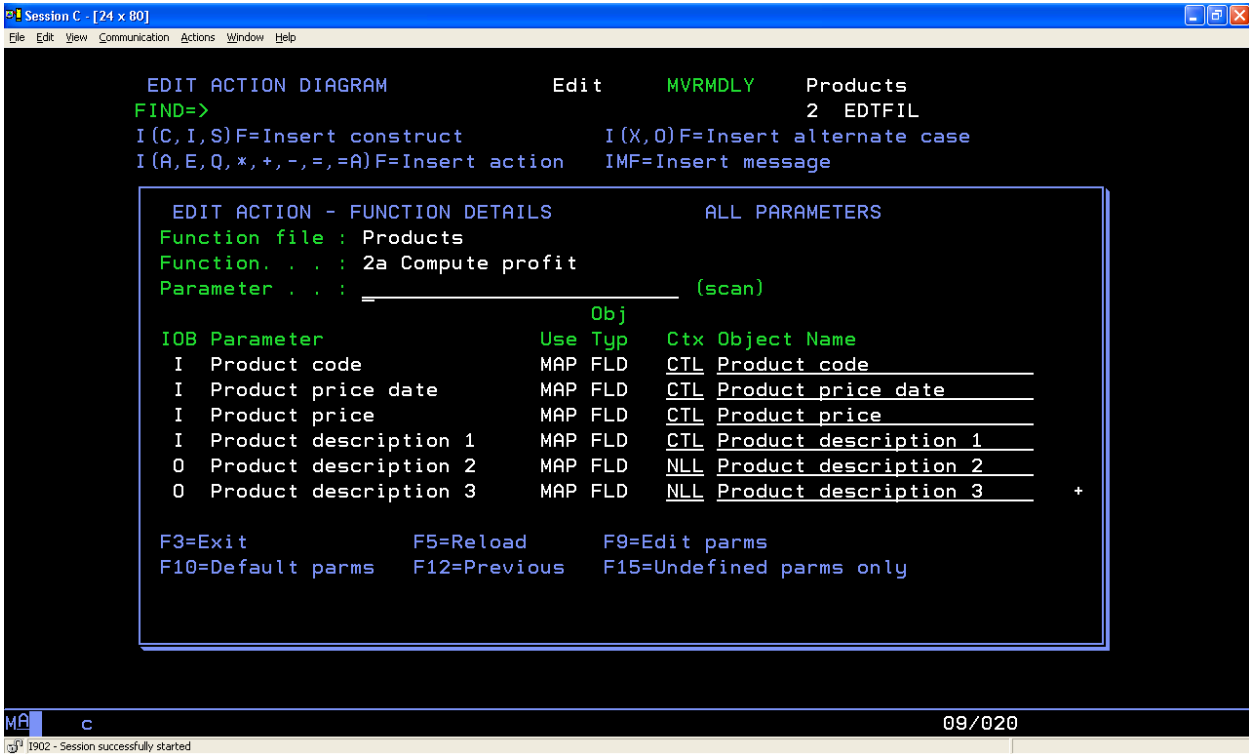
EDIT ACTION - FUNCTION DETAILS          NON-NLL PARAMETERS
Function file : Products
Function. . . : 2a Compute profit

I0B Parameter          Obj          Use Typ          Ctx Object Name
I Product code          MAP FLD          CTL Product code
I Product price date    MAP FLD          CTL Product price date
I Product price          MAP FLD          CTL Product price
I Product description 1  MAP FLD          CTL Product description 1
I Product cost          MAP FLD          CTL Product cost

F3=Exit          F5=Reload          F9=Edit parms
F10=Default parms  F12=Previous        F15=All parms

MA  c                                                    12/044
1902 - Session successfully started
    
```

The following is the display after pressing F15 another time, which then 'toggles' back to the initial display of ALL PARAMETERS:



Note: Changes do not occur while pressing F15, the ENTER key must be pressed to confirm any changes to an action.

The following documentation deliverables were updated for this feature:

- Building Applications

Trigger Error Processing if no Control Data

Functionality has been added to the CA 2E Trigger Router to handle the situation where a trigger exists on a database file which has the CA 2E Trigger Router YTRIGGER specified as the trigger program, but where no records exist in the Trigger Control file for the specified trigger event.

The following documentation deliverables were updated for this feature:

- Building Applications

YCPYMDLOBJ New Override Target Model Locks Parameter

CA 2E provides the ability to copy an object where there is a user-defined permanent lock on the 'to' object. A new parameter OVRTGLCK is provided for the YCPYMDLOBJ command to override permanent locks in the target model.

The following documentation deliverables were updated for this feature:

- Command Reference Guide

YCVTSPLF Flexibility

You can use YCVTSPLF on a computer that does not have CA 2E or CA 2E Toolkit installed or licensed on that computer, so that the YCVTSPLF functionality can be used in 2E generated applications at runtime. A new CA 2E Toolkit command YDUPTKOBJ has been introduced in this release. This command can copy the objects, that YCVTSPLF requires, to a target library.

The following documentation deliverables were updated for this feature:

- Command Reference Guide

Option to Generate RLA against DDL

CA 2E now provides an option to generate (and regenerate) the functions with the same RLA code that is generated against a DDS database even after switching from DDS to DDL database. This option lets you modify (and regenerate) a function after moving from DDS to DDL database without introducing the risk and wholesome change of function source switching to SQL-like access. This functionality is controlled using the YDDLDBA model value. For more information about the YDDLDBA model value, see the *"Model Values Used in Building Functions"* topic in the CA 2E Building Applications Guide.

The following documentation deliverables are updated for this feature:

- Administration Guide
- Building Access Path Guide
- Building Applications Guide
- Command Reference Guide

F7=Auxiliaries in the DDL Implementation

Auxiliaries are not applicable for DDL type file as Views are not created for DDL type file and *only* Index with the same name as the source member name is created. F7=Auxiliaries is not applicable for the DDL implementation.

The following documentation deliverables are updated for this feature:

- Administration Guide
- Building Access Path Guide

Support CM Promotion of DDL Objects (Not Switched from DDS)

CA 2E and CM now allow you to promote DDL-based objects. CM does not support "promotion with compile" for SQL-based access paths. The only way to promote them is with "promotion with moving as a 3GL object." The new DDL to the DDL promotion functionality follows this same process.

During the promotion request creation, the DDL table takes the YSQLPF object code and the DDL indexes take the YSQLLF object code.

Note: The new DDL to DDL promotion functionality is available only with CA 2E Release 8.7 and Implementer 11.0. Upgrade your existing product setup to CA 2E Release 8.7 and Implementer 11.0 to take advantage of the new functionality.

Limitation:

- If the database is implemented with YSQLVNM = *SQL, irrespective of generation mode as *SQL/*DDL, the promotion of "physical file"/"table" access paths is not successful.

The following documentation deliverables are updated for this feature:

- Compatibility Matrix

Note: For more information on the CM promotion of DDL-based objects, see the Implementer 11.0 documentation.

Support CM promotion of DDL objects (DDS to DDL Conversion)

CA 2E and CM now allow you to check out *DDS PFs / LFs, convert them to *DDL tables / indexes and promote the new *DDL objects to Production. You can also check out *DDL tables / indexes, convert them to *DDS PFs / LFs and promote the *DDS objects to Production. CM does not support "promotion with compile" for SQL-based access paths. The only way to promote them is with "promotion with moving as a 3GL object.". Hence, *DDL objects promotion follows this same process.

For more information on the CM promotion of *DDS to *DDL / *DDL to *DDS based objects, see the Implementer 11.0 patch 948724 documentation.
<https://support.ptc.com/appserver/cs/view/solution.jsp?n=CS176520>

Note: The new *DDS to *DDL / *DDL to *DDS conversion during promotion functionality is available *only* with CA 2E Release 8.7 and Implementer 11.0 + patch 948724.

Limitation:

- When attempting a *DDS to *DDL / *DDL to *DDS conversion, you must generate the *DDS / *DDL objects into the same object library.
- The new CM functionality only caters to *DDS to *DDL / *DDL to *DDS conversions. *DDS to *SQL / *SQL to *DDS conversions are not supported. We recommend you not to carry out a *DDS to *SQL / *SQL to *DDS conversion.

The following documentation deliverables are updated for this feature:

- Compatibility Matrix
- Generating and Implementing Applications Guide

Chapter 2: Documentation Updates

This section contains the following topics:

[Documentation Changes](#) (see page 27)

[End-to-End \(E2E\) Bookshelf](#) (see page 27)

Documentation Changes

Each guide of the product documentation has a Documentation Changes page, which lists the topics that have been updated for the current release.

End-to-End (E2E) Bookshelf

This release contains an E2E HTML bookshelf, which includes all the information related to the product at one place. You will find links to the product documentation, knowledge base articles, and additional resources of the product.

The E2E Bookshelf features include:

- A single help screen that displays all documentation for this release.
- An all-in-one system which provides you with a single tool to search the entire documentation set.
- Additional links for using the Bookshelf, downloading Acrobat Reader, and contacting CA.

To access the E2E Bookshelf

1. Extract the .ISO image and navigate to the DOCSETUP folder.
The DOCSETUP folder contains the Bookshelf.zip file.
2. Unzip the Bookshelf.zip file.
3. Click the Bookshelf.html and access the E2E bookshelf.

Note: You can also download and extract the CA 2E Bookshelf.zip file from CA Support Online. To extract the content of a .ZIP file, use an archive program such as WinZip or Stuffit, and choose to extract the content to a local folder. Once extracted, open the Bookshelf folder and click the Bookshelf.html file.

Chapter 3: Published Fixes

We corrected, modified, or fixed all of the issues described in this Appendix. Published fixes are also available from Published Solutions at <http://ca.com/support>.

Note: Fixes with an eight-digit number are internal to CA so are not posted to CA Support Online.

This section contains the following topics:

[2E](#) (see page 29)

[CA 2E Toolkit](#) (see page 43)

[Web Option](#) (see page 45)

2E

We completed the following fixes, corrections, or updates for CA 2E:

C22E 14

Consider a scenario where two files with only a key field are created. An RTVOBJ fun is built over PHY ACP of the first file with no parameters. In the RTVOBJ's USER: Process Data record, call an RTVOBJ built over the RTV access path of second file with no parameters And a DLTOBJ built over the PHY access path of first file.

Call the RTVOBJ from an EXCEXTFUN generated in RPG IV. The program fails to compile with QRG4005 and QRG5132 errors.

C22E 77

When you select F17=Services option in a large model from the Edit Action Diagram screen on a function, the Action Diagram Services screen displays.

If you enter '?' on the find function name field and press enter key on this screen; it results in a model crash with the run unit error in YMSGACTF1I.

C22E 79

If user source code contains I Specifications, then RPGIV generated functions result in an RNF0257 compilation error.

C22E 142

When the EXIT FUNCTION DEFINITION panel was displayed for an EXCURPGM function and the "Submit generation" option on it, was set to "Y", the entry for the EXCURPGM was not added to the user joblist.

C22E 220

Sometimes, the Action Diagram load fails and then the model crashes when you attempt to zoom into the Action Diagram of a large/complex PRTFIL function by using the 'F' option. The following error messages display:

- Run-unit ended at nnnn in YGENRPTR1I.
- Run-unit ended at nnnn in YEXPACPR1I.

In addition, at times, the generation of the function might also fail.

C22E 404

When using CA 2E Triggers implemented using *DTAQ, the following error can occur:

CPF950A Storage limit exceeded for data queue YTRIGGERQ in *LIBL.

C22E 437

Consider a CA 2E model, which is integrated with Implementer, such that there is an integrity error for the model, involving Model Message Action File (YMSGACTRFP) and Model Message File (YMSGDTARFP). Within this model, if a function, having multiple versions (a production version which is "current", in addition to one or more development versions) and referencing the invalid records causing the integrity problems, is picked and a development version is selected for the processing, the resulting model object redirection, and the subsequent function checkout, fails.

C22E 447

YCPYMDLOBJ fails with the error "Run unit ended at 1905 in YPARTAR1I" when copying message parameters objects from one model to another.

C22E 449

When an RTVOBJ function--

- Is built over the Physical file access path,
- Is copied from the *Templates file,
- The parameter of the function is defined by the physical file access path of the file.

The parameter fields lose their values for "Usage" and "Role". This bug is a result of the YC22E386 fix.

C22E 450

Upon redirection of a module, the References of a service program do not reflect this latest current version of the module. In addition, the usage of the current module does not display the service program.

C22E 453

A model crashed with a run-unit error when the following actions were performed:

1. Enter a file with access path as *None on the Edit Array Details screen of an array.
2. Select a field from the file in Edit Array Entries screen.
3. Press the function key "F7-Array keys".

An attempt to zoom into the parameter details of the file in the same array caused the model to crash with the same run-unit error.

C22E 454

When a function with object type MOD, was called conditionally from another function, the CALLB statement for this call, was generated before the corresponding stored conditions, leading to a "RNF5121" error during compilation.

C22E 455

ENTER processing for DSPFIL, EDTFIL, SELRCD function types.

When the user does not make any changes, the Process Subfile Record processing is performed for every subfile record (including DB updates in an EDTFIL).

C22E 457

When upgrading a user model from an earlier version to the latest r8.6, the data area, YPRDRDRRFA is added to the model (as part of the model upgrade processing). However, the default value of the new data area in user model shows as *NO, whereas, it is *YES in the r8.6 null model. If the user model is running under CM, this default value of *NO does not allow the PRD versions of objects to be redirected when the YRDRMDLOBJ command is executed.

C22E 458

CA 2E generator program could generate a maximum of only 260 subroutines in RP4 programs. The maximum now is 360 subroutines.

C22E 459

Execution of YEXCMDLLST, using a user option, did not complete successfully.

C22E 460

YCRTWS did not handle the IBM limitation of maximum 7 parameters per procedure in an ILE service program (*SRVPGM) that was to be externalized as a Web Service.

C22E 461

The allowed values and help text for a few reason codes were not updated in the model usage or reference functionality.

C22E 462

After you created an EDTFIL/EDTRCD/EDTTRN function and changed the function option Create Record to "N". When you modify the action diagram of the Edit function to replace the default call to CHGOBJ DBF with CRTOBJ DBF, the following was the result:

- The usages of the CRTOBJ DBF displayed the Edit function with reason code as *DSLDBF even though the call to CRTOBJ was in the default user point of Change DBF record in the action diagram.
- The references of the Edit function erroneously displayed two records of CRTOBJ, both with reason code as *DSLDBF. Also, the Reason field on the "Display Model Usages" screen did not display the reason code as *DSLDBF.

Note: For more information about these changes, see the *Command Reference Guide*.

C22E 463

When an EXCURSRC function having one or more parameters is invoked from another function and the calling function is generated, the condition values are not substituted correctly leading to compilation errors such as RNF0267, RNF0312 and RNF0530. These errors occur under the following conditions:

- The generation language for the EXCURSRC is RP4.
- The EXCURSRC contains EVAL statements which use parameters of the EXCURSRC.
- Condition values of length greater than 6 (including quotes) are specified on the parameter mapping screen, at the time of the function call.

C22E 464

Consider a scenario where we have a *TEMPLATE function, such that it is not built over any access path, but, it in turn calls other *TEMPLATE functions, at least one of which is built over a valid *TEMPLATE access path.

When it is attempted to create a function over a normal file by copying the top level *TEMPLATE function, the copy ends with a "MCH3601" error that is encountered by the YDUPREFR1I program.

C22E 466

The display model usages command did not recognize the action diagram usages of DRV function field when it was used in an Action Diagram.

C22E 470

When generating SQL access paths containing SELECT/OMIT criteria, using codepage 273 (Germany)/codepage 1141 (Germany Euro), the NOT symbol, '¬' (SM660000, Hex-'5F', in code page 37) is generated erroneously as the Circumflex symbol, ' ^ ' (SD150000, Hex-'5F', in code page 273/1141), leading to a compilation failure, with compile error SQL0104.

C22E 471

The allowed values and help text for a few reason codes were not updated in the model usage or reference functionality.

C22E 472

In a Japanese environment, some screens do not display text on certain screens in Japanese, but displays the upper-case English text.

C22E 475

Consider the scenario wherein

- An Internal or DBF Function contains a comparison for its Parameter with a CND value *BLANK,
- *BLANK is passed as a value for this parameter from its invoking function
- The generation language of the invoking function is CBL or CBI.

When it is attempted to compile the generated source of the invoking function, the compilation fails with an LBL1429 error (when generation language is CBL) or LNC1429 error (when generation language is CBI). This problem also occurs in the specific case of internal function being EXCUSRSRC and generation language RP4. In this case, the compilation fails with an RNF7421 error.

C22E 476

When a user displays Model usages (YDSPMDLUSG) for a Field; enters *EXTFUN for the Scope and Filter parameters; the processing becomes slow when executed on large Models.

C22E 477

When the source member name of a DDS access path is changed, a record is written to the model file YACPAUXRFP.

If the access path was promoted using CM, the auxiliary from YACPAUXRFP was also added to the model list and this caused problems in the promotion because the access path was not SQL.

C22E 478

When you copy messages from a source model to a target model using the YCPYMDLOBJ command, for messages which do not have a second-level text, only the model message definitions are copied to the target model. However, the corresponding message id's are not copied to the default message file of the target model.

C22E 479

When the figurative constant *ZERO is used as a "parameter" to a function or built-in-function, upon subsequent generation, the generated code for *ZERO varies, depending on the release and generation language.

Note: When *ZERO is used in a "comparison" statement within a function, upon subsequent generation, the code is generated correctly.

C22E 488

When code is copied from one User Point to another, within the Action Diagram of a function, using the "Notepad Insert", "Copy" or "Move" operations, context errors might be introduced, based on available contexts in the target User Point. When you attempt to generate and compile such a function, the generation and compilation go through successfully, in spite of the context errors.

C22E 490

Consider a scenario, where you have a *TEMPLATE function, which is not built over any access path; but has at least one parameter that is based on any access path over the *TEMPLATE file. When you attempt to create a function over a user file by copying this *TEMPLATE function, the copy ends with a "MCH3601" error that is encountered by the YDUPREFR1I program.

C22E 491

Binding procedures from an EXCURPGM module that contains multiple exported procedures into a service program fails to bind more than one procedure.

C22E 493

Consider a scenario wherein you work with a synchronized model and a new relation is added to a user file.

Without resynchronizing the model, when you attempt to create a new function on this user file by copying a *TEMPLATE function having "**Template key defn" and/or "**Template record defn" as parameters, irrespective of the access path on which this *TEMPLATE function is built, the copy ends with a "YYY0101" error.

C22E 495

When you execute the YRTVMDLOBJ command for an object that has all the date fields populated with the value 0 or blank, the object returns junk characters for the date fields.

C22E 497

Sometimes, the F7=Find feature for names (like function file name, function name, field name) within the Action Diagram Services panel incorrectly encounters an error when a valid name is entered.

Example:

Find field name - 'No field of specified name exists' (Y2V0363).

These errors occur for certain characters within certain non-English code pages. This problem was originally reported for the Katakana character 0xAD within the code page 290.

C22E 498

Consider a scenario where a File Level Customization is applied to a function through the EDIT FUNCTION DEVICES screen and the function is saved on exit. Upon reentry into the function device design, the previously saved File Level Customization is lost.

C22E 501

Incorrect code is generated for COBOL SQL CHGOBJ functions when specifying the Null Update Suppression feature.

C22E 502

The following two messages appear unnecessarily in the job log:

- Value for parameter MSGID not a valid name. CPD0078 Sev 30
- Error found on ADDMSGD command. CPD000 Sev 30

C22E 503

Sometimes, the following generation error message occurs unnecessarily when interactively generating a function ('G' from the EDIT FUNCTIONS panel), and the subfile select field is being highlighted.

Function did not generate successfully. Y2V0183 Sev 30

This generation error message also occurs unnecessarily when you enter 'J' to submit generation to batch. The generation status results as *ERROR within the SUBMIT GENERATIONS & CREATES panel. Subsequently, when you enter 'C' to request CRT, the generated function is created successfully.

C22E 504

Sometimes, during interactive generation ('G') of a function, user is kicked out of the Model due to a Decimal Data Error (MCH1202).

C22E 505

SQL Indexes are being created without a description.

C22E 506

Sometimes, the Action Diagram editor for the *MOVE ARRAY built-in function incorrectly issues an error, when a valid field name is entered using the correct case.

Example:

'Z_HLER' type FLD not found.' (Y2V0101).

These errors occur for certain characters within certain non-English code pages. For example, this problem was originally reported for the German characters 0x6A, 0xC0 and 0xD0 within the code page 273.

C22E 507

The YGENSRC job fails with a CPF5027 error due to a record lock within the YMSGDTA00L file (format @MSGSEC).

C22E 508

The RPG/RP4 compile failures occur when:

- The Prompt Message File (YPMTMSF) model value is longer than 8 characters
- A screen text constant (within a subfile record) had been specified to generate a message ID.

C22E 510

Consider a scenario where an EXCURSRC function having one or more parameters is invoked from another function, under the following conditions:

- The generation language for the EXCURSRC is RP4.
- The EXCURSRC contains CAT statements, which use parameters of the EXCURSRC.
- CONstant values of a length greater than 6 (including quotes) - long constants, are specified on the parameter mapping screen at the time of the function call.

Upon generation of the calling function, these CONstant values are not substituted correctly, leading to compilation errors such as RNF0289, RNF5157 on a subsequent compilation.

C22E 511

Consider a scenario where you have an RP4 EXCURSRC function containing fixed-format statements along with comments starting from position 81.

When the fields in the EXCURSRC are substituted during generation, the comments are not placed correctly. When you compile the function that invokes the EXCURSRC, the compilation fails with the RNF5377 errors.

C22E 512

When utilizing the Wrapping feature for an extremely large User Point, the 16-MB memory limitation is being exceeded, thus, encountering the MCH2804 error ("Tried to go larger than storage limit for object &1.").

Modifications are made to reduce the memory allocation. However, it is still possible for an even larger User Point to encounter the MCH2804 error.

Note: We recommend that the user exits the Model after wrapping a large User Point so that the excessive memory allocation is properly freed.

C22E 513

Defining Element Customization for a Constant on a screen design is not possible. On a CONstant field, when you attempt to add element customization, the following error displays preventing you from adding customizations:

Y2I1039 - "Element 'CON' not currently on screen"

Though element customization is for the Web Option, the programs that require modification are in 2E. Therefore, a C22E problem is created.

C22E 514

Sometimes, the SQL CHGOBJ Functions incorrectly report an error when specifying the Null Update Suppression feature.

Such incorrect reporting of an error occurs when an SQL CHGOBJ function includes a CHGOBJ/CRTOBJ/DLTOBJ that was being called within the 'USER: Processing before Data update' user point and the database operation fails (which causes Indicator 91 to be set-on).

C22E 515

The SQL Table Generator truncates 'LABEL ON' field description to 20 characters.

C22E 516

When a field is required (Allow blank = ' ' or Allow zero = ' ') and a 'controlling condition' had been specified within the EDIT SCREEN FIELD ATTRIBUTES panel to convert an Input field to Output (or non-display), a "Value required" message is sent even though the Output (or non-display) field is conditioned not to allow any input.

C22E 517

The following COBOL generation errors occur at statement 996 within YCBLCSRK1I.

MCH1210 ('Receiver value too small to hold result.')

These errors occur when using Test Cursor logic.

Example:

```
.-CASE  
-PGM.*Cursor field <IS> DTL.C001  
'-ENDCASE
```

```
Context.Field . . . : PGM *Cursor field  
Condition . . . . . :  
OR  
Comparison . . . . . : IS  
Context.Field . . . : DTL C001
```

C22E 520

When generating a Function that includes Device User Source (DUS), the DDS Generator incorrectly issues the following offset error:

"E* Y2V0709 - Offset error occurs for updating string."

This DDS Generation error occurs when the DUS specifies an UPDATE merger command with the COLUMN parameter along with a lengthy BY parameter 'updating text' value.

Example:

```
) FIND TEXT=TEXT  
) UPDATE S='TEXT' C=45 BY='TEXT("1234567890123456789012345678")'
```

Note: Within the DUS, short parameter names are allowed.

Example:

```
SUBSTRING or S  
COLUMN or C
```


C22E 521

When a function with Device User Source (DUS), attached at the screen-/report-level or format-level is copied to a different file, the copied function is created with the DUS incorrectly attached at the device-level.

Copying Functions That Contain Attached Device User Source - Device-level device user source is always copied. When a different file has been specified, only the device-level device user source is copied.

Screen, report, and format level device user source is copied unless the corresponding entity in the target function is excluded due to a change of function type or due to a change of file. Entry-level device user source is copied unless the corresponding entry in the target function is excluded due to an access path change or a file change.

C22E 523

The RPG/RP4 functions that include the *RTVFLDINF (Retrieve Field Information) built-in function, has the corresponding @CN compile-time array entry generated with a four-digit index.

This generation is inconsistent with other built-in functions.

Example:

The RPG/RP4 functions that include the *MOVE built-in function, have the corresponding @CN compile-time array entry generated with a five-digit index.

In addition, at times, a @CN entry generated for the *RTVFLDINF built-in function can have a spurious character following the four-digit index.

Modifications have been made to generate a five-digit index for the *RTVFLDINF built-in function's corresponding @CN entry.

Before		After
Generator		Generator
Modifications		Modifications

** @CN		** @CN
00001 ABCDEFGHIJ	<--- *MOVE ---->	00001 ABCDEFGHIJ
0002& Customer-Name	<- *RTVFLDINF ->	00002 Customer-Name
00003 1234567890	<--- *MOVE ---->	00003 1234567890
0004 STS Long Text	<- *RTVFLDINF ->	00004 STS Long Text

C22E 524

Within a 2E Model, surrogate values are allocated from records within the YLSTSGTNXP file:

- The first record is used for high-order surrogate allocation.
- The second record is used for low-order surrogate allocation.
- The third record was previously used for a now unsupported feature.

The end-users using legacy Models with hundreds of concurrent users (*DSNR/*PGMR/*USER) are allocating thousands of high orders surrogates every day, causing them to approach the maximum value allowed prematurely.

Modifications are made to do Session surrogate allocation utilizing the third record within the YLSTSGTNXP file.

C22E 530

At times, when executing the YCHKMDL command with ACTION(*UPDATE), a decimal data error (MCH1202) occurs at statement 438 within the YCHKMDLL1 program.

C22E 532

The generation of RPG Functions with a parameter 'Passed' as RCD/KEY that exceeds 9999 characters in length, encounters "FIXEDOVERFLOW at statement nnnn in YDCLPARG1I. ONCODE 310." (PLI0600) errors.

Interactive ('G') generations cause the users to log off the Model when encounters this error.

C22E 535

The YCHKMDL (Check Model) command provides for the ACTION parameter to be *ANALYZE, *PREPASS, or *UPDATE.

Object Table User Spaces (*USRSPC) were incorrectly being deleted when *PREPASS mode had been specified. Modifications have been made to only delete the Model's *USRSPC(s) when *UPDATE mode has been specified.

Moreover, when a Model contained multiple Object Table User Spaces (*USRSPC), *only* up to two of the *USRSPCs were being deleted. Modifications have been made within the YCHKMDL command to execute the YDLTOBJTBL (Delete Object Table User Space) command so that any/all of the Model's *USRSPC(s) are deleted when *UPDATE mode has been specified.

C22E 537

The default tab sequencing moves from left-to-right then top-to-bottom. Within CA 2E, you can choose to override the tab sequencing movement to be more of a top-down design by specifying 'Tab seq' numbers within the device design.

Tab sequencing (Cursor Progression) is implemented within the generated DDS through the FLDCSRPRG keyword for non-subfile fields; while the SFLCSRPRG keyword is generated for subfile fields.

Modifications are made to the DDS Generators for the FLDCSRPRG Keyword. In some cases, adjustment to 'Tab seq' number(s) are required to maintain previously generated results.

We recommend you to specify two (or more) 'Tab Seq' numbers. Each 'Tab seq' number pair acts as a link -> (forward tab) and <- (backward tab).

C22E 538

Certain source members were generated incorrectly by not including the CA 2E release number within the header section of the source.

Modifications are made so that all types of source members are now being generated to include the CA 2E release number within their corresponding header.

Example:

Before -> H* Generated by CA 2E release 2E (1547)

After -> H* Generated by CA 2E release 8.6 (1547)

CA 2E Toolkit

We completed the following fixes, corrections, or updates for the CA 2E Toolkit:

C21E 26

The Edit Library List Entries (YEDTLIBLST) command encounters a CPD0074 ('Value 'xxxxxxxx' for LIBL exceeds ten characters.') error within the "Exit Edit Library List Entries" panel when a ten character library name is specified at or after Sequence 0460 (while one or more libraries are also sequenced after the ten character library name).

C21E 54

The YWRKF command on the RTV access path of a file fails with decimal data error when a key is larger than 40-bytes length in the first 120 bytes of the total key length.

C21E 55

The YRTVOBJLIB command did not return correct results under the following scenarios:

- When searching for particular source member in a source physical file, the correct library was not returned, when another library having the same source physical file was present above the correct library in the library list.
- When multiple invocations of the command were carried out in the same program, each invocation was not running independently. The result that was returned was dependent on the earlier invocation and thereby incorrect in some cases.

C21E 61

The DBCS data is not updated with YWRKF Update. The YVL0005 error message displays and the program run can only be run in the Hex mode.

C21E 65

Consider a scenario when you have to compile multiple functions having Z*(compilation override) and/or Y*(pre/post compilation) directives. When they are compiled individually, directives are processed in the correct order. However, when you compile them in a single job, such that at least one of the preceding components has Z* directives in them. Hence, during the compilation of later components, any pre-compilation Y* directives are treated as post-compilation Y* directives and are incorrectly processed after Z* directives, which leads to compilation failures.

This problem is experienced when using YEXCOVR/YCRTOBJ for submitting compilations.

C21E 67

When you attempt to compile a function having an OVRDBF precompilation directive (example, a function that is built on a QRY access path) using YEXCOVR in batch mode, such that OVRDBF is necessary for successful compilation of the function, the OVRDBF is not executed properly leading to compilation failure.

C21E 70

The YWRKF does not display data for a file, which has any of its key field with Timestamp data type.

Web Option

We completed the following fixes, corrections, or updates for the CA 2E Web Option:

C2WEB 241

When you attempt to generate the HTML of a function from within the EDIT FUNCTION DETAILS panel, the generation is not successful and the error message displays:

W2G1046(Function is locked panel)

C2WEB 242

Using the YW2EJOBX API we can identify that a running job is a Web Option related job. But the API did not identify the job correctly when Web Option associated with the job and the YW2EJOBX API did not belong to the same release.

C2WEB 244

When a LST condition has multiple VAL options which have varying number of leading spaces, the LST condition is not identified correctly at runtime. Instead, the specific VAL option that is being used, is displayed at runtime.

C2WEB 249

When a customization is applied to "DATE" fields on a screen, the HTML generation process fails to recognize the customization.

C2WEB 252

When an element customization is longer than 222 characters, only the first 222 characters are written into the HTML file and rest are truncated.

C2WEB 253

Consider a scenario wherein a function has a 27*132 screen and a long screen constant (length greater than 80 characters) is defined in it. When the HTML of this function is generated, it leads to the following errors:

- a. The function keys are generated with the incorrect text on the buttons.
- b. The long screen constant might not be visible in the generated HTML.

C2WEB 254

Web Option is potentially vulnerable to unauthenticated privilege escalation due to a predictable session token. With predicted token, you can possibly access the details of another active session.

The relevant vulnerability is announced with a CVE identifier, CVE-2014-1219.

Chapter 4: Known Issues

This section of the Release Notes contains known issues for r8.7.

CA 2E

Issue with the Select Record Function Compilation

The Select Record function does not get compiled when virtual fields are used for the generation method of *SQL or *DDL, and for the data access method of *TABLE.

Compilation of CBI Functions Fail

The DSPFIL, SELRCD, and EDTFIL CBI functions fail to compile when a Select/Omit criteria is specified.

Issue with the Copy Process for SQL Tables

The copying process for SQL Tables fails. When you setup YCPYLIB and YOLDLIB processing and regenerate/recompile the access paths (*SQL or *DDL), the data does not get copied over.

Trigger Loss When Moving to DDL/SQL

1. Triggers are *only* supported when the physical files on which trigger is implemented, are present in the generation library, denoted by model value (YGENLIB).
2. When we convert the database from DDS to DDL or SQL, the access path objects get recreated in SQL collection library, denoted by the model value YSQLLIB. However, because of a limitation in trigger processing algorithm, the trigger functionality can only be implemented on access paths present in generation library, denoted by the model value YGENLIB. Therefore, trigger implementation fails when you convert the database from DDS to DDL or SQL and the SQL collection library is different from the Generation Library.

The following lists the steps that you must perform for the trigger functionality to work after converting the database from DDS to DDL/SQL:

1. Ensure that the SQL collection library is same as the Generation library, (that is, both model values YSQLLIB and YGENLIB hold the same value) before regenerating your access paths as DDL or SQL. This ensures that the DDL/SQL type access paths objects are recreated in the same library where the original DDS-based access paths existed.
2. After converting the database to DDL or SQL, delete the trigger reference by using YWRKTRGREF command and choosing option 4=Delete against the access path that is being converted from DDS to DDL/SQL.
3. Rerun the YCVTTRGDTA command.

Web Option

Safari for Windows - F5 Key Behavior

Web Option does not suppress Safari default refresh behavior for F5 key.

During Web Option runtime, if you press the F5 key on the keyboard, a dialog opens with the following message:

“Are you sure you want to send a form again? To reopen this page Safari must resend a form. This might result in duplicate purchases, comments, or other actions.”

We recommend that you do not use the F5 key. However, if it is inadvertently pressed, select the Cancel option in the dialog box.

Internet Explorer, Chrome, Firefox - F5 Key Behavior

Web Option does not suppress the refresh behavior for Internet Explorer (IE), Firefox, and Chrome when your cursor is in the browser address bar and if you press F5 key.

When your cursor is in the browser address bar and if you press F5 key in any of the following browsers, a dialog opens with the following message:

Firefox:

"To display this page, Firefox must send information that will repeat any action (such as a search or order confirmation) that was performed earlier."

Chrome:

"The page that you are looking for used information that you entered. Returning to that page might cause any action that you took to be repeated. Do you want to continue?"

IE:

"To display the webpage again, the web browser needs to resend the information you've previously submitted. If you were making a purchase, you should Cancel to avoid a duplicate transaction. Otherwise, click Retry to display the webpage again."

We recommend that you do not use the F5 key. However, if it is inadvertently pressed, select the Cancel option in the dialog box.

JIT Displayed When Skeleton Exists

A limitation exists with Web Option where it can display a Just-In-Time (JIT) page, even if a skeleton was previously generated for the screen. This limitation only occurs when:

- The function is a window function.
- The function has a confirm prompt (that normally appears in its own small window).
- The function displays with the confirm prompt, but was not displayed immediately before and without the confirm prompt.

For example, if a window function WinFun (with a confirm prompt) displays, and then, as a result of action on the WinFun page, a different function SelfFun is displayed. In this case, when the user leaves SelfFun, WinFun is immediately redisplayed with the confirm prompt, and the WinFun page displays in JIT mode.

This limitation occurs because although Web Option is able to determine that a confirm prompt (in its own window) is being displayed, it is unable to retrieve required details of the underlying window, such as its original window offset and attributes, which are required to process field offsets.

This limitation does not effect full-screen functions. It does not effect window functions that initially display without the confirm prompt and then redisplay with the confirm prompt when the user presses Enter.

There are two workarounds to this limitation:

- Ensure that window functions that have the option to show the confirm prompts always display without the confirm prompt. Require a command key such as Enter to be pressed before the confirm prompt displays. This is essential in situations such as the previous example, where control might have gone to a different function and can then return to the window function.
- When window functions do not have the option to display the confirm prompt, consider changing the window function to be a full-screen function.

Note: If a window function displays in JIT mode, this is only while the confirm prompt is displayed. When the window function displays without the confirm prompt, the generated skeleton is used. If the window function displays in JIT mode, normal application functionality is retained. However, functions specific to the generated skeleton, such as drop-down lists, are not available.

HTML Bookshelf Search Results

When you perform a search in the HTML bookshelf, search results for PDF files return summaries with errant HTML code showing under the result. This is a known problem with the indexing software, but does not affect search results and links to the individual guides.