CA Plex r7.2.1 Cumulative Update

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Contents

Overview

This cumulative update (PTF) provides bug fixes and enhancements to the CA Plex r7.2.1 tool and runtimes. For a complete list of what is new in this PTF, please refer to the enhancement & ix list in this document. Note that in the remainder of this document the terms 'cumulative update' and 'PTF' are used interchangeably.

Note that existing applications do NOT need to be re-generated or re-compiled in order to be compatible with this update. However, certain fixes may require you to regenerate a subset of your functions in order to take advantage of a particular fix. Fixes that may require source code generation are indicated via the "Gen?" column in the fix list table.

Refresh Pack – As part of the continues delivery model, Refresh Pack delivers all new functionalities & does not contain any bug fixes. To distinguish between cumulative update (PTF) and Refresh Pack, Product's About screen reflects '**Refresh Pack**' at the end of Product's build version e.g. r7.2.1   (Build 24.004)   Refresh Pack.

Installation (via Update.exe)

The main cumulative update is provided in a single file called **Update.exe**. This update can be run on a machine containing an existing CA Plex r7.2.1 installation. All CA Plex r7.2.1 components installed on that machine will be updated to the latest PTF version.

If you need to install a runtime PTF on machines that do not have the CA Plex r7.2.1 tool installed (for example, a production server), please refer to the section Runtime Deployment.

Installing the Cumulative PTF

This cumulative update can be installed over any existing CA Plex r7.2.1 installation, including an installation that has already been patched with an earlier PTF version. Simply execute **Update.exe** on the machine you wish to update using Administrator privileges and follow the update wizard steps. Note that on machines using Windows Vista or later, you must use the **Run as Administrator** command in order to run Update.exe and successfully install the PTF.

Uninstalling the Cumulative PTF

Please note that individual components of this CA Plex r7.2.1 cumulative update **cannot** be removed individually.

Also note that you **cannot** install a prior update once you have installed a later version. If you wish to remove the cumulative update from your machine, please follow these steps:

1. Uninstall CA Plex r7.2.1 from **Add/Remove Programs** (Windows XP) or **Programs and Features** (Windows Vista/7). This will remove CA Plex r7.2.1 completely from your PC.
2. Re-install Plex r7.2.1 GA from your original install media.
3. You may now apply a prior version of the PTF using the Update.exe that came with that cumulative update.

Memo

1. The Update.exe installer will run only if CA Plex r7.2.1 GA is installed. If you run Update.exe on a machine where CA Plex r7.2.1 is not installed, you will see an error message similar to the following:

    1628: Failed to complete installation.

    OK

2. Each version of a PTF cumulatively includes all fixes from prior PTF updates, so there is no need to apply each PTF one by one; simply install the latest PTF in order to obtain all the fixes up to and including that PTF.
3. Note that there is no check to avoid running an older version of Update.exe in the event that a newer one is already installed.

    For example, imagine you have just installed PTF005. You then run the Update.exe for PTF003. Although the install appears to complete correctly, the final list of files installed on your PC will NOT be the same as for a clean install of PTF003 – only a subset of files will be installed to the expected PTF003 version - See item 4 for details.
4. The Update.exe installs files using two distinct methods, depending on the type of file being updated:
    a. Files with embedded version numbers. This includes files such as *.dll or*. exe files. These files only updated if the installing version is <u>newer</u> than the version on the file system.
    b. Files without embedded version numbers, such as *.txt, *. Lib or *.h files are always updated, irrespective of whether the version from the file system is newer.

    Using the example from item 3 above, you would observe that the executable and other binaries associated with PTF005 would remain on the machine even after PTF003 had been installed. Only the library and other text files associated with the install would be changed to PTF003.

Runtime Deployment

Whilst the specific runtimes installed during a CA Plex tool installation can be updated via Update.exe, there might be times where you wish to apply a cumulative update onto a machine that does not have CA Plex installed on it. The most common example of this is when you need to update the CA Plex runtime binaries associated with an application that you have developed in CA Plex and deployed into a production environment. The CA Plex Cumulative Update also includes a zip file for each runtime that CA Plex supports, each of which contains only the updated runtime files associated with that platform.

The table of fixes indicates when a fix includes changes to one of the CA Plex runtime systems (WinC, WinNTC, Java, .NET or IBM i). In these cases, the updated runtime files must be deployed on users systems in order to implement the fixes concerned, along with any re-generated and built functions (note that not all fixes will require regeneration).

Windows C++ Client Runtime (WinC: CAPlexr721PTF_WINC.zip)

The runtime DLLs and related files from the Plex **\Bin** folder need to be installed to the target system. This Plex 7.2.1 runtime update is **not** compatible with 6.0, 6.1, 7.0, 7.1 and 7.2 generated C++ DLLs.

Windows C++ Server Runtime (WinNTC: CAPlexr721PTF_WINNTC.zip)

The runtime DLLs and related files from the Plex **AppServer\Bin** folder need to be installed to the target system. This Plex 7.2.1 runtime update is **not** compatible with 6.0, 6.1, 7.0, 7.1 and 7.2 generated C++ DLLs. The CA Plex NT Dispatch Service must be restarted on the server during the update using the following procedure:

1. Stop the **CA Plex Dispatch Service 721** if it is running.
2. Updated the runtime files on the server.
3. Uninstall the Dispatch Service (ob721dp.exe) by entering the following at a command line prompt:

```
Ob721dp /u
```

4. Then re-install the Dispatch Service by entering the following at a command line prompt:

```
Ob721dp /i
```

Java Runtime (CAPlexr721PTF_JAVA.zip)

Unless otherwise noted only the updated Obrun.jar file needs to be deployed to the target systems. For server applications, the Java dispatcher or EJB Proxy must be restarted. Java runtime updates are compatible with Plex 5.0 and later. For additional information on deploying to earlier releases, please refer to the help topic "Java Runtime Backwards Compatibility" in the Plex online help.

.NET Runtime (CAPlexr721PTF_DOTNET.zip)

The updated runtime files must be deployed to the target system. The .NET runtime must be stopped and restarted. See the Plex 7.2.1 online help topic "Deploying a .NET Server" for more information.

IBM i Server Runtime (CAPlexr721PTF_IBMI.zip)

The IBM i server components are supplied in a save files (*SAVF) that needs to be restored to your IBM i server. The name of this save file is `P721024nnn.SAVF`, where 'nnn' denotes the PTF build number (e.g. `P721024002.SAVF` relates to PTF721.024.002). To apply the fixes contained in a particular PTF, please follow the steps below:

1. Download the file `CAPlexr721PTF_IBMI.zip` file to a directory on your PC.
2. Unzip the file `CAPlexr721PTF_IBMI.zip` to extract the `P721024nnn.SAVF` file contained within it.
3. FTP the `P721024nnn.SAVF` file to library QGPL on your IBM i server (see [Appendix 1: Using FTP to transfer a .SAVF file to your IBM i server](#), for details).
4. Use the RSTLIB command to restore the library `P710026nnn` to your machine, as follows:

```
RSTLIB SAVLIB(P721024nnn) DEV(*SAVF) SAVF(QGPL/P721024nnn)
```

5. Add library `P721024nnn` to any library lists (including job description initial library lists) which contain `PLEX721`, so that `P721024nnn` is higher in the library list than `PLEX721`.
6. You can review the member QTXTSRC/PTFREADME for details on each individual fix contained in the PTF library.

For additional information on CA Plex components for the IBM I platform, and additional details on how to restore the save file to your system, please refer to the CA Plex r7.2.1 Getting Started Guide, Chapter IBM i Components under the section "Restore the Product Libraries from Save Files (*SAVF)".

Windows C++ Release with PDB Runtimes (CAPlexr721PTF_PDB_WINC.zip/CAPlexr721PTF_PDB_WINNTC.zip)

In addition to the standard WinC and WinNTC runtime PTF zips, there are two companion versions that allow you to obtain crash dump information from applications that are causing runtime exceptions to occur during execution. These versions can be installed in exactly the same way as their standard WinC and WinNTC counterparts, but contain additional Program Database (PDB) files for each of the binaries shipped as part of the Plex runtime. For further details on the Release with PDB versions of the C++ runtimes and information on obtaining crash dump information about your applications, please refer to the CA Support document 'Using Application Verifier with CA Plex Applications'.

Note: These WinC/WinNTC PDB runtimes are not being bundled as part of PTF build deliverable. These PDB runtimes can be requested from product support, if there is a need of collecting Plex built application's crash dump or other debugging information.

Enhancement & Fix List

In many cases additional documentation may be available by clicking the links below to the corresponding problem on CA Support Online (requires CA Support login).

Problem / Issue Number	Description	Tool	WinC	Win NTC	Java	.NET	IBM i	Gen?
(024.006)	**Certifications, Bug Fixes**							
Certifications								
Windows Server 2022 For more details, refer to the Plex compatibility matrix.								
OpenJDK v8 support. For more details, refer to the Plex online documentation space.								
Addresses a bunch of vulnerability fixes identified by proactive scanning of the product.								
Bug Fixes								
12966	Fix to avoid overwriting edit control data with paste operation in Java DB encrypt password utility.				✓			
12967	Fix to handle Java Database password decryption.				✓			
13179	Fix to handle saved model configuration across multiple level version environment.	✓						
13477	Fix to handle multiple Web Service method calls from C# Server function, in case of calling C# server function from same WinC client function.					✓		
13674	Fix to handle deselect row event for last row in selection with read-only grid.		✓					
13743	Fix to handle CheckBox modified event with spacebar control.				✓			
13986	Fix to handle to navigate back subroutine caller in case of partially expanded AD blocks.	✓						
14695	Fix to handle code generation for unused fields in few circumstances.	✓						✓
15543	Fix to avoid losing the mapping for source code and message objects in case mapping parameter deleted in higher-level version environment.	✓						
15640	Fix to handle quite long scoped function's generation and build.	✓	✓	✓				
16319	Fix to handle 3 state CheckBox to return the literal value for third state.				✓			

Problem / Issue Number	Description	Tool	WinC	Win NTC	Java	.NET	IBM i	Gen?
16320	Fix to handle C# ComboBox append operation after ComboBox clear.					✓		
16388	Fix to handle C++ precompiled header rebuild without any change in project.	✓	✓	✓				✓
17338	Fix to provide an option to control unused subroutine in Action Diagram (AD). This is being controlled by Plex.INI option. [Options] Report AD Unused Subroutine=1 Refer Problem record for more details.	✓						
18797	Fix to handle WinC IfFocus in case of defined outside of meta for loop. This is being controlled by application INI option. [Settings] If Focus Without ForEach Loop=1 Refer Problem record for more details.		✓					
18799	Fix to handle to re-calculate field size on panel according to font size change.	✓						
18800	Fix to warn user about unsaved AD changes while generating the respective object. The unsaved AD changes will not be generated. Refer Problem record for more details.	✓						
18835	Fix to improve the generation time with unused Action Diagram fields.	✓						
2515	Fix to avoid losing local properties in inherited AD in multi-level version environment.	✓						
2533	Fix to handle duplicate field's edit and level control on panel.	✓						

(024.005)	Features, Certifications, Deprecation, Bug Fixes								
Feature/Enhancement									
Navigate to previous cursor position This functionality extends the tool's ability to track the Action Diagram (AD) subroutine's caller position. Once user clicks on subroutine call statement in AD, which intern jumps to subroutine definition – now user can go back to subroutine call statement using 'CTRL+B'.		✓							
Type through list in Object Browser This functionality improves the object browser searching capability by directly typing keys in object browser's list items. Instead of locating object with single character, now quickly typed word can be searched e.g. **E** v/s **EMP**.		✓							
Save Local Model Configurations This functionality extends the tool's ability to save the current local model configuration and can load the saved configuration any time later.		✓							
Local Model House Keeping As part of this feature, - Unused Subroutine, Fields within Action Diagram will be reported to user. - User can opt to not generate code for unused fields in Action Diagram.		✓							
Certification									
Oracle 19c									
Windows Server 2019									
SQL Server 2019									
Deprecation									
Product License check removal		✓	✓	✓	✓	✓	✓		
Bug Fixes									
2495	Fix to handle manual Grid sorting to refresh the current grid selection.		✓						
2533	Fix to handle duplicate field's edit and level control on panel.	✓							

ID	Description						
2556	Fix to handle C++ build error 'msb3491'.		✓	✓			
2557	Fix to avoid Plex IDE GPF while saving Action Diagram changes.	✓					
2558	Fix to handle marking multiple comments & uncomments blocks in Action Diagram.	✓					
2559	Fix to handle oracle database error ORA-00920.				✓		
2561	Fix to handle event sync in focus gain and focus lost events.				✓		
2563	Fix to handle C++ generator to avoid compilation error C4010. This occurs if there is a comment line ending with single '\' within source code object, which makes it continuation of comment line with generated C++ code.	✓	✓		✓		✓
2564	Fix to handle Meta Operation '++If Input Capable' for invisible checkbox.				✓		
2565	Fix to handle disabled button with image appearance correctly within inactive state.		✓				
2566	Fix to handle, - Favorite object filter pattern while moving across multiple object types in Object Browser. - Toggle favorite object button to show only favorite list or all list objects.	✓					
2567	Fix to generate correct NULL values for "STE may be EQ VAL" triple.	✓					✓
2568	Fix to handle edit masks for Fixed decimal number to avoid keeping negative sign at the end of the number.		✓				
2569	Fix to remove 'calls FNC' triple only for selected function in model editor.	✓					
2570	Fix to avoid nag license screen for VSFLEXGRID v8.0 ActiveX control.		✓				
2571	Fix to handle field prompt processing correctly.					✓	
2572	Fix to avoid garbled characters while deleting any character in edit control. This is specific to Japanese locale.		✓				
2573	Fix to handle Grid scrolling until the end of the grid.					✓	
2574	Fix to handle Plex IDE control sizes when using DPI larger than 100%.	✓					
2575	Fix to handle avoid marking inherited action diagram block (Function call & API call) changed without making any AD changes.	✓					
2576	Fix to avoid Plex IDE GPF while opening Inheritance Path.	✓					
2577	Fix to avoid Java application while loading panel resources in few circumstances.				✓		
2578	Fix to delete 'calls FNC' triple in case of parent deleted in Action Diagram.	✓					

ID	Description						
2579	Fix to handle Java error '*java.sql.SQLException: Missing IN or OUT parameter at index:: #*' while inserting database record with Blob field.				✓		
2580	Fix to handle MFC Spin Control in case of setting Max/Min value. Refer problem record for more details.		✓				
2581	Fix to handle WinWidget control processing for decimal point input. This occurs in few circumstances.		✓				
2582	Fix to update the Object Browser search history across multiple object types, in case Object Browser has customized search filter string.	✓					
2583	Fix to avoid logical event trigger on WPF grid's scrollbar double click.					✓	
2584	Fix to trigger update event on field's content deletion. This is specific to SingleLineEdit control with Winwidgets.		✓				
2585	Fix to handle DPI issue with built application launched with Ob721RC.EXE.	✓	✓				
2586	Fix to load Image in Grid with long path (more than 128 characters).		✓				
2587	Fix to handle 'If Focus' with Java structure field.				✓		
2589	Fix to handle WPF edit control to allow decimal point. Refer problem record for more details.					✓	
2590	Fix to handle single quote while preparing SQL statement in Java variant.				✓		
2592	Fix to handle event processing while launching multiple dialog windows via Top Windows.		✓				
2593	Fix to avoid Plex IDE GPF while saving Action Diagram.	✓					
2594	Fix to handle 'If Focus' within WinC Grid.		✓				
2595	Fix to handle field prompt processing in few circumstances.		✓				
2596	Enhancement to encrypt the database password in Java properties files.	✓			✓		
2597	Fix to avoid Plex Java generator GPF wherein EXTERNAL_NAME operator used without view variable. Plex reports warning in such scenarios.	✓					
2598	Fix avoid Java dispatcher hang by spurious calls from unknown client like Telnet etc.				✓		
2599	Fix to avoid launching multiple prompt functions for single prompt request in WPF.					✓	
2600	Fix to handle duplicate row with misaligned data in WPF grid.					✓	
2601	Fix to show status bar information correctly in Java variant.				✓		
2602	Fix to handle Set State Grid and Append Grid statement to work correctly.					✓	

ID	Description	1	2	3	4	5	6	7
2603	Fix to handle Selected Grid row with Refresh Grid processing.					✓		
2604	Fix to handle WCF exception 'System.Data.DuplicateNameException'.					✓		
2605	Enhancement to enable Java SSL client authentication. Refer problem record for more details.				✓			
2606	Fix to handle long path values in application INI entry 'DLL directory path' & 'PNL directory path'.		✓					
2607	License removed for all licensed components of CA Plex.	✓	✓	✓	✓	✓	✓	
2609	Fix to handle Tabbing focus for CheckBox in few circumstances.		✓					
2610	Fix to handle function call mapping in inherited functions in few circumstances.	✓						
(024.004)	**Refresh Pack**							
	This functionality resolves the known limitation of removing the '*calls FNC*' triple manually after deleting the respective function call from Action Diagram. Now, automatically '*calls FNC*' triple gets removed for deleted call(s) as and when respective function call gets deleted in Action Diagram.	✓						
	This functionality extends the tool's ability to select entire text in source code editor with 'CTRL+A' keycode.	✓						
	This functionality resolves the known limitation of commenting & uncommenting only single Action Diagram block in single operation. Now, tool extends the functionality to comment & uncomment multiple selected blocks in Action Diagram in single operation.	✓						
	Provision to set customized search filter pattern for Object Browser search pattern. So far this is set to '*' that takes long time to list out all objects of selected object type while opening large models. Set following Plex.INI option for customized search pattern. The search pattern string supports up to 64 characters length. [Object Browser] Object Browser Default Search Pattern=*	✓						

ID	Description	C1	C2	C3	C4	C5	C6	C7
	Provision to mark required object(s) as your favorite object(s). This creates a list object type first time with the name '<*ModelUserName*>_**favList**' having no expiry date. For quick access, new icon ⭐ has been added in Object Browser window which takes user directly to favorite list. The 'Add to Favorites…' option is available from, - Object's context menu - 'Object' tool menu.	✓						
(024.003)								
2528	Fix to handle Java generator to avoid generating unreachable code which leads into compilation error - "*unreachable statement*".	✓			✓			✓
2529	Fix to save Action Diagram (AD) statement permanently while deleting AD statement like Call/Comment within multi-level & version environment.	✓						
2531	Fix to handle WinC application error '*The Parameter is incorrect*' followed by application crash in case of using IBM-I profile name with length of 10.		✓					
2533	Fix to handle field's duplicate label and edit control in inherited function.	✓						
2534	Fix to avoid Plex IDE crash while accessing ActiveX properties.	✓						
2535	Fix to avoid memory build up while casting between fixed decimal & double.		✓	✓				
2536	Fix to avoid IBM-I dispatcher error – 'spawn() failed.: Storage allocation request failed.'.						✓	
2537	Fix to clear ComboBox with '++set empty' meta code, if ComboBox selected item gets re-selected.				✓			
2538	Fix to handle data exchange properly within WinC runtime and ActiveX control. This is being controlled by application INI. For more details, please refer problem record 2538.		✓					
2539	Fix to invoke correct WinC selector function.		✓					
2540	Fix to handle Java Grid's vertical/horizontal scrolling properly.				✓			
2541	Fix to handle tabbing within ActiveX control hosted on panel.		✓					
2542	Fix to store correct value in database with SQL field as *Numeric* & *C Format Fixed_Decimal*.		✓	✓				
2543	Fix to save Action Diagram parameter overriding in higher level/version.	✓						
2544	Fix to avoid WinC application crash with Home, Delete or arrow keys.		✓					

ID	Description								
2545	Fix to handle Panel layout generation correctly irrespective of panel loading at design time before generation. This occurs in few circumstances.	✓	✓						✓
2546	Fix to refresh Java grid's header with respect to horizontal scroll.				✓				
2547	Fix to show full text for static control on Java panel. In case of static text starting with letter 'W' having font 'MS Sans Serif' & size '8' – left side of character 'W' gets partially visible.				✓				
2548	Fix to launch WinC function from Plex IDE without creating EXE.	✓							
2549	Fix to include Server function(s) within Server package while running packager tool.	✓							
2550	Fix to keep backward compatibility for WinC application DPI awareness compared to earlier release of Plex. Plex r7.2 WinC application works fine with 150% DPI but Plex r7.2.1 built application fails.	✓	✓						✓
2551	Fix to handle RPG generator to generate compiler directives correctly defined as part of custom source code object. For more details, please refer problem record 2551.	✓					✓		✓
2552	Fix to handle Java runtime exceptions correctly to avoid resource leaks. For more details, please refer problem record 2552.				✓				
(024.002)									
2476	Fix to handle Grid save placement changes, when there is a change in grid design e.g. new column added to grid.				✓				
2479	Fix to handle date input with MFC Native control. For more details, please refer problem record 2479.		✓						
2490	Fix to handle Tabbing while moving focus to child panel.		✓						
2491	Fix to handle programmatic sort with WinC editable grid.		✓						
2492	Plex template Build file (PLEX.BLD) updated with an entry for EJB interface type selection.	✓			✓				
2493	Fix to avoid throwing exception in EJB within remove method.	✓			✓				✓
2494	Fix to improve performance with Code library wizard.	✓				✓			
2495	Fix to raise record switch event with respect to manual grid sorting.		✓						
2496	Fix to save WinC Build option - "Header Directories" under "Pre-Build C++ Libraries" section in model build file.	✓							
2497	Enhance DDS generator to avoid generating field with Exist property set to No.	✓					✓		✓

ID	Description								
2499	Enhancement to define higher precedence of triple FNC located on NME over PKG located on NME. For more details, please refer problem record **2499**.	✓						✓	✓
2500	Fix to handle WinC application GPF in Win Widget control with cursor keys.		✓						
2501	Fix to show correct field edit mask color for both single instance and grid region in Java.				✓				
2502	Fix to avoid compiler error "C2181: illegal else without matching if " in case of 'Generate for Action Diagram debugging' enabled.	✓	✓						✓
2503	Fix to handle tabbing within child panel.		✓						
2504	Enhance Java exception reporting for ObApplication.handleException method.				✓				
2505	Fix to handle meta variable replacement correctly.	✓							
2506	Fix to report warning message when using numeric field with decimal places with Use statement.	✓							
2507	Fix to handle RPG generator crash while generating function with large call graph.	✓						✓	
2508	Fix to address the C++ COM connector build failure.	✓	✓	✓					
2509	Fix to handle tabbing issue with editable Grid combo box.		✓						
2510	Fix to handle Tabbing issue with FrameChild functions with property "Tab From Parent" is set to "Yes".		✓						
2511	Fix to handle Plex Java generator GPF with a function which has moved to a new package structure.	✓			✓				✓
2512	Fix to handle CheckedTimeISO field to insert user defined date in to database e.g. source code object. For more details, please refer problem record **2512**.					✓			
2513	Fix to handle Fixed decimal parameter casting within WinNTC ExecSQL statement. For more details, please refer problem record **2513**.		✓						
2514	Fix to improve parameter mapping s for function Call, API CALL, Message etc. in multiple level/version environment.	✓							
2515	Fix to not loose field local property in multiple level/version environment while saving the changes. For more details, please refer problem record **2515**.	✓							
2516	Fix to resolve inherited attribute property correctly.	✓							

ID	Description							
2517	Fix to handle scrolling properly to show located row in grid.			✓				
2518	Fix to validate the input before converting large scientific number into string.			✓				
2519	Fix to process grid manual sorting to update grid's internal states properly.				✓			
2520	Fix to avoid application freezing in few circumstances while closing Dialog window with close button.				✓			
2521	Fix to show objects from main package as well when there is sub package.	✓						
2522	Fix to handle Long Double assignment to Fixed decimal in few circumstances.		✓	✓				
2523	Fix to handle Java Grid page down/up events to scroll grid rows properly.				✓			
2524	Fix to improve performance while trimming the space within string field.				✓			
2525	Fix to improve memory footprint within CodeJock ActiveX control usage.		✓					
2526	Fix to improve CodeJock active control handling within WinC runtime.		✓					
(024.001)								
2448	Fix to highlight the MFC checkbox control on set focus.		✓					
2463	Fix to handle date field input validation.				✓			
2464	Fix to handle Plex GPF in model editor with space bar key.	✓						
2465	Fix to avoid Plex C++ generator crash in few circumstances with conditional block.	✓						
2466	Fix to avoid firing select event in case of Grid Reload.		✓					
2467	Fix to handle casting (numeric-char) correctly with different locale.						✓	
2468	Fix to suppress the import informational message XIE59844.	✓						
2469	Fix to terminate EJB properly after execution completes.				✓			
2470	Fix to C# runtime to avoid showing window in minimize state.						✓	
2471	Fix to provide *AllowDefaultWindowLoadOrder* C# configuration (<app>.exe.config) property to change the load order of windows to avoid application loading exceptions.						✓	
2472	Fix to save Panel element (fields) positions correctly in few circumstances.	✓						
2473	Fix to provide Plex.INI option to control EJB Local v/s Remote interface generation. For more details, please refer problem record **2473**.	✓			✓			✓

ID	Description							
[2475](#)	Fix to avoid NullPointerExcetion exception while logging errors.				✓			
[2477](#)	Fix to avoid WCF Service Generator import problem. For more details, please refer problem record **2477**.	✓				✓		✓
[2478](#)	Fix to avoid Plex C++ generator GPF in few circumstances.	✓						✓
[2480](#)	Fix to avoid generating junk characters for C# function of type *OBASE/Check status*.	✓						✓
[2481](#)	Fix to generate Post build events correctly for C++ functions.	✓	✓	✓				✓
[2482](#)	Fix to enable Trigraph support with C++ functions. By default, Trigraph support is no enabled with Visual Studio 2013.	✓	✓	✓				✓
[2483](#)	Fix to assign date value via C# source code object.						✓	
[2484](#)	Fix to avoid Panel freeze after returning immediately after selecting date from date picker.						✓	
[2485](#)	Fix to avoid Plex IDE GPF while expanding C# package object.	✓						
[2486](#)	Fix to improve group model extract/update performance.	✓						
[2487](#)	Fix to improve performance of Action Diagram copy/paste, drag/drop operations.	✓						
[2488](#)	Fix to update 'FIELDS/WizardCaption' message object in Fields Pattern library to have similar message text across all language variants.	✓						
[2489](#)	Fix to avoid Plex GPF in case of dragging Java function (having implementation name more than 30 characters) into Gen & Build window.	✓						

Appendix 1: Using FTP to transfer a .SAVF file to your IBM i server

Open a command prompt and enter each of the following commands in turn, followed by Enter:

```
FTP <ibm-i>
<user-profile>
<password>
BIN
LCD C:\Temp
CD QGPL
QUOTE SITE NAMEFMT 1
PUT P721024nnn.SAVF P721024nnn.SAVF
QUIT
```

Where <ibm-i>, <user-profile> and <password> are replaced by the name or IP address of your IBM i, your IBM i user profile and your IBM i password, respectively; and 'nnn' denotes the PTF build number.