New features and customer reported issues fixed in RAD Studio 10.4

Abstract: List of new features and customer reported issues fixed in RAD Studio 10.4 Sydney.

RAD Studio™ is the ultimate RAD environment for quickly building high-performance native cross-platform applications in Delphi and modern C++ using integrated toolchains loved by developers.

RAD Studio 10.4 Sydney consists of new features, enhancements, and quality improvements.

Key RAD Studio 10.4 Features

- Major Delphi Code Insight improvements
- New Delphi language features
- Unified Memory Management across all supported platforms for Delphi and C++
- New VCL Components, Per-Control Styling, High DPI Styles and more
- Enhanced Delphi multi-device platform support
- Many database enhancements
- Unified installer for online & offline installations
- IDE usability and performance enhancements
- New debugger for Windows 64-bit for C++
- C++ toolchain performance and quality improvements
- Expanded C++ libraries support
- Enhanced CMake for C++ features and compatibility with other toolchains
- Hundreds of quality and performance improvements

For a detailed list of new features, please visit the What's New page.

Contents

Additional Quality Enhancements in RAD Studio 10.4

There are many significant quality enhancements in various areas of the product. Key additional (smaller)

new features include those listed in the following sections.

App Tethering

- App Tethering quality has been further improved following the work already done in RAD Studio 10.3.3.
- There is now an option to set tethering timeouts.
- Tethering resources provide a mechanism to know when communication is done.

Threading and Parallel Programming Library

- There is a new AMinTimeToWait parameter in ForceQueue to delay the execution of code without creating a thread.

Delphi RTL

- New TCustomIniFile methods WriteInt64 and ReadInt64.
- New TGUID method IsEmpty.
- JSON reading optimization: TJSONReader is now 50% faster.
- The Items property of TJSONArray is now a default array property, allowing you to write `myJArray[2]` rather than `myJArray.Items[2]`.
- Optimized assigning a sorted StringList to another StringList.
- We have removed some dependencies blocking certain console apps to run on WindowsServerCore.
- The `CopyFrom` function of TStream used to have a fixed constant buffer for copying data (set to 60K). This can be very inefficient for copying large streams. The new default is 1MB, but the method has an additional parameter you can use to provide a specific buffer size depending on the copy operation you are doing (source and target streams). The new signature of the method is:

```
// class TStream
  function CopyFrom(const Source: TStream; Count: Int64 = 0;
  BufferSize: Integer = $100000): Int64;
```

- RTTI performance improvements include:

  - TRttiMethod.Invoke is ~ 4 times faster
  - TVirtualInterface invocation is ~ 1.7 times faster
  - TRttiType.GetXxxx(AName) methods are ~ 10 times faster
  - For TValue several operations are faster
- The QuickSort operation in System.Classes is now more efficient (that is, faster)
- The TStringHelper.GetHashCode method has been updated not to uppercase the string before hashing it, so its result matches other internal operations like the TStringComparer class.

FreeAndNil

In 10.4 we updated the signature of the FreeAndNil procedure, to avoid its use with interface references

and other unsupported data types. It is now declared to require a reference to a TObject:

```
procedure FreeAndNil(const [ref] Obj: TObject); inline;
```

This means that incorrect usage of FreeAndNil will now cause a compiler error. In the past, incorrect usage would not be caught, leading to difficult bugs. Note that although the parameter is declared as const, the by-reference variable is indeed modified.

A new, but 'not as bad', class of incorrect calling is possible with this declaration of FreeAndNil: the method can be called passing in properties or a method result, as well as cast expressions, a type's implicit conversion to TObject, etc. The nil-ed value will then be the temporary variable in the expression.

FreeAndNil in C++

You will get a compiler error if the pointer type is not a descendant of TObject. That is, FreeAndNil is now typesafe. The error will take the form of a static_assert in a system header - although the error is raised in a system header, the assertion indicates an error in the code using FreeAndNil.

The new implementation will resolve incorrect usage of FreeAndNil in C++ as well. In the past, a direct translation of the Delphi idiom to pass the pointer to FreeAndNil could be a common mistake:

```
TObject* o = new TObject();
FreeAndNil(o); // Warning! Used to require FreeAndNil(&o)
```

In the past this would crash or cause unexpected behaviour, because FreeAndNil required a pointer to pointer (and its parameter was specified only as void*) but was unable to warn if the TObject* was passed in, rather than a pointer to that pointer.

Both classic and Clang compilers support two overloads of FreeAndNil, taking pointer-to-pointer and reference-to-pointer. Now, for that same previously incorrect line of code, that pointer will now be captured by reference and the correct pointer freed.

FireDAC SQLite driver offers both static and dynamic linkage

For SQLite, FireDAC adds the ability to choose static vs dynamic linkage of SQLite engine. To use the static linkage of SQLite engine it is required to add the unit "FireDAC.Phys.SQLiteWrapper.Stat" to the *uses* clause of one of the units of your project. Otherwise dynamical linkage will be chosen. There is a new property TFDPhysSQLiteDriverLink.EngineLinkage. When the value is *slDefault* or *slStatic*, then the "FireDAC.Phys.SQLiteWrapper.Stat" unit will be added at design-time to the unit hosting the component. If application defines the connection at run-time, then the "FireDAC.Phys.SQLiteWrapper.Stat" unit must be added manually.

Other Data Improvements

- FireDAC improvements in the PostgreSQL driver with better support for complex types in TDataSetField and for `hstore` type.
- FireDAC adds support for Firebird3 isc_info_sql_explain_plan in TIBStatement.
- RAD Server TEMSDataSetResource now supports "total" value on get response for Sencha Ext JS VirtualStore. To activate the Sencha Ext JS VirtualStore format, include roVirtualStore into TEMSDataSetResource.Options.
- For the DBImage component, there is a new DoLoadPicture virtual method and an OnLoadPicture event handler.

Several TFDEventAlerter component improvements and fixes.

Internet Related Improvements

- The RestRequest has a way of cancelling an Asynchronous request.
- (SOAP) Additional SendTimeout and UseDefaultCredentials properties and OnPostingData and OnHttpError events in THTTPReqResp class.
- Ability to set client certificate for all SOAP HTTP clients (TStreamLoader)
- TNetHTTPClient supports TLS 1.3.
- The TAmazonRegion type (in Data.Cloud.AmazonAPI) has been changed from an enumerated value to a string value, so that additional regions can be added directly by developers without having to wait for an update to the component itself.
- The spelling of method *THTTPClient.CreateFormFromStrings* has been corrected from *THTTPClient.CreateFormFromStings*. This would make any existing code using the method fail with an error. We deem this is not commonly used, so it should not break a lot of existing code.

List of publicly reported bugs fixed in 10.4

RAD Studio 10.4 Sydney release includes over 1000 quality and performance enhancements, including fixes for over 700 publicly reported bugs.

Summary	Component/s	ExternalID
Problems with Indy IdSSLOpenSSL library management in combination with dynamic dll's	3rd Party	RSP-18132 (https://quality.embarcadero.com/browse/RSP-18132)
Linux TTCPServer with OpenSSL, "Active := False" not working	3rd Party	RSP-22191 (https://quality.embarcadero.com/browse/RSP-22191)
IN6ADDR_TEREDOPREFIX_INIT - wrong macro (IdWinsock2.pas)	3rd Party	RSP-23223 (https://quality.embarcadero.com/browse/RSP-23223)
[CMake] Wrong compiler detected when multiple IDEs installed	Command Line Tools\CMake	RSP-20451 (https://quality.embarcadero.com/browse/RSP-20451)
[CMake] CMake with Ninja generator: incorrect tlib and ilink rsp file format	Command Line Tools\CMake	RSP-20453 (https://quality.embarcadero.com/browse/RSP-20453)
[CMake] Building with classic bcc32 compiler no longer possible	Command Line Tools\CMake	RSP-20454 (https://quality.embarcadero.com/browse/RSP-20454)
[CMake] CMake+Ninja doesn't support dependency information	Command Line Tools\CMake	RSP-20606 (https://quality.embarcadero.com/browse/RSP-20606)
[CMake] CMake+Ninja Incremental link of obj to lib doesn't work	Command Line Tools\CMake	RSP-20607 (https://quality.embarcadero.com/browse/RSP-20607)
TJsonTextWriter String error is "true" C++	Compiler, Compiler\C++	RSP-16067 (https://quality.embarcadero.com/browse/RSP-16067)

10.2 Tokyo clang dfm xxx is not a valid integer value	Compiler, Compiler\C++	RSP-18428 (https://quality.embarcadero.com/browse/RSP-18428)
Incorrect linking for lambda function created during static construction	Compiler, Compiler\C++	RSP-18692 (https://quality.embarcadero.com/browse/RSP-18692)
cmake do not generate import library on x64 platform	Compiler, Compiler\C++	RSP-21703 (https://quality.embarcadero.com/browse/RSP-21703)
Template with property can cause compiler error MSB6006. (delete <property>)	Compiler, Compiler\C++	RSP-23033 (https://quality.embarcadero.com/browse/RSP-23033)
Unexpected compiler error [calling convention attribute on destructor]	Compiler, Compiler\C++	RSP-23671 (https://quality.embarcadero.com/browse/RSP-23671)
std_iterator.h bug	Compiler, Compiler\C++	RSP-25537 (https://quality.embarcadero.com/browse/RSP-25537)
ICE: Internal compiler error: 0 @ 00000000 because of pointer initialization in header	Compiler, Compiler\C++	RSP-26068 (https://quality.embarcadero.com/browse/RSP-26068)
When stopping a program using a DLL, a 32-bit program reports a resource leak and a 64-bit program throws an access violation exception	Compiler, Compiler\C++	RSP-26155 (https://quality.embarcadero.com/browse/RSP-26155)
"clang" exited with code -1073741819. (delete <property>)	Compiler, Compiler\C++	RSP-26261 (https://quality.embarcadero.com/browse/RSP-26261)
Problem with struct inside struct in C compiler	Compiler, Compiler\C++	

		RSP-26442 (https://quality.embarcadero.com/browse/RSP-26442)
UTF8 headaches in RADStudio C++ Builder	Compiler, Compiler\C++	RSP-26502 (https://quality.embarcadero.com/browse/RSP-26502)
std::put_time ISO8601 formatted date output support via %F is currently broken.	Compiler, Compiler\C++	RSP-26578 (https://quality.embarcadero.com/browse/RSP-26578)
Missing System::UInt64 and System::Int64 typedefs for C++	Compiler, Compiler\C++	RSP-26595 (https://quality.embarcadero.com/browse/RSP-26595)
The problem with thread_local (or __thread) variable in dll compiled for Win64 in RAD Studio 10.3.3	Compiler, Compiler\C++	RSP-27126 (https://quality.embarcadero.com/browse/RSP-27126)
ICE: Internal compiler error: 0 @ 00000000	Compiler, Compiler\C++	RSP-27176 (https://quality.embarcadero.com/browse/RSP-27176)
64-bit builds crash with threads	Compiler, Compiler\C++	RSP-27180 (https://quality.embarcadero.com/browse/RSP-27180)
10.3.3 don't render correctly on High Sierra	Compiler, Compiler\C++	RSP-27259 (https://quality.embarcadero.com/browse/RSP-27259)
[bcc64 Error] ICE: Internal compiler error: 0 @ 00000000	Compiler, Compiler\C++	RSP-27490 (https://quality.embarcadero.com/browse/RSP-27490)
"typedef union" causes internal compiler error	Compiler, Compiler\C++	

		RSP-27616 (https://quality.embarcadero.com/browse/RSP-27616)
Internal compiler error on a legacy project	Compiler, Compiler\C++	RSP-27678 (https://quality.embarcadero.com/browse/RSP-27678)
Bug Report using bcc32c and -b- option in EMB Studio 20.0	Compiler, Compiler\C++	RSP-27681 (https://quality.embarcadero.com/browse/RSP-27681)
Cannot step into method when debugging an application	Compiler, Compiler\C++	RSP-27684 (https://quality.embarcadero.com/browse/RSP-27684)
Compiler crash in debug build	Compiler, Compiler\C++	RSP-27717 (https://quality.embarcadero.com/browse/RSP-27717)
clang32 has serious problems	Compiler, Compiler\C++, Compiler\C++\CLANG	RSP-14923 (https://quality.embarcadero.com/browse/RSP-14923)
[C++][CLANG]BCC32C and exception propagation: EExternalException	Compiler, Compiler\C++, Compiler\C++\CLANG	RSP-15809 (https://quality.embarcadero.com/browse/RSP-15809)
Linker reports unresolved externals, when compiling with bcc32c compiler	Compiler, Compiler\C++, Compiler\C++\CLANG	RSP-19919 (https://quality.embarcadero.com/browse/RSP-19919)
CSpinEdit create access violation	Compiler, Compiler\C++, Compiler\C++\CLANG	RSP-21903 (https://quality.embarcadero.com/browse/RSP-21903)

Abnormal Program Termination when Package throws exception after structure { double; UnicodeString; } was declared on stack	Compiler, Compiler\C++, Compiler\C++\CLANG	RSP-26513 (https://quality.embarcadero.com/browse/RSP-26513)
Android and _DELPHI_STRING_ONE_BASED	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Delphi interop	RSP-17839 (https://quality.embarcadero.com/browse/RSP-17839)
Clang doesn't generate RTTI for constructor	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Delphi interop	RSP-23767 (https://quality.embarcadero.com/browse/RSP-23767)
Unresolved external '__fastcall Vcl::Direct2d::D2DFactory(D2D1_FACTORY_TYPE, D2D1_FACTORY_OPTIONS *)'	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Delphi interop	RSP-28042 (https://quality.embarcadero.com/browse/RSP-28042)
[C++] Unresolved external TJsonSerializer Serialize and Deserialize	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Delphi interop, RTL\Delphi\Other	RSP-20458 (https://quality.embarcadero.com/browse/RSP-20458)
UCS4StringToUnicodeString missing on Android	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Delphi interop, RTL\Delphi\Other	RSP-21185 (https://quality.embarcadero.com/browse/RSP-21185)
bcc32c compiler crashes due compilation	Compiler, Compiler\C++, Compiler\C++\CLANG, Compiler\C++\CLANG\Front End	RSP-20020 (https://quality.embarcadero.com/browse/RSP-20020)
Program with <chrono> compiles in 10.1 but not 10.2	Compiler, Compiler\C++, Compiler\C++\CLANG, RTL\C++\STL	RSP-17775 (https://quality.embarcadero.com/browse/RSP-17775)
Regression: Incorrect HPP file entries are generated for the overloaded == or != operator	Compiler, Compiler\C++, Compiler\Delphi	RSP-27504 (https://quality.embarcadero.com/browse/RSP-27504)

Working with 20+ beacons and 10hz transmissions will crash the TBeacon in the background	Compiler, Compiler\C++, FireMonkey, RTL\C++	RSP-19073 (https://quality.embarcadero.com/browse/RSP-19073)
[Bcc32c] [ilink32 Error] Fatal: Illegal SEGMENT fixup index in module 'Swx_8_81.cpp'	Compiler, Compiler\C++, Linker	RSP-19352 (https://quality.embarcadero.com/browse/RSP-19352)
dynamic_cast of a base class pointer to a publicaly virtually derived class pointer from another DLL returns nullptr	Compiler, Compiler\C++, Linker	RSP-27632 (https://quality.embarcadero.com/browse/RSP-27632)
C++ builder for Android cannot create std::thread	Compiler, Compiler\C++, RTL\C++	RSP-16248 (https://quality.embarcadero.com/browse/RSP-16248)
C++ DLL 64bit - Access violation when TIdTCPClient->Connect	Compiler, Compiler\C++, VCL	RSP-27541 (https://quality.embarcadero.com/browse/RSP-27541)
Custom Managed Records are inefficient	Compiler, Compiler\Delphi	RSB-1981 (https://quality.embarcadero.com/browse/RSB-1981)
Default constructor is called even when explicit constructor is called on managed record	Compiler, Compiler\Delphi	RSB-2054 (https://quality.embarcadero.com/browse/RSB-2054)
Record constructor with only default parameter(s) should not raise error	Compiler, Compiler\Delphi	RSB-2055 (https://quality.embarcadero.com/browse/RSB-2055)
inline generates slow code when result is a managed type	Compiler, Compiler\Delphi	RSB-2322 (https://quality.embarcadero.com/browse/RSB-2322)
For managed variables, declared at lower levels, the top-level implicit TRY-FINALLY block is unnecessarily added	Compiler, Compiler\Delphi	RSB-2447 (https://quality.embarcadero.com/browse/RSB-2447)

Invalid hints for private implicit ctors/dtors in Managed Records	Compiler, Compiler\Delphi	RSB-2581 (https://quality.embarcadero.com/browse/RSB-2581)
Calls to System.Finalize for M-records are not optimized	Compiler, Compiler\Delphi	RSB-2606 (https://quality.embarcadero.com/browse/RSB-2606)
Copy constructors are not called for M-records declared in-line using type inference	Compiler, Compiler\Delphi	RSB-2635 (https://quality.embarcadero.com/browse/RSB-2635)
Calls to System.Dispose for M-record pointers are not optimized	Compiler, Compiler\Delphi	RSB-2640 (https://quality.embarcadero.com/browse/RSB-2640)
Calls to System.New for M-records are not optimized	Compiler, Compiler\Delphi	RSB-2642 (https://quality.embarcadero.com/browse/RSB-2642)
M-record constructor not called if used as inline for-in variable	Compiler, Compiler\Delphi	RSB-2655 (https://quality.embarcadero.com/browse/RSB-2655)
Adding the inline directive to a function that converts a negative SmallInt value to Word affects the function's result	Compiler, Compiler\Delphi	RSB-2687 (https://quality.embarcadero.com/browse/RSB-2687)
Default ctor not called record when declared inline	Compiler, Compiler\Delphi	RSB-2704 (https://quality.embarcadero.com/browse/RSB-2704)
Inline assignment of record variable does not consider implicit operator overload	Compiler, Compiler\Delphi	RSB-2705 (https://quality.embarcadero.com/browse/RSB-2705)
Inline declared record variable accepts right hand value because of constructor with matching parameter	Compiler, Compiler\Delphi	RSB-2706 (https://quality.embarcadero.com/browse/RSB-2706)
Win64: M-record as fifth parameter is accessed wrongly	Compiler, Compiler\Delphi	RSB-2733 (https://quality.embarcadero.com/browse/RSB-2733)

[Regression] Unnecessary InitializeRecord and CopyRecord calls before implicit overload	Compiler, Compiler\Delphi	RSB-2751 (https://quality.embarcadero.com/browse/RSB-2751)
[REGRESSION] Overloading of copy/converting constructors no longer works	Compiler, Compiler\Delphi	RSB-2760 (https://quality.embarcadero.com/browse/RSB-2760)
[REGRESSION] Parameterless constructors are not automatically invoked for M-records initialized using overloaded operator Assign	Compiler, Compiler\Delphi	RSB-2762 (https://quality.embarcadero.com/browse/RSB-2762)
Discrepancy in copy constructor handling DCC322 and DCC64.	Compiler, Compiler\Delphi	RSB-2780 (https://quality.embarcadero.com/browse/RSB-2780)
Incorrect declaration of record Assign operator compiles	Compiler, Compiler\Delphi	RSB-2783 (https://quality.embarcadero.com/browse/RSB-2783)
Inline variables don't work with anonymous methods	Compiler, Compiler\Delphi	RSB-3311 (https://quality.embarcadero.com/browse/RSB-3311)
IDE freezes	Compiler, Compiler\Delphi	RSP-14877 (https://quality.embarcadero.com/browse/RSP-14877)
Make {$ZEROBASEDSTRINGS OFF} by default in RTL.	Compiler, Compiler\Delphi	RSP-18333 (https://quality.embarcadero.com/browse/RSP-18333)
"Finalize" not accepts procedure type variable as parameter.	Compiler, Compiler\Delphi	RSP-18448 (https://quality.embarcadero.com/browse/RSP-18448)
H2077 inside try finally block with goto	Compiler, Compiler\Delphi	RSP-19110 (https://quality.embarcadero.com/browse/RSP-19110)
	Compiler, Compiler\Delphi	

Compiler issues W1025 Unsupported language feature: 'class constructor'		RSP-19912 (https://quality.embarcadero.com/browse/RSP-19912)
Compiler unable to recognize array of string in for... in do expression	Compiler, Compiler\Delphi	RSP-20046 (https://quality.embarcadero.com/browse/RSP-20046)
FreeAndNil can free a interface var and case av	Compiler, Compiler\Delphi	RSP-20127 (https://quality.embarcadero.com/browse/RSP-20127)
DLL methods incorrectly resolved	Compiler, Compiler\Delphi	RSP-20196 (https://quality.embarcadero.com/browse/RSP-20196)
Localized VCL program starts up in English, even if other language is default	Compiler, Compiler\Delphi	RSP-20979 (https://quality.embarcadero.com/browse/RSP-20979)
Delphi inline usage causes 'F2084 internal error'	Compiler, Compiler\Delphi	RSP-21028 (https://quality.embarcadero.com/browse/RSP-21028)
When IF-THEN-ELSE branches become NOPs, the condition evaluation is not eliminated, even when it has no side effects	Compiler, Compiler\Delphi	RSP-21194 (https://quality.embarcadero.com/browse/RSP-21194)
[10.2 REGRESSION] Premature finalisation of unused managed results of inlined calls	Compiler, Compiler\Delphi	RSP-21353 (https://quality.embarcadero.com/browse/RSP-21353)
Managed temporary variables, created to receive unused results of calls, should be auto-finalized at the end of the calling block	Compiler, Compiler\Delphi	RSP-21428 (https://quality.embarcadero.com/browse/RSP-21428)
Inline var gives AV in System._FinalizeArray	Compiler, Compiler\Delphi	

		RSP-23589 (https://quality.embarcadero.com/browse/RSP-23589)
Compilation Error. System Path is probably corrupt!	Compiler, Compiler\Delphi	RSP-23908 (https://quality.embarcadero.com/browse/RSP-23908)
Wrong generated code in Win64	Compiler, Compiler\Delphi	RSP-25553 (https://quality.embarcadero.com/browse/RSP-25553)
Operator of generic record cannot be inlined in generic methods	Compiler, Compiler\Delphi	RSP-26003 (https://quality.embarcadero.com/browse/RSP-26003)
Compiler calculating wrong offset for object field throught property	Compiler, Compiler\Delphi	RSP-26170 (https://quality.embarcadero.com/browse/RSP-26170)
For/in loop can leak TEnumerator in Linux64 and macOS64	Compiler, Compiler\Delphi	RSP-26257 (https://quality.embarcadero.com/browse/RSP-26257)
case' statement does not work with DWORD values on Linux 64bit	Compiler, Compiler\Delphi	RSP-26425 (https://quality.embarcadero.com/browse/RSP-26425)
Please implement a compiler intrinsic for "Find first set" functionality	Compiler, Compiler\Delphi	RSP-26466 (https://quality.embarcadero.com/browse/RSP-26466)
[radserver][openssl] Access violation	Compiler, Compiler\Delphi	RSP-27041 (https://quality.embarcadero.com/browse/RSP-27041)
	Compiler, Compiler\Delphi	

Case statement behavior is strange with LLVM-based Delphi compiler		RSP-27203 (https://quality.embarcadero.com/browse/RSP-27203)
Compiler error misspells "inaccessible"	Compiler, Compiler\Delphi	RSP-27355 (https://quality.embarcadero.com/browse/RSP-27355)
Window error running an android application	Compiler, Compiler\Delphi	RSP-27720 (https://quality.embarcadero.com/browse/RSP-27720)
F2084 Internal Error: AV00000000(09DF0000)-R00000000-0	Compiler, Compiler\Delphi	RSP-27758 (https://quality.embarcadero.com/browse/RSP-27758)
iOS with SDK 13.2	Compiler, Compiler\Delphi	RSP-27851 (https://quality.embarcadero.com/browse/RSP-27851)
Access violation when calling an inherited function with an open array parameter in Rio	Compiler, Compiler\Delphi, Compiler\Delphi\CodeGen	RSP-23939 (https://quality.embarcadero.com/browse/RSP-23939)
[REGRESSION] Bad codegen for certain generic code constructs	Compiler, Compiler\Delphi, Compiler\Delphi\Generics	RSP-26463 (https://quality.embarcadero.com/browse/RSP-26463)
{$LIBSUFFIX AUTO} for packages	Compiler, Compiler\Delphi, Compiler\Delphi\Packages/Libs	RSP-9868 (https://quality.embarcadero.com/browse/RSP-9868)
incorrect breakpoint points	Compiler, Compiler\Delphi, Debugger	RSP-23280 (https://quality.embarcadero.com/browse/RSP-23280)
Package fails to compile in OSX64	Compiler, Compiler\Delphi, Linker	RSP-26544 (https://qualit

		y.embarcade ro.com/brow se/RSP-265 44)
F2084 Internal Error: B1925 + Access Violation in generic method and binding variable	Compiler, Compiler\Delphi, RTL\Delphi	RSP-23718 (https://qualit y.embarcade ro.com/brow se/RSP-237 18)
[ClientDataSet] Couldn't insert few records within a single transaction	Data	RSP-15061 (https://qualit y.embarcade ro.com/brow se/RSP-150 61)
The SQL REFRESH statement of the TIBUpdateSQL component is incorrect	Data	RSP-21049 (https://qualit y.embarcade ro.com/brow se/RSP-210 49)
Duplicates not allowed" exception is raised	Data	RSP-27809 (https://qualit y.embarcade ro.com/brow se/RSP-278 09)
ADOConnection OnLogin event should pass var parameters	Data, Data\ADO	RSP-20689 (https://qualit y.embarcade ro.com/brow se/RSP-206 89)
Can't get the ADO Field Editor windows/popup to launch. It has not worked in any of the installed versions.	Data, Data\ADO	RSP-27626 (https://qualit y.embarcade ro.com/brow se/RSP-276 26)
TAmazonPopulator.GetFiles() should raise exception on error	Data, Data\Cloud	RSP-19517 (https://qualit y.embarcade ro.com/brow se/RSP-195 17)
TAmazonStorageService.DeleteObject() should determine bucket location if the BucketRegion is not specified	Data, Data\Cloud	RSP-23172 (https://qualit y.embarcade ro.com/brow se/RSP-231 72)
Missing AWS locations like Canada, Stockholm, Bahrain	Data, Data\Cloud	RSP-26246 (https://qualit y.embarcade

		ro.com/brow se/RSP-262 46)
Some difficulty using amazon sqs	Data, Data\Cloud	RSP-27429 (https://qualit y.embarcade ro.com/brow se/RSP-274 29)
Datasnap - Internal Server Error on no password with IIS	Data, Data\DataSnap	RSP-20331 (https://qualit y.embarcade ro.com/brow se/RSP-203 31)
Unable to use % in String parameters in a Rest Client/Server Application	Data, Data\DataSnap	RSP-23925 (https://qualit y.embarcade ro.com/brow se/RSP-239 25)
TDBGrid Indicator Bitmaps are not scaled with High DPI	Data, Data\DBCtrls, VCL	RSP-26052 (https://qualit y.embarcade ro.com/brow se/RSP-260 52)
Indicator in TDBGrid is not scaled under DPI Awareness	Data, Data\DBCtrls, VCL	RSP-27667 (https://qualit y.embarcade ro.com/brow se/RSP-276 67)
Null and empty string in TWideMemoField	Data, Data\DBRtl	RSP-27730 (https://qualit y.embarcade ro.com/brow se/RSP-277 30)
Make TDBImage.LoadPicture virtual	Data, Data\DBRtl, RTL\Delphi	RSP-26541 (https://qualit y.embarcade ro.com/brow se/RSP-265 41)
Memory leak and truncated string result when executing DB Stored Procedure	Data, Data\DBX	RSP-13821 (https://qualit y.embarcade ro.com/brow se/RSP-138 21)
Unit 'FireDAC.VCLUI.Wait' not found.	Data, Data\FireDAC	RSP-15140 (https://qualit y.embarcade ro.com/brow

		se/RSP-151 40)
Mongo connection fails in C++ Builder on application exit	Data, Data\FireDAC	RSP-15415 (https://quality.embarcadero.com/browse/RSP-15415)
FireDAC using SQLite is incompatible with the Firebase Cloud Messaging SDKs on iOS	Data, Data\FireDAC	RSP-18329 (https://quality.embarcadero.com/browse/RSP-18329)
TFDBatchMove does not restore destination dataset state after job.	Data, Data\FireDAC	RSP-19264 (https://quality.embarcadero.com/browse/RSP-19264)
FireDAC - PostgreSQL - No function PQbackendPID and other	Data, Data\FireDAC	RSP-26055 (https://quality.embarcadero.com/browse/RSP-26055)
[FireDAC.Phys.IBWrapper] add support for Firebird3 isc_info_sql_explain_plan in TIBStatement	Data, Data\FireDAC	RSP-26340 (https://quality.embarcadero.com/browse/RSP-26340)
FireDAC: Access violation with command execution and nvarchar(max) columns	Data, Data\FireDAC	RSP-26625 (https://quality.embarcadero.com/browse/RSP-26625)
[FireDAC] Incorrect "Data too large for variable" exception against Postgres	Data, Data\FireDAC	RSP-26645 (https://quality.embarcadero.com/browse/RSP-26645)
Unable to use not equal clause <> in TFDLocalSQL statement	Data, Data\FireDAC	RSP-26970 (https://quality.embarcadero.com/browse/RSP-26970)
TFDTable cannot fetch indexes if hyphen is present in database name with MS-SQL	Data, Data\FireDAC	RSP-27063 (https://quality.embarcadero.com/brow

		se/RSP-270 63)
Bug in FireDAC TFDEventAlerter component	Data, Data\FireDAC	RSP-27080 (https://qualit y.embarcade ro.com/brow se/RSP-270 80)
FireDAC TFDSQLiteBackup doesn't clean up WAL and SHM files in 10.3 Rio	Data, Data\FireDAC	RSP-27093 (https://qualit y.embarcade ro.com/brow se/RSP-270 93)
[FireDAC][Phys] Syntax Error parsing escaped JSON	Data, Data\FireDAC	RSP-27104 (https://qualit y.embarcade ro.com/brow se/RSP-271 04)
TFDEventAlerter (with postgres 10.0). Access violation and empty parameters	Data, Data\FireDAC	RSP-27391 (https://qualit y.embarcade ro.com/brow se/RSP-273 91)
FireDAC unique constraint doesn't ignore deleted rows	Data, Data\FireDAC	RSP-27392 (https://qualit y.embarcade ro.com/brow se/RSP-273 92)
TFDMemTable.CopyDataSet copy Unicode string as AnsiString	Data, Data\FireDAC	RSP-27400 (https://qualit y.embarcade ro.com/brow se/RSP-274 00)
Access Violation when deleting from disconnected TFDQuery	Data, Data\FireDAC	RSP-27421 (https://qualit y.embarcade ro.com/brow se/RSP-274 21)
FireDAC incorrectly copies NULL values in CopyDataSet method	Data, Data\FireDAC	RSP-27428 (https://qualit y.embarcade ro.com/brow se/RSP-274 28)
TFDTable.locate generate access violation	Data, Data\FireDAC	RSP-27444 (https://qualit y.embarcade ro.com/brow

		se/RSP-274 44)
FiraDAC do not work since Microsoft Office 2016 Update (MDB - Database)	Data, Data\FireDAC	RSP-27471 (https://qualit y.embarcade ro.com/brow se/RSP-274 71)
FireDac FDEventAlerter AEventName & AArgument are empty	Data, Data\FireDAC	RSP-27502 (https://qualit y.embarcade ro.com/brow se/RSP-275 02)
TFDFBNBackup dosen´t backp to a UNC Path	Data, Data\FireDAC	RSP-27517 (https://qualit y.embarcade ro.com/brow se/RSP-275 17)
FireDAC PostgreSQL driver does not support `hstore` type	Data, Data\FireDAC	RSP-27532 (https://qualit y.embarcade ro.com/brow se/RSP-275 32)
BCD overflow with aggregate field	Data, Data\FireDAC	RSP-27566 (https://qualit y.embarcade ro.com/brow se/RSP-275 66)
FireDac with mySQL 8.0.18 update problems	Data, Data\FireDAC	RSP-27664 (https://qualit y.embarcade ro.com/brow se/RSP-276 64)
TFDIBBackup (Firebird) new gbak parameters	Data, Data\FireDAC	RSP-27731 (https://qualit y.embarcade ro.com/brow se/RSP-277 31)
FDConnection Database name with blanks	Data, Data\FireDAC	RSP-27740 (https://qualit y.embarcade ro.com/brow se/RSP-277 40)
[FireDAC, MySQL v8] MySQL, storedproc that returns some cursors fails	Data, Data\FireDAC	RSP-27742 (https://qualit y.embarcade ro.com/brow

		se/RSP-277 42)
[Firedac][Phys][ODBC][sqlncli11.dll] SQL_ERROR' with TFDStoredProc	Data, Data\FireDAC	RSP-27745 (https://qualit y.embarcade ro.com/brow se/RSP-277 45)
FireDAC init and shutdown case mem leak	Data, Data\FireDAC	RSP-27897 (https://qualit y.embarcade ro.com/brow se/RSP-278 97)
FireDAC: AV exception in TFDQuery when using calculated fields, filters and multiple threads	Data, Data\FireDAC	RSP-27994 (https://qualit y.embarcade ro.com/brow se/RSP-279 94)
sql lite where fieldName !='a' Invalid character found	Data, Data\FireDAC	RSP-28012 (https://qualit y.embarcade ro.com/brow se/RSP-280 12)
TRESTResponseDataSetAdapter only creates TWideStringFields when adapting JSON to a FDMemTable regardless of JSON type	Data, Data\FireDAC, Data\REST	RSP-22941 (https://qualit y.embarcade ro.com/brow se/RSP-229 41)
[IBX] TIBQuery->BatchOutput fails on multi-line string fields	Data, Data\IBX	RSP-18710 (https://qualit y.embarcade ro.com/brow se/RSP-187 10)
TIBInputDelimitedFile BatchInput fails	Data, Data\IBX	RSP-26984 (https://qualit y.embarcade ro.com/brow se/RSP-269 84)
[IBX] XSQLDA-Index außerhalb des gültigen Bereichs.	Data, Data\IBX	RSP-26997 (https://qualit y.embarcade ro.com/brow se/RSP-269 97)
Delphi XE 10.3/10.3.1: TIBQuery (IBX) cached updates bug with BLOB fields	Data, Data\IBX	RSP-27002 (https://qualit y.embarcade ro.com/brow

		se/RSP-270 02)
same declarations in different units with different parameters	Data, Data\IBX	RSP-27404 (https://qualit y.embarcade ro.com/brow se/RSP-274 04)
TField DisplayWidth & Property Not Honored In TGrid	Data, Data\LiveBindings	RSP-12905 (https://qualit y.embarcade ro.com/brow se/RSP-129 05)
LiveBindings expert is throwing an EAccess Violation when creating a new data source	Data, Data\LiveBindings	RSP-14761 (https://qualit y.embarcade ro.com/brow se/RSP-147 61)
Data.Bind.EngExt doesn't clean up properly in UnregisterMethods	Data, Data\LiveBindings	RSP-15285 (https://qualit y.embarcade ro.com/brow se/RSP-152 85)
TLinkGridToDataSource.AutoActivate works only at design time	Data, Data\LiveBindings	RSP-17037 (https://qualit y.embarcade ro.com/brow se/RSP-170 37)
Streamline LiveBinding Support Of Booleans From/To String/Boolean/Integer/Float	Data, Data\LiveBindings	RSP-17155 (https://qualit y.embarcade ro.com/brow se/RSP-171 55)
LiveBinding' CustomFormat stop working - always return 0	Data, Data\LiveBindings	RSP-18988 (https://qualit y.embarcade ro.com/brow se/RSP-189 88)
LiveBindings don't update ListView after MemTable sort	Data, Data\LiveBindings	RSP-21132 (https://qualit y.embarcade ro.com/brow se/RSP-211 32)
Unnecessary creation of lists and heap allocations	Data, Data\LiveBindings	RSP-21279 (https://qualit y.embarcade ro.com/brow

		se/RSP-212 79)
TListView OnUpdatingObjects event handler not synch with datasource	Data, Data\LiveBindings, FireMonkey	RSP-16014 (https://qualit y.embarcade ro.com/brow se/RSP-160 14)
Live Bindings Master/ Detail problem in FireMonkey	Data, Data\LiveBindings, FireMonkey	RSP-16255 (https://qualit y.embarcade ro.com/brow se/RSP-162 55)
Access violation in dclbindcomp250.bpl when opeing a project	Data, Data\LiveBindings, FireMonkey	RSP-18445 (https://qualit y.embarcade ro.com/brow se/RSP-184 45)
FMX relationship TClientDataSet TGrid program	Data, Data\LiveBindings, FireMonkey	RSP-23224 (https://qualit y.embarcade ro.com/brow se/RSP-232 24)
Column index,1 out of bounds	Data, Data\LiveBindings, FireMonkey	RSP-23941 (https://qualit y.embarcade ro.com/brow se/RSP-239 41)
Error formatting the TDateColumn with LiveBindings on Mac Os 64 bit	Data, Data\LiveBindings, FireMonkey	RSP-27237 (https://qualit y.embarcade ro.com/brow se/RSP-272 37)
When using BindingsList, The number in the edit box is not inserted or updated after submission when the mouse clicks the up or down button of TUpDown (FMX / TSpinBox)	Data, Data\LiveBindings, FireMonkey, VCL	RSP-21412 (https://qualit y.embarcade ro.com/brow se/RSP-214 12)
LiveBindings bug with DataSet and active index	Data, Data\LiveBindings, VCL	RSP-14089 (https://qualit y.embarcade ro.com/brow se/RSP-140 89)
RAD Server Head Requests To Endpoints Return 500 Errors	Data, Data\MEAP	RSB-3033 (h ttps://quality. embarcader o.com/brows e/RSB-3033)

TClientDataset's Error in Android 32 Mode at XE10.3.3!	Data, Data\Midas	RSP-26954 (https://quality.embarcadero.com/browse/RSP-26954)
A TClientDataset, with active aggregate(s), fails when Dataset Index is switched to a different index which is Non-Unique	Data, Data\Midas	RSP-27743 (https://quality.embarcadero.com/browse/RSP-27743)
RESTDebugger & RESTClient class: missing http headers	Data, Data\REST	RSB-3478 (https://quality.embarcadero.com/browse/RSB-3478)
Unable to set the Connect and Read timeouts separately on TRestClient	Data, Data\REST	RSP-23485 (https://quality.embarcadero.com/browse/RSP-23485)
TRESTClient invalid handling of default parameters	Data, Data\REST	RSP-24197 (https://quality.embarcadero.com/browse/RSP-24197)
Server cookies retrieval not possible using TRESTClient/REST.HttpClient (Also in RESTDebugger)	Data, Data\REST	RSP-26497 (https://quality.embarcadero.com/browse/RSP-26497)
REST Debugger should remember last used load/save directory	Data, Data\REST	RSP-26585 (https://quality.embarcadero.com/browse/RSP-26585)
POST request created by RestClient is broken on FMX mobile	Data, Data\REST	RSP-27437 (https://quality.embarcadero.com/browse/RSP-27437)
JSON serialization changes identifier capitalization	Data, Data\REST, RTL	RSP-9650 (https://quality.embarcadero.com/browse/RSP-9650)
IDE is throwing emsedge250.bpl error after manual Indy installation	Data\MEAP	RSP-20491 (https://quality.embarcade

		ro.com/brow se/RSP-204 91)
RadServer Project Platform Win64 is not supported (RadServer Project Platform Win64 wird nicht unterstützt)	Data\MEAP	RSP-24678 (https://qualit y.embarcade ro.com/brow se/RSP-246 78)
RAD Server package project not able to locate ODBC Data Source Name	Data\MEAP	RSP-27692 (https://qualit y.embarcade ro.com/brow se/RSP-276 92)
CPU window broken for macOS64	Debugger	RSB-2919 (h ttps://quality. embarcader o.com/brows e/RSB-2919)
Debuger 'freezes' on Iphone 11 Pro	Debugger	RSB-3416 (h ttps://quality. embarcader o.com/brows e/RSB-3416)
[bcceval64] class members of function parameters are treated as arrays when expanded in inspector	Debugger	RSP-10270 (https://qualit y.embarcade ro.com/brow se/RSP-102 70)
Incorrect file used when debugging generic class types in Delphi	Debugger	RSP-18927 (https://qualit y.embarcade ro.com/brow se/RSP-189 27)
Win64 debugger crashes to WER dialog if working dir set to relative path	Debugger	RSP-19983 (https://qualit y.embarcade ro.com/brow se/RSP-199 83)
64bit debugger appears to lose track of the correct stack info / symbol trables	Debugger	RSP-20705 (https://qualit y.embarcade ro.com/brow se/RSP-207 05)
Can't debug dynamic-load DLL	Debugger	RSP-21055 (https://qualit y.embarcade ro.com/brow se/RSP-210 55)

local variable not available	Debugger	RSP-21126 (https://quality.embarcadero.com/browse/RSP-21126)
[C++] Exception unloading DLL when debugging	Debugger	RSP-22951 (https://quality.embarcadero.com/browse/RSP-22951)
Debugger hangs after expression evaluation	Debugger	RSP-24131 (https://quality.embarcadero.com/browse/RSP-24131)
Android64 debugging not working with spaces in the project path	Debugger	RSP-27458 (https://quality.embarcadero.com/browse/RSP-27458)
[4361] AccessCamera Sample Error	Demos	RSB-2809 (https://quality.embarcadero.com/browse/RSB-2809)
[4361] CameraRoll Sample Error	Demos	RSB-2810 (https://quality.embarcadero.com/browse/RSB-2810)
[4361] AudioRecPlay	Demos	RSB-2811 (https://quality.embarcadero.com/browse/RSB-2811)
HttpDownloadDemo: Sample link does not more exist	Demos	RSP-19570 (https://quality.embarcadero.com/browse/RSP-19570)
[Demo] Android service demo - Remote Demo crash	Demos	RSP-19713 (https://quality.embarcadero.com/browse/RSP-19713)
[Demo] This link in the camera FMX example windows 10 also shuts down the program	Demos	RSP-21378 (https://quality.embarcadero.com/brow

		se/RSP-213 78)
Some of the C++ sample projects (CameraComponent for example) get version info error	Demos	RSP-21799 (https://qualit y.embarcade ro.com/brow se/RSP-217 99)
Error when running BindGridLinkFMXProject.dproj samples	Demos	RSP-23560 (https://qualit y.embarcade ro.com/brow se/RSP-235 60)
PhoneDailer sample raises exception	Demos	RSP-24621 (https://qualit y.embarcade ro.com/brow se/RSP-246 21)
TeeResou.res missing on Android64	File Delivery	RSP-27663 (https://qualit y.embarcade ro.com/brow se/RSP-276 63)
Interaction of Swipe gestures with button clicks	FireMonkey	AP-208 (http s://quality.e mbarcadero. com/browse/ AP-208)
fmx client align apparently ignores system toolbar at bottom of screen	FireMonkey	AP-209 (http s://quality.e mbarcadero. com/browse/ AP-209)
Exception when setting the text property of a TLabel if the text contains a line feed character	FireMonkey	RSB-1753 (h ttps://quality. embarcader o.com/brows e/RSB-1753)
Integer overflow in FMX.InertialMovement (TAniCalculations FUpdateTimerCount)	FireMonkey	RSB-2555 (h ttps://quality. embarcader o.com/brows e/RSB-2555)
Move some TControl3D methods from private section to protected	FireMonkey	RSB-2724 (h ttps://quality. embarcader o.com/brows e/RSB-2724)
Can't upload MacOS-64-App to AppStore because of deprecated API usage	FireMonkey	RSB-3037 (h ttps://quality. embarcader

		o.com/brows e/RSB-3037)
iOS 13 Dark mode - switch event	FireMonkey	RSB-3357 (h ttps://quality. embarcader o.com/brows e/RSB-3357)
Video playback fails on Catalina	FireMonkey	RSB-3375 (h ttps://quality. embarcader o.com/brows e/RSB-3375)
iOS missing property list keys for Bluetooth LE development	FireMonkey	RSB-3428 (h ttps://quality. embarcader o.com/brows e/RSB-3428)
access to macOS Documents folder is missing from the entitlements list	FireMonkey	RSB-3468 (h ttps://quality. embarcader o.com/brows e/RSB-3468)
Audio recording is not working even though entitlement is set	FireMonkey	RSB-3469 (h ttps://quality. embarcader o.com/brows e/RSB-3469)
DateEdit onEnter called too late	FireMonkey	RSB-3486 (h ttps://quality. embarcader o.com/brows e/RSB-3486)
CameraControl freezes on all windows	FireMonkey	RSP-11625 (https://qualit y.embarcade ro.com/brow se/RSP-116 25)
FMX Hint	FireMonkey	RSP-13220 (https://qualit y.embarcade ro.com/brow se/RSP-132 20)
Disabling FMX Border Icon cause tips to not be displayed	FireMonkey	RSP-13663 (https://qualit y.embarcade ro.com/brow se/RSP-136 63)
Create double buffered FMX controls	FireMonkey	RSP-15576 (https://qualit y.embarcade ro.com/brow

		se/RSP-155 76)
Hints not shown when BorderIcons maximize is disabled.	FireMonkey	RSP-16240 (https://qualit y.embarcade ro.com/brow se/RSP-162 40)
TGrid: move Tcolumn.Layout property to public	FireMonkey	RSP-16415 (https://qualit y.embarcade ro.com/brow se/RSP-164 15)
TTetheringAppProfile.SendStream() doesn't return false if the transmission failed everytime	FireMonkey	RSP-16430 (https://qualit y.embarcade ro.com/brow se/RSP-164 30)
TEdit ValidChars doesn't work on Android	FireMonkey	RSP-16585 (https://qualit y.embarcade ro.com/brow se/RSP-165 85)
Delphi 10.1 Berlin FireMonkey (Mobile platform) - English and Chinese characters arrangement proble	FireMonkey	RSP-16590 (https://qualit y.embarcade ro.com/brow se/RSP-165 90)
OpenGL we always recreate the shared context just after the form is created	FireMonkey	RSP-16602 (https://qualit y.embarcade ro.com/brow se/RSP-166 02)
Memory Leak in TTextLayoutNG from FMX.TextLayout.GPU	FireMonkey	RSP-16664 (https://qualit y.embarcade ro.com/brow se/RSP-166 64)
Toggling Active state of TCameraComponent causes app to crash	FireMonkey	RSP-16812 (https://qualit y.embarcade ro.com/brow se/RSP-168 12)
TCheckCell.DrawCell should place CheckBox image into center of cell	FireMonkey	RSP-17083 (https://qualit y.embarcade ro.com/brow

		se/RSP-170 83)
Pan and Zoom gestures cannot be used simultaneously in Android	FireMonkey	RSP-17835 (https://qualit y.embarcade ro.com/brow se/RSP-178 35)
Push Notifications from FCM in an Android Service and iOS	FireMonkey	RSP-18006 (https://qualit y.embarcade ro.com/brow se/RSP-180 06)
Regarding Hint problem again	FireMonkey	RSP-18265 (https://qualit y.embarcade ro.com/brow se/RSP-182 65)
[Windows] FMX TEdit Component Error!!!	FireMonkey	RSP-18276 (https://qualit y.embarcade ro.com/brow se/RSP-182 76)
Regarding Control's ClipChildren property	FireMonkey	RSP-18795 (https://qualit y.embarcade ro.com/brow se/RSP-187 95)
TBindNavigator::Visible property does not compile in C++	FireMonkey	RSP-19037 (https://qualit y.embarcade ro.com/brow se/RSP-190 37)
Hint on TSpeedButton Result Segmentation Fault	FireMonkey	RSP-19306 (https://qualit y.embarcade ro.com/brow se/RSP-193 06)
Firemonkey Slow Paint [BUFFER IS THE SOLUTION]	FireMonkey	RSP-19432 (https://qualit y.embarcade ro.com/brow se/RSP-194 32)
GDI Leaks at FMX.Memo.Win	FireMonkey	RSP-19474 (https://qualit y.embarcade ro.com/brow

		se/RSP-194 74)
SharedHint Issue/Crash on mobile devices	FireMonkey	RSP-19479 (https://qualit y.embarcade ro.com/brow se/RSP-194 79)
Add TToolbar ShowHint & ParentShowHint	FireMonkey	RSP-19507 (https://qualit y.embarcade ro.com/brow se/RSP-195 07)
The size of the TTextLayout text displayed by TTextLayout::ConvertToPath and TTextLayout::LenderLayout is different.	FireMonkey	RSP-19590 (https://qualit y.embarcade ro.com/brow se/RSP-195 90)
Please change visibility of StyledMemo method	FireMonkey	RSP-19944 (https://qualit y.embarcade ro.com/brow se/RSP-199 44)
TCurrencyColumn for TGrid does not work properly	FireMonkey	RSP-20095 (https://qualit y.embarcade ro.com/brow se/RSP-200 95)
Cant get Caret position from mouse in TMemo	FireMonkey	RSP-20112 (https://qualit y.embarcade ro.com/brow se/RSP-201 12)
TGrid.OnSetValue evoke twice when click TCheckCell	FireMonkey	RSP-20125 (https://qualit y.embarcade ro.com/brow se/RSP-201 25)
VisualBindings is Slow, should be improved	FireMonkey	RSP-20325 (https://qualit y.embarcade ro.com/brow se/RSP-203 25)
Add IIsChecked interface to TRadioButton	FireMonkey	RSP-20374 (https://qualit y.embarcade ro.com/brow

		se/RSP-203 74)
Add IIsChecked interface to TMenuItem	FireMonkey	RSP-20410 (https://qualit y.embarcade ro.com/brow se/RSP-204 10)
Add IIsChecked interface to TSpeedButton	FireMonkey	RSP-20411 (https://qualit y.embarcade ro.com/brow se/RSP-204 11)
Multi-point gradients fail	FireMonkey	RSP-20497 (https://qualit y.embarcade ro.com/brow se/RSP-204 97)
Androidapi.JNIBridge source appears to be misaligned with binaries	FireMonkey	RSP-20651 (https://qualit y.embarcade ro.com/brow se/RSP-206 51)
Using Metal instead of OpenGL on Mac / iOS	FireMonkey	RSP-20667 (https://qualit y.embarcade ro.com/brow se/RSP-206 67)
TListView onChange called twice	FireMonkey	RSP-20828 (https://qualit y.embarcade ro.com/brow se/RSP-208 28)
FMX.Canvas.TextToPath() on Android behaves differently to Windows	FireMonkey	RSP-21137 (https://qualit y.embarcade ro.com/brow se/RSP-211 37)
wrong behave of OnClick in TLabel (Firemonkey)	FireMonkey	RSP-21187 (https://qualit y.embarcade ro.com/brow se/RSP-211 87)
OnResize event is triggered before (Frame)Create is complete	FireMonkey	RSP-21188 (https://qualit y.embarcade ro.com/brow

		se/RSP-211 88)
Can't link xcode9.4 build Static Library framework in firemonkey	FireMonkey	RSP-21247 (https://qualit y.embarcade ro.com/brow se/RSP-212 47)
Invalid assumption in TTextLayoutNG.CreateFrame	FireMonkey	RSP-21249 (https://qualit y.embarcade ro.com/brow se/RSP-212 49)
TGestureEventInfo.Distance wrong on multimonitor system	FireMonkey	RSP-21326 (https://qualit y.embarcade ro.com/brow se/RSP-213 26)
TFrame.Enabled problem	FireMonkey	RSP-21447 (https://qualit y.embarcade ro.com/brow se/RSP-214 47)
TPushDeviceTokenData must contain the NSData of the token	FireMonkey	RSP-21539 (https://qualit y.embarcade ro.com/brow se/RSP-215 39)
Dont remove "Translation Tools" (FireMonkey TLang)	FireMonkey	RSP-21641 (https://qualit y.embarcade ro.com/brow se/RSP-216 41)
Ignoring value TComboTrackBar.DecimalDigits in runtime	FireMonkey	RSP-21821 (https://qualit y.embarcade ro.com/brow se/RSP-218 21)
TakeFotoFromCameraAction property Editable doesn't work	FireMonkey	RSP-21921 (https://qualit y.embarcade ro.com/brow se/RSP-219 21)
FMX.Listbox.TComboBox Sort ignores comparer	FireMonkey	RSP-21924 (https://qualit y.embarcade ro.com/brow

		se/RSP-219 24)
Changes to FMX.Memo.Style.pas	FireMonkey	RSP-22406 (https://qualit y.embarcade ro.com/brow se/RSP-224 06)
dbl-click on TEdit doesn't select last word	FireMonkey	RSP-22876 (https://qualit y.embarcade ro.com/brow se/RSP-228 76)
IF UIFileSharingEnabled is true/YES Application Loader rejects iOS-App because of type mismatch	FireMonkey	RSP-22926 (https://qualit y.embarcade ro.com/brow se/RSP-229 26)
TMemo crash triggered by EndUpdate during destruction	FireMonkey	RSP-22948 (https://qualit y.embarcade ro.com/brow se/RSP-229 48)
Hints stop displaying after form's handle recreation	FireMonkey	RSP-23062 (https://qualit y.embarcade ro.com/brow se/RSP-230 62)
"ld" exited with code 1 when adding TetheringManager to project (Android)	FireMonkey	RSP-23073 (https://qualit y.embarcade ro.com/brow se/RSP-230 73)
TTimer can suddenly die without any notification	FireMonkey	RSP-23114 (https://qualit y.embarcade ro.com/brow se/RSP-231 14)
FMX.ListView.OnChange fires even if item doesn't change	FireMonkey	RSP-23188 (https://qualit y.embarcade ro.com/brow se/RSP-231 88)
Rio officially only support Android 5+ but minSDK is 19 (4.4) which has problems	FireMonkey	RSP-23219 (https://qualit y.embarcade ro.com/brow

		se/RSP-232 19)
Android TNumberbox: onExit gets wrong value	FireMonkey	RSP-23299 (https://qualit y.embarcade ro.com/brow se/RSP-232 99)
Visibility of TFont.FFontSvc: IFMXSystemFontService	FireMonkey	RSP-23757 (https://qualit y.embarcade ro.com/brow se/RSP-237 57)
Tooltips and hints do not function for controls placed on layout containers	FireMonkey	RSP-23835 (https://qualit y.embarcade ro.com/brow se/RSP-238 35)
procedure TCustomForm.PaintBackground; must be set as virtual	FireMonkey	RSP-23841 (https://qualit y.embarcade ro.com/brow se/RSP-238 41)
Calendar causing crashes	FireMonkey	RSP-23873 (https://qualit y.embarcade ro.com/brow se/RSP-238 73)
Popup menu closes when clicking on item separator and on disabled items.	FireMonkey	RSP-23890 (https://qualit y.embarcade ro.com/brow se/RSP-238 90)
FMX [ANDROID] unable to use NDK API beyond 22 - App Crash on 23+	FireMonkey	RSP-24016 (https://qualit y.embarcade ro.com/brow se/RSP-240 16)
MapView.OnMarkerDragEnd does not give new position	FireMonkey	RSP-24168 (https://qualit y.embarcade ro.com/brow se/RSP-241 68)
Access violation on TEdit when TEdit.ShowHint=True and there is text in TEdit.Hint and you tap on it	FireMonkey	RSP-24246 (https://qualit y.embarcade ro.com/brow

		se/RSP-242 46)
TCalendar OnDateSelected trigger loop	FireMonkey	RSP-24324 (https://qualit y.embarcade ro.com/brow se/RSP-243 24)
Inner borders drawn on TEdit, TCombo, TButton, TLabel	FireMonkey	RSP-24392 (https://qualit y.embarcade ro.com/brow se/RSP-243 92)
AV in TFMXViewBase.insertText	FireMonkey	RSP-24409 (https://qualit y.embarcade ro.com/brow se/RSP-244 09)
miss the declaration of UIAlertController/UIAlertAction in iOSApi.uiKit	FireMonkey	RSP-24740 (https://qualit y.embarcade ro.com/brow se/RSP-247 40)
Usage descriptions that could be added for macOS	FireMonkey	RSP-25593 (https://qualit y.embarcade ro.com/brow se/RSP-255 93)
Tab Stops do not follow Tab Order	FireMonkey	RSP-25964 (https://qualit y.embarcade ro.com/brow se/RSP-259 64)
fmx gpu rendering text property bug	FireMonkey	RSP-25974 (https://qualit y.embarcade ro.com/brow se/RSP-259 74)
TPopup and TScrollBox is not working well	FireMonkey	RSP-26042 (https://qualit y.embarcade ro.com/brow se/RSP-260 42)
Implement automatic dark mode switching	FireMonkey	RSP-26110 (https://qualit y.embarcade ro.com/brow

		se/RSP-261 10)
TCurrencyColumn wrong display	FireMonkey	RSP-26184 (https://quality.embarcadero.com/browse/RSP-261 84)
TCalendar wrong resizing with FireMonkey styles	FireMonkey	RSP-26332 (https://quality.embarcadero.com/browse/RSP-263 32)
TDateEdit IsEmpty is not persistent	FireMonkey	RSP-26353 (https://quality.embarcadero.com/browse/RSP-263 53)
TLayout Size 0 is not persistent	FireMonkey	RSP-26361 (https://quality.embarcadero.com/browse/RSP-263 61)
TBitmapCodecManager.SaveToFile raises AV	FireMonkey	RSP-26363 (https://quality.embarcadero.com/browse/RSP-263 63)
FireMonkey scaling of PopupMenu subitems doesn't work	FireMonkey	RSP-26572 (https://quality.embarcadero.com/browse/RSP-265 72)
[macOS 64] Crash due to a tap with three fingers	FireMonkey	RSP-26642 (https://quality.embarcadero.com/browse/RSP-266 42)
Android 64 bit app crashes when calling TInAppPurchase.QueryProducts	FireMonkey	RSP-27140 (https://quality.embarcadero.com/browse/RSP-271 40)
Any iOS app cannot start without debugger	FireMonkey	RSP-27146 (https://quality.embarcadero.com/brow

		se/RSP-271 46)
FMX.Tmediaplayer.Duration is negative.	FireMonkey	RSP-27166 (https://quality.embarcadero.com/browse/RSP-271 66)
Firemonkey App compiled with Rio 10.3.3 is not usable on a MacbookPro with macOS10.13	FireMonkey	RSP-27197 (https://quality.embarcadero.com/browse/RSP-271 97)
InAppPurchase.QueryProducts crash App in Android64	FireMonkey	RSP-27228 (https://quality.embarcadero.com/browse/RSP-272 28)
Wrong Decimals in NumberBox when Value is greater than 32767	FireMonkey	RSP-27282 (https://quality.embarcadero.com/browse/RSP-272 82)
incorrect declaration export function JSStringCreateWithUTF8CString	FireMonkey	RSP-27340 (https://quality.embarcadero.com/browse/RSP-273 40)
NSLocale missing a number of methods	FireMonkey	RSP-27353 (https://quality.embarcadero.com/browse/RSP-273 53)
FMX.TListBoxGroupHeader - default FALSE value in TextSettings.WordWrap not works	FireMonkey	RSP-27470 (https://quality.embarcadero.com/browse/RSP-274 70)
Firemomkey - android. Onkeyup event not called	FireMonkey	RSP-27496 (https://quality.embarcadero.com/browse/RSP-274 96)
Support newer Android NDK than 17	FireMonkey	RSP-27509 (https://quality.embarcadero.com/brow

		se/RSP-275 09)
Bad TLabel text rendering quality on some Android devices	FireMonkey	RSP-27520 (https://qualit y.embarcade ro.com/brow se/RSP-275 20)
TTreeView expanding items during begin update does not work	FireMonkey	RSP-27739 (https://qualit y.embarcade ro.com/brow se/RSP-277 39)
InputQuery on iOS should not show first prompt as message when using two prompts	FireMonkey	RSP-27777 (https://qualit y.embarcade ro.com/brow se/RSP-277 77)
ITMS-90809: Deprecated API Usage UIWebView warning from Apple	FireMonkey	RSP-27902 (https://qualit y.embarcade ro.com/brow se/RSP-279 02)
Bug in rendering ListView items	FireMonkey	RSP-27917 (https://qualit y.embarcade ro.com/brow se/RSP-279 17)
TNumberCell. Shortcoming in the validation of valid characters	FireMonkey	RSP-28057 (https://qualit y.embarcade ro.com/brow se/RSP-280 57)
FMX and VCL default exception handlers produce uninformative error messages with EAggregateException (as raised by ITask.Wait etc.)	FireMonkey	RSP-9539 (h ttps://quality. embarcader o.com/brows e/RSP-9539)
Circular references when using 3D controls	FireMonkey, FireMonkey\3D Components	RSP-9785 (h ttps://quality. embarcader o.com/brows e/RSP-9785)
FMX Hint Cannot display if the form is transparent	FireMonkey, FireMonkey\Components	RSP-12907 (https://qualit y.embarcade ro.com/brow se/RSP-129 07)
C++Builder 10 Seattle - Hint function will fail		

	FireMonkey, FireMonkey\Components	RSP-13065 (https://quality.embarcadero.com/browse/RSP-13065)
Hint is not shown if there is no Maximize button in form frame	FireMonkey, FireMonkey\Components	RSP-13218 (https://quality.embarcadero.com/browse/RSP-13218)
classes.dex contains superfluous gingerbread dialog classes	FireMonkey, FireMonkey\Runtime	RSP-13159 (https://quality.embarcadero.com/browse/RSP-13159)
TApplicationEvent.WillBecomeInactive is called after TApplicationEvent.EnteredBackground for the Android platform	FireMonkey, FireMonkey\Runtime	RSP-18686 (https://quality.embarcadero.com/browse/RSP-18686)
provider_paths.xml is missing entries	FireMonkey, FireMonkey\Runtime	RSP-26950 (https://quality.embarcadero.com/browse/RSP-26950)
Performance optimizations - TStyledControl.FindStyleResource	FireMonkey, FireMonkey\Styles	RSP-10814 (https://quality.embarcadero.com/browse/RSP-10814)
LongTap gesture event in Android has no TInteractiveGestureFlag.gfEnd	FireMonkey, IDE	RSP-23806 (https://quality.embarcadero.com/browse/RSP-23806)
BannerAd header error on Windows targeted android project	FireMonkey, Install	RSP-20929 (https://quality.embarcadero.com/browse/RSP-20929)
TNotificationCenter.PresentNotification not working on iOS10 devices (for R104)	FireMonkey, RTL	RSP-16762 (https://quality.embarcadero.com/browse/RSP-16762)
	FireMonkey, RTL, RTL\Delphi	

Multi-platform App crashes on OSX when Abort is called and 'posix.stdlib' is in 'uses' section		RSP-19307 (https://quality.embarcadero.com/browse/RSP-19307)
GLHasAnyErrors is a little useless as it's not show the error code	FireMonkey, RTL, RTL\Delphi	RSP-21577 (https://quality.embarcadero.com/browse/RSP-21577)
The iOS framework interface for NSNotification is missing 'object' property	FireMonkey, RTL, RTL\Delphi	RSP-24206 (https://quality.embarcadero.com/browse/RSP-24206)
Light and dark theme flag for VCL and FMX styles	FireMonkey, VCL	RSP-21531 (https://quality.embarcadero.com/browse/RSP-21531)
Replace Internet Explorer based TWebBrowser with IWebView2	FireMonkey, VCL	RSP-27543 (https://quality.embarcadero.com/browse/RSP-27543)
build all - crashes IDE eventually	Help and Doc, IDE	RSP-23123 (https://quality.embarcadero.com/browse/RSP-23123)
VCL change caused an IDE to crash	IDE	RSP-23900 (https://quality.embarcadero.com/browse/RSP-23900)
Allow setting default file encoding in Environment options	IDE	RSB-1694 (https://quality.embarcadero.com/browse/RSB-1694)
Title bar is painted incorrectly when window is maximized	IDE	RSB-2146 (https://quality.embarcadero.com/browse/RSB-2146)
Docked panel title bar buttons lack hover highlight	IDE	RSB-2310 (https://quality.embarcader

		o.com/brows e/RSB-2310)
Tooltip missing for inline declarations	IDE	RSB-2421 (h ttps://quality. embarcader o.com/brows e/RSB-2421)
ErrorInsight does not like inline var in DPR	IDE	RSB-2423 (h ttps://quality. embarcader o.com/brows e/RSB-2423)
Android SDK setup automatically chooses very old build tools	IDE	RSB-2456 (h ttps://quality. embarcader o.com/brows e/RSB-2456)
Options dialog duplicated items	IDE	RSB-2472 (h ttps://quality. embarcader o.com/brows e/RSB-2472)
Error insight doesn't support 10.3 features	IDE	RSB-2498 (h ttps://quality. embarcader o.com/brows e/RSB-2498)
Cursor out of view in options dialog	IDE	RSB-2838 (h ttps://quality. embarcader o.com/brows e/RSB-2838)
Stepping over code in IDE causes IDE to show Range Check error [only when maximised]	IDE	RSB-2868 (h ttps://quality. embarcader o.com/brows e/RSB-2868)
Tools/Options/Language/Delphi/-options/Library combo boxes are truncated	IDE	RSB-2932 (h ttps://quality. embarcader o.com/brows e/RSB-2932)
Debug Inspector Shows 'PanelMain' panel caption when smallest vertical size	IDE	RSB-3310 (h ttps://quality. embarcader o.com/brows e/RSB-3310)
Save changes to project popup, blanks out background	IDE	RSB-3331 (h ttps://quality. embarcader o.com/brows e/RSB-3331)
Holding CTRL Key lets Display refresh fast	IDE	RSB-3332 (h ttps://quality.

		embarcadero.com/browse/RSB-3332)
Title bar issue	IDE	RSB-3336 (https://quality.embarcadero.com/browse/RSB-3336)
Code editor flickers when changing focus	IDE	RSB-3339 (https://quality.embarcadero.com/browse/RSB-3339)
IDE flickering	IDE	RSB-3340 (https://quality.embarcadero.com/browse/RSB-3340)
Undocked layout: Object inspector has no title bar and as such is unmovable	IDE	RSB-3353 (https://quality.embarcadero.com/browse/RSB-3353)
Video Flickering while debugging	IDE	RSB-3376 (https://quality.embarcadero.com/browse/RSB-3376)
Radiant shapes does not drop on Android 64 bit project, but does compile and run	IDE	RSB-3418 (https://quality.embarcadero.com/browse/RSB-3418)
[License Manager] Exception EOSError in module rtl250.bpl at 00052A2F. System Error. Code: 111	IDE	RSB-3424 (https://quality.embarcadero.com/browse/RSB-3424)
Ctrl+Click on generics	IDE	RSP-13009 (https://quality.embarcadero.com/browse/RSP-13009)
Code completion awfully slow	IDE	RSP-15405 (https://quality.embarcadero.com/browse/RSP-15405)
Cannot uninstall system design-time packages (regression)	IDE	RSP-16327 (https://quality.embarcadero.com/brow

		se/RSP-163 27)
Please offer an option to turn off "Clipboard History"	IDE	RSP-16410 (https://quality.embarcadero.com/browse/RSP-164 10)
Code Completion not work [for completing a unit in uses clause]	IDE	RSP-17659 (https://quality.embarcadero.com/browse/RSP-176 59)
Code Insight does not know the current type	IDE	RSP-17910 (https://quality.embarcadero.com/browse/RSP-179 10)
Code Insight does not know generic type parameters	IDE	RSP-17911 (https://quality.embarcadero.com/browse/RSP-179 11)
Find in Files add Search in current one File	IDE	RSP-18120 (https://quality.embarcadero.com/browse/RSP-181 20)
Bundle identifier changed by the IDE when deploy on Mac App Store	IDE	RSP-18718 (https://quality.embarcadero.com/browse/RSP-187 18)
Code completion fails to invoke	IDE	RSP-19116 (https://quality.embarcadero.com/browse/RSP-191 16)
Code Completion shows unreachable symbols for TEncoding and TPath	IDE	RSP-19184 (https://quality.embarcadero.com/browse/RSP-191 84)
Incorrect project options page with a new static library project	IDE	RSP-19231 (https://quality.embarcadero.com/brow

		se/RSP-192 31)
Inisght confused by Invoke	IDE	RSP-19294 (https://qualit y.embarcade ro.com/brow se/RSP-192 94)
Theme change invalidates custom editor colors	IDE	RSP-19524 (https://qualit y.embarcade ro.com/brow se/RSP-195 24)
Event Log Colours are not used	IDE	RSP-19630 (https://qualit y.embarcade ro.com/brow se/RSP-196 30)
white place inside dark theme	IDE	RSP-19638 (https://qualit y.embarcade ro.com/brow se/RSP-196 38)
Cannot set TLIB page size for c++ package	IDE	RSP-20015 (https://qualit y.embarcade ro.com/brow se/RSP-200 15)
Dark theme is broken in Project->Add unit	IDE	RSP-20245 (https://qualit y.embarcade ro.com/brow se/RSP-202 45)
Dark theme is broken in windows 'Select Connection Profile'	IDE	RSP-20260 (https://qualit y.embarcade ro.com/brow se/RSP-202 60)
Dark theme not used for TODO List Panel background	IDE	RSP-20511 (https://qualit y.embarcade ro.com/brow se/RSP-205 11)
Code insight crashes IDE	IDE	RSP-20778 (https://qualit y.embarcade ro.com/brow

		se/RSP-207 78)
Bring back double click to open a folder in the Projects manager	IDE	RSP-21689 (https://qualit y.embarcade ro.com/brow se/RSP-216 89)
Design issue of compiler options page	IDE	RSP-21796 (https://qualit y.embarcade ro.com/brow se/RSP-217 96)
Title bar controls move when switching desktop layout	IDE	RSP-22237 (https://qualit y.embarcade ro.com/brow se/RSP-222 37)
QuickEdit still use 10.2 registry path	IDE	RSP-22904 (https://qualit y.embarcade ro.com/brow se/RSP-229 04)
Cannot delete nonexistent SDK	IDE	RSP-22986 (https://qualit y.embarcade ro.com/brow se/RSP-229 86)
IDE crash in history when clicking "view in diff viewer"	IDE	RSP-23003 (https://qualit y.embarcade ro.com/brow se/RSP-230 03)
In Object Inspector, some text entries not fully visible	IDE	RSP-23006 (https://qualit y.embarcade ro.com/brow se/RSP-230 06)
Display clearly where the files are installed with GetIt	IDE	RSP-23202 (https://qualit y.embarcade ro.com/brow se/RSP-232 02)
Code completion does not work inside anonymous methods	IDE	RSP-23252 (https://qualit y.embarcade ro.com/brow

		se/RSP-232 52)
Two new features for GetIt Package Manager	IDE	RSP-23926 (https://quality.embarcadero.com/browse/RSP-239 26)
Stack Overflow when navigating source	IDE	RSP-24045 (https://quality.embarcadero.com/browse/RSP-240 45)
Ctrl-Space work as Ctrl-J	IDE	RSP-24078 (https://quality.embarcadero.com/browse/RSP-240 78)
Project manager doesn't let you add COM items to ActiveX library project	IDE	RSP-24186 (https://quality.embarcadero.com/browse/RSP-241 86)
Deploy option on Project menu must be visible even if disabled	IDE	RSP-24282 (https://quality.embarcadero.com/browse/RSP-242 82)
Dragging an Editor Tab to re-position Next to Another one causes error	IDE	RSP-24424 (https://quality.embarcadero.com/browse/RSP-244 24)
IDE Insight - existing text not preselected	IDE	RSP-24437 (https://quality.embarcadero.com/browse/RSP-244 37)
Update Local File Cache of SDK Manager is a system modal dialog, not application modal	IDE	RSP-24460 (https://quality.embarcadero.com/browse/RSP-244 60)
GetIt keyboard scrolling looks badly	IDE	RSP-24469 (https://quality.embarcadero.com/brow

		se/RSP-244 69)
Ctrl+A not supported when editing property values in the Object Inspector	IDE	RSP-24601 (https://qualit y.embarcade ro.com/brow se/RSP-246 01)
Opacity fails in FMX TRectangle	IDE	RSP-24681 (https://qualit y.embarcade ro.com/brow se/RSP-246 81)
Cannot open a file	IDE	RSP-25653 (https://qualit y.embarcade ro.com/brow se/RSP-256 53)
Static library project includes Application settings	IDE	RSP-25909 (https://qualit y.embarcade ro.com/brow se/RSP-259 09)
[macOS 64] Ticket stapling fails during notarization	IDE	RSP-25911 (https://qualit y.embarcade ro.com/brow se/RSP-259 11)
Error while notarizing app	IDE	RSP-26041 (https://qualit y.embarcade ro.com/brow se/RSP-260 41)
D10.3.2 Error Reading Form and Access violation	IDE	RSP-26318 (https://qualit y.embarcade ro.com/brow se/RSP-263 18)
Incorrect search bar position in IDE Editing Option set dialog	IDE	RSP-26626 (https://qualit y.embarcade ro.com/brow se/RSP-266 26)
Add Run Time Packages Dialog is not Themed (no Dark Style)	IDE	RSP-26973 (https://qualit y.embarcade ro.com/brow

		se/RSP-269 73)
IDE fails to respond or display correctly. High CPU usage.	IDE	RSP-27070 (https://qualit y.embarcade ro.com/brow se/RSP-270 70)
IDE drawing issues with theming enabled	IDE	RSP-27091 (https://qualit y.embarcade ro.com/brow se/RSP-270 91)
Debugger options contains an needlessly scrollable area	IDE	RSP-27190 (https://qualit y.embarcade ro.com/brow se/RSP-271 90)
last character in Value in ObjectInspector not show	IDE	RSP-27350 (https://qualit y.embarcade ro.com/brow se/RSP-273 50)
Editor scrollbar is not working	IDE	RSP-27531 (https://qualit y.embarcade ro.com/brow se/RSP-275 31)
IDE freezes if project options are changed during compilation	IDE	RSP-27651 (https://qualit y.embarcade ro.com/brow se/RSP-276 51)
Crash complete after close	IDE	RSP-27696 (https://qualit y.embarcade ro.com/brow se/RSP-276 96)
Android deployment uncheck problem	IDE	RSP-27756 (https://qualit y.embarcade ro.com/brow se/RSP-277 56)
GetIt finds no results for "C++"	IDE	RSP-27759 (https://qualit y.embarcade ro.com/brow

		se/RSP-277 59)
IDE and application freeze	IDE	RSP-27786 (https://qualit y.embarcade ro.com/brow se/RSP-277 86)
TListBoxItem Tag values set at design time do not carry through to runtime	IDE	RSP-27787 (https://qualit y.embarcade ro.com/brow se/RSP-277 87)
Application error , Exception EAccessViolation	IDE	RSP-27790 (https://qualit y.embarcade ro.com/brow se/RSP-277 90)
Delphi reported a disconnected session error after I started to run my program	IDE	RSP-27796 (https://qualit y.embarcade ro.com/brow se/RSP-277 96)
open new Project No response	IDE	RSP-27824 (https://qualit y.embarcade ro.com/brow se/RSP-278 24)
Error on Search from IDE	IDE	RSP-27829 (https://qualit y.embarcade ro.com/brow se/RSP-278 29)
After running a program delphi raise exception	IDE	RSP-27873 (https://qualit y.embarcade ro.com/brow se/RSP-278 73)
IDE stays minimized. Unable to restore IDE window	IDE	RSP-27908 (https://qualit y.embarcade ro.com/brow se/RSP-279 08)
SDK Manager with macOSX 10.15.4 not working	IDE	RSP-27927 (https://qualit y.embarcade ro.com/brow

		se/RSP-279 27)
MacOS: entitlement for Bluetooth has to be set manually	IDE, IDE\Build System	RSP-27234 (https://qualit y.embarcade ro.com/brow se/RSP-272 34)
can't create Storyboard Splash as required by Apple for iOS	IDE, IDE\Build System, IDE\Deployment	RSP-28065 (https://qualit y.embarcade ro.com/brow se/RSP-280 65)
Code completion window not working correctly for method with a parameter	IDE, IDE\Code Editor, IDE\General	RSP-15416 (https://qualit y.embarcade ro.com/brow se/RSP-154 16)
XE6 : Version Info option 'Auto generate build number' gives wrong Seconds	IDE, IDE\General	RSP-10027 (https://qualit y.embarcade ro.com/brow se/RSP-100 27)
CTRL+SPACE not working after some time	IDE, IDE\General	RSP-14803 (https://qualit y.embarcade ro.com/brow se/RSP-148 03)
Invalid Pointer Operation.	IDE, IDE\General	RSP-27744 (https://qualit y.embarcade ro.com/brow se/RSP-277 44)
Odd Look and Feel of the GetIt Package manager	IDE, IDE\GetIt	RSP-13895 (https://qualit y.embarcade ro.com/brow se/RSP-138 95)
AutoGenVersion not generate correct build number	IDE, IDE\Projects	RSP-28055 (https://qualit y.embarcade ro.com/brow se/RSP-280 55)
GetIt: undescribed issue IDs (add description to error numbers)	IDE, Install	RSP-25955 (https://qualit y.embarcade ro.com/brow

		se/RSP-259 55)
French translation error on Tools / Options / ... / Code audit	IDE, Translation	RSP-24294 (https://qualit y.embarcade ro.com/brow se/RSP-242 94)
Image Collection Editor doesn't save changes after replacing an image	IDE, VCL	RSB-2949 (h ttps://quality. embarcader o.com/brows e/RSB-2949)
Exception "Cannot assign a TVirtualImageListItem to a TVirtualImageListItem"	IDE, VCL	RSB-2984 (h ttps://quality. embarcader o.com/brows e/RSB-2984)
VCL frames that have Align set to alClient lose their designed Height and Width in the IDE	IDE, VCL	RSP-19863 (https://qualit y.embarcade ro.com/brow se/RSP-198 63)
tstylemanager.StyleNames has some times a wrong style list	IDE, VCL	RSP-20643 (https://qualit y.embarcade ro.com/brow se/RSP-206 43)
TVirtualImageList does not allow to inherit a form	IDE, VCL	RSP-23652 (https://qualit y.embarcade ro.com/brow se/RSP-236 52)
Cannot edit a form which has a StackPanel in a parent form	IDE, VCL	RSP-26440 (https://qualit y.embarcade ro.com/brow se/RSP-264 40)
Truncated tab caption	Install	RSB-3205 (h ttps://quality. embarcader o.com/brows e/RSB-3205)
Serial number screen misses some German translations	Install, Translation	RSB-1946 (h ttps://quality. embarcader o.com/brows e/RSB-1946)
TTask.Wait() does not wait canceled TTask's handler to complete	Libraries and Frameworks, RTL	RSP-11267 (https://qualit y.embarcade

		ro.com/brow se/RSP-112 67)
Unable to link (LME288 / unknown heap name)	Linker	RSP-13247 (https://qualit y.embarcade ro.com/brow se/RSP-132 47)
Win64 Link terminated if delayload enabled	Linker	RSP-15948 (https://qualit y.embarcade ro.com/brow se/RSP-159 48)
Invalid 64-bit ldap import library	Linker	RSP-17760 (https://qualit y.embarcade ro.com/brow se/RSP-177 60)
ilink64 incorrectly sets SizeOfHeaders	Linker	RSP-18823 (https://qualit y.embarcade ro.com/brow se/RSP-188 23)
Unresolved externals when compiling with clang compiler	Linker	RSP-21172 (https://qualit y.embarcade ro.com/brow se/RSP-211 72)
Android Linker	Linker	RSP-22092 (https://qualit y.embarcade ro.com/brow se/RSP-220 92)
Clang for win32 cause unresolved error for unused code	Linker	RSP-23557 (https://qualit y.embarcade ro.com/brow se/RSP-235 57)
Delphi forces wrong binary into APK	Linker	RSP-27025 (https://qualit y.embarcade ro.com/brow se/RSP-270 25)
Running macOS applications from the IDE do not appear to have entitlements applied	PAServer	RSP-27313 (https://qualit y.embarcade ro.com/brow

		se/RSP-273 13)
no Tethering on an PC with multiple devices	RTL	RSP-11716 (https://quality.embarcadero.com/browse/RSP-117 16)
AV after dynamically unloading a DLL that uses std::facet	RTL, RTL\C++	RSP-16469 (https://quality.embarcadero.com/browse/RSP-164 69)
Use stringstream in DLL with dynamic RTL	RTL, RTL\C++	RSP-16755 (https://quality.embarcadero.com/browse/RSP-167 55)
AV in CBuilder Win64 in TDataset descendants	RTL, RTL\C++	RSP-18865 (https://quality.embarcadero.com/browse/RSP-188 65)
Deploy for Appstrore MISS Debug Information	RTL, RTL\C++	RSP-19542 (https://quality.embarcadero.com/browse/RSP-195 42)
TJSONPair missing a constructor	RTL, RTL\C++	RSP-23163 (https://quality.embarcadero.com/browse/RSP-231 63)
Win64 TThread/Exception access violation	RTL, RTL\C++	RSP-27127 (https://quality.embarcadero.com/browse/RSP-271 27)
std::array template deduction not working	RTL, RTL\C++	RSP-27381 (https://quality.embarcadero.com/browse/RSP-273 81)
eof does not work in 64-bit target	RTL, RTL\C++, RTL\C++\I/O	RSP-27082 (https://quality.embarcadero.com/brow

		se/RSP-270 82)
[clang32/64] compiler errors on usage of C++11 math functions in <cmath>	RTL, RTL\C++, RTL\C++\Math	RSP-12160 (https://qualit y.embarcade ro.com/brow se/RSP-121 60)
Using va_copy causes Access Violation when compiled with clang 32/64	RTL, RTL\C++, RTL\C++\Other	RSP-27577 (https://qualit y.embarcade ro.com/brow se/RSP-275 77)
[C++17] Error using 'std::sample'	RTL, RTL\C++, RTL\C++\STL	RSB-2998 (h ttps://quality. embarcader o.com/brows e/RSB-2998)
std::basic_string is missing non const data()	RTL, RTL\C++, RTL\C++\STL	RSP-23438 (https://qualit y.embarcade ro.com/brow se/RSP-234 38)
Using std::unique_ptr with an array gives an error	RTL, RTL\C++, RTL\C++\STL	RSP-27936 (https://qualit y.embarcade ro.com/brow se/RSP-279 36)
Add _PROCESS_MEMORY_COUNTERS_EX Support	RTL, RTL\Delphi	RSB-1863 (h ttps://quality. embarcader o.com/brows e/RSB-1863)
Linux/SysSocketTypes.inc -Incorrect constant value	RTL, RTL\Delphi	RSB-1913 (h ttps://quality. embarcader o.com/brows e/RSB-1913)
Regression: Application Title double DPI scaled with VCL styles	RTL, RTL\Delphi	RSB-2678 (h ttps://quality. embarcader o.com/brows e/RSB-2678)
Handling of tkMRecord still missing in System.Rtti	RTL, RTL\Delphi	RSB-2714 (h ttps://quality. embarcader o.com/brows e/RSB-2714)
Regression: An AV occurs on obtaining a managed record using the TRttiProperty.GetValue function	RTL, RTL\Delphi	RSB-2758 (h ttps://quality. embarcader

		o.com/brows e/RSB-2758)
Can Managed records with ctor have an "empty state"? Possible bugs in TList<>	RTL, RTL\Delphi	RSB-2786 (h ttps://quality. embarcader o.com/brows e/RSB-2786)
Wrong CreateJobObject declaration on Winapi.Windows unit.	RTL, RTL\Delphi	RSB-2871 (h ttps://quality. embarcader o.com/brows e/RSB-2871)
Missing constants for Windows JobApi.	RTL, RTL\Delphi	RSB-2872 (h ttps://quality. embarcader o.com/brows e/RSB-2872)
pidAllPlatforms doesn't contain pidAndroid64Arm	RTL, RTL\Delphi	RSB-3227 (h ttps://quality. embarcader o.com/brows e/RSB-3227)
Invalid declaration of REFIID in Macapi.CoreAudio	RTL, RTL\Delphi	RSB-3251 (h ttps://quality. embarcader o.com/brows e/RSB-3251)
Invalid declarations of AudioChannelFlags and AudioChannelBitmap in Macapi.CoreAudio	RTL, RTL\Delphi	RSB-3254 (h ttps://quality. embarcader o.com/brows e/RSB-3254)
System.Threading needs attention	RTL, RTL\Delphi	RSB-3276 (h ttps://quality. embarcader o.com/brows e/RSB-3276)
SOAP webservice client shows all SOAP faults as Internal server error (500)	RTL, RTL\Delphi	RSB-3487 (h ttps://quality. embarcader o.com/brows e/RSB-3487)
pidAllPlatforms is short of pidAndroid64Arm	RTL, RTL\Delphi	RSB-3490 (h ttps://quality. embarcader o.com/brows e/RSB-3490)
TIntegerHelper.ToString much slower than IntToStr	RTL, RTL\Delphi	RSP-11176 (https://qualit y.embarcade ro.com/brow se/RSP-1117 6)
	RTL, RTL\Delphi	

Missing import of AccessibleObjectFromPoint etc in Winapi.oleacc		RSP-12712 (https://quality.embarcadero.com/browse/RSP-12712)
Incorrect inline assembler code in System.ObjAuto.pas in 64 bits	RTL, RTL\Delphi	RSP-13620 (https://quality.embarcadero.com/browse/RSP-13620)
Android Intent Service handler not called	RTL, RTL\Delphi	RSP-14696 (https://quality.embarcadero.com/browse/RSP-14696)
OSX Delphi-Objective-C Bridge interfaces missing methods	RTL, RTL\Delphi	RSP-15017 (https://quality.embarcadero.com/browse/RSP-15017)
ELocalTimeInvalid if you call TTimeZone.ToUniversalTime depending on local timezone	RTL, RTL\Delphi	RSP-15021 (https://quality.embarcadero.com/browse/RSP-15021)
CLONE - TTetheringAppProfile.OnAcceptResource gives wrong value in AProfileID parameter. ALSO in Berlin 10.1	RTL, RTL\Delphi	RSP-15043 (https://quality.embarcadero.com/browse/RSP-15043)
Wrong typecast in System.ObjAuto.TBaseMethodHandlerInstance.Create() may cause EAccessViolation	RTL, RTL\Delphi	RSP-15243 (https://quality.embarcadero.com/browse/RSP-15243)
TJFMXTextEditorProxy INPUT_NUMBER_AND_PUNCTUATION is mapped incorrectly	RTL, RTL\Delphi	RSP-15597 (https://quality.embarcadero.com/browse/RSP-15597)
Implement uniform memory management on all platforms	RTL, RTL\Delphi	RSP-15689 (https://quality.embarcadero.com/browse/RSP-15689)
API Headers for credui.dll	RTL, RTL\Delphi	

		RSP-16038 (https://quality.embarcadero.com/browse/RSP-16038)
SHARDAPPIDINFOIDLIST is declared incorrectly in Winapi.ShlObj	RTL, RTL\Delphi	RSP-16235 (https://quality.embarcadero.com/browse/RSP-16235)
SHCreateShellItemArray is declared incorrectly in Winapi.ShlObj	RTL, RTL\Delphi	RSP-16236 (https://quality.embarcadero.com/browse/RSP-16236)
TTask.WaitForAll crashes if timeout is INFINITE	RTL, RTL\Delphi	RSP-16377 (https://quality.embarcadero.com/browse/RSP-16377)
Incorrect binding in MacApi.Security.pas	RTL, RTL\Delphi	RSP-16509 (https://quality.embarcadero.com/browse/RSP-16509)
ID3D11ShaderReflection in Winapi.D3D11Shader has wrong GUID	RTL, RTL\Delphi	RSP-16622 (https://quality.embarcadero.com/browse/RSP-16622)
Wrong declaration of "ID3DInclude" in Winapi.D3DCommon	RTL, RTL\Delphi	RSP-16623 (https://quality.embarcadero.com/browse/RSP-16623)
Wrong calling conventions in Winapi.D3D11.pas	RTL, RTL\Delphi	RSP-16663 (https://quality.embarcadero.com/browse/RSP-16663)
add addObserver to nsObject	RTL, RTL\Delphi	RSP-16857 (https://quality.embarcadero.com/browse/RSP-16857)
	RTL, RTL\Delphi	

SERVICE_DELAYED_AUTO_START_INFO declared wrong		RSP-16930 (https://quality.embarcadero.com/browse/RSP-16930)
Make ReportMemoryLeaksOnShutdown work for Android out of the box	RTL, RTL\Delphi	RSP-17159 (https://quality.embarcadero.com/browse/RSP-17159)
FMX.Types.pas and FMX.Platform.pas are absent for Linux platform	RTL, RTL\Delphi	RSP-17521 (https://quality.embarcadero.com/browse/RSP-17521)
Compass sensor in iOS always returns the current timestamp, instead of the timestamp of the latest available heading	RTL, RTL\Delphi	RSP-17831 (https://quality.embarcadero.com/browse/RSP-17831)
Declaration of GetNumaNodeProcessorMask is wrong	RTL, RTL\Delphi	RSP-18106 (https://quality.embarcadero.com/browse/RSP-18106)
Windows "secur32.dll" api	RTL, RTL\Delphi	RSP-18196 (https://quality.embarcadero.com/browse/RSP-18196)
isRegisteredForRemoteNotifications missing from uiApplication	RTL, RTL\Delphi	RSP-18670 (https://quality.embarcadero.com/browse/RSP-18670)
system.internal.unwinder.pas is missing a const keyword	RTL, RTL\Delphi	RSP-19017 (https://quality.embarcadero.com/browse/RSP-19017)
If task is canceled then the TTask.WaitForAll-method is finished before the task is finished	RTL, RTL\Delphi	RSP-19435 (https://quality.embarcadero.com/browse/RSP-19435)
customsort executed unnecessaily	RTL, RTL\Delphi	

		RSP-19551 (https://quality.embarcadero.com/browse/RSP-19551)
THash.DigestAsString terribly slow and badly implemented	RTL, RTL\Delphi	RSP-19799 (https://quality.embarcadero.com/browse/RSP-19799)
Add parameter AMinTimeToWait to ForceQueue to delay the execution of code without creating a thread	RTL, RTL\Delphi	RSP-19864 (https://quality.embarcadero.com/browse/RSP-19864)
add wglSwapIntervalEXT to Winapi.OpenGLext.pas	RTL, RTL\Delphi	RSP-19891 (https://quality.embarcadero.com/browse/RSP-19891)
TimeInRange does not consider float inaccuracy	RTL, RTL\Delphi	RSP-19933 (https://quality.embarcadero.com/browse/RSP-19933)
Bad declaration of 'EnumServicesStatus' (Winaip.WinSvc.pas)	RTL, RTL\Delphi	RSP-20075 (https://quality.embarcadero.com/browse/RSP-20075)
FindCmdLineSwitch does not work with empty Chars set	RTL, RTL\Delphi	RSP-20282 (https://quality.embarcadero.com/browse/RSP-20282)
Wrong declaration for Singly-linked list API	RTL, RTL\Delphi	RSP-20283 (https://quality.embarcadero.com/browse/RSP-20283)
The PUREPASCAL version of StrToFloat erroneously uses IsDigit when parsing the input and erroneously accepts non-latin digits	RTL, RTL\Delphi	RSP-20334 (https://quality.embarcadero.com/browse/RSP-20334)
Wrong import functions in Winapi.UserEnv	RTL, RTL\Delphi	

		RSP-20889 (https://quality.embarcadero.com/browse/RSP-20889)
System.TInstItem.Free using Dispose causes error when using custom memory manager	RTL, RTL\Delphi	RSP-20907 (https://quality.embarcadero.com/browse/RSP-20907)
GdiplusStartup and GdiplusShutdown have wrong parameter definition	RTL, RTL\Delphi	RSP-20942 (https://quality.embarcadero.com/browse/RSP-20942)
(Linux, iOS64, macOS64) Dynamically calling method with managed record result fails	RTL, RTL\Delphi	RSP-21076 (https://quality.embarcadero.com/browse/RSP-21076)
Wrong Declaration in Winapi.Direct3D8	RTL, RTL\Delphi	RSP-21081 (https://quality.embarcadero.com/browse/RSP-21081)
Invalid Class TypeCast exception when access null variant	RTL, RTL\Delphi	RSP-21705 (https://quality.embarcadero.com/browse/RSP-21705)
System.AnsiStrings AdjustLineBreaks not exported	RTL, RTL\Delphi	RSP-21947 (https://quality.embarcadero.com/browse/RSP-21947)
Weak references crash the application on exit when used with FastMM	RTL, RTL\Delphi	RSP-22897 (https://quality.embarcadero.com/browse/RSP-22897)
Delphi Rio still ships with a broken ASM version of Move	RTL, RTL\Delphi	RSP-23018 (https://quality.embarcadero.com/browse/RSP-23018)
Memory leak in TInvokeableVariantType.DispInvoke	RTL, RTL\Delphi	

		RSP-23093 (https://quality.embarcadero.com/browse/RSP-23093)
Optimize TInvokeableVariantType.DispInvoke	RTL, RTL\Delphi	RSP-23095 (https://quality.embarcadero.com/browse/RSP-23095)
PthreadAPI.inc has incorrectly generates by reference values for Linux (and macOS64)	RTL, RTL\Delphi	RSP-23204 (https://quality.embarcadero.com/browse/RSP-23204)
TIBCustomDataSet and large data	RTL, RTL\Delphi	RSP-23253 (https://quality.embarcadero.com/browse/RSP-23253)
Does not work Cancel in TParallel.Join	RTL, RTL\Delphi	RSP-23266 (https://quality.embarcadero.com/browse/RSP-23266)
FIONREAD value is not correct in iOS 64	RTL, RTL\Delphi	RSP-23366 (https://quality.embarcadero.com/browse/RSP-23366)
TypeInfo changes when converting TValue to Variant and back to TValue	RTL, RTL\Delphi	RSP-23373 (https://quality.embarcadero.com/browse/RSP-23373)
Add default directive to Items property of TJSONArray	RTL, RTL\Delphi	RSP-23711 (https://quality.embarcadero.com/browse/RSP-23711)
Incorrect interace declarations in WinAPI.OleDB.pas	RTL, RTL\Delphi	RSP-23764 (https://quality.embarcadero.com/browse/RSP-23764)
	RTL, RTL\Delphi	

function GetCommandText in ICommandText and ICommandTextSC interface inside OleDB unit is incorrectly declared		RSP-23843 (https://quality.embarcadero.com/browse/RSP-23843)
AV on finalizing TThreadPool	RTL, RTL\Delphi	RSP-23874 (https://quality.embarcadero.com/browse/RSP-23874)
Calling inherited in TList<T> constructor leads to memory leak	RTL, RTL\Delphi	RSP-23943 (https://quality.embarcadero.com/browse/RSP-23943)
Missing Windows privilege constants	RTL, RTL\Delphi	RSP-23989 (https://quality.embarcadero.com/browse/RSP-23989)
Mobile platforms don't have 8-bit character type	RTL, RTL\Delphi	RSP-24020 (https://quality.embarcadero.com/browse/RSP-24020)
TCustomIniFile miss WriteInt64 and ReadInt64	RTL, RTL\Delphi	RSP-24422 (https://quality.embarcadero.com/browse/RSP-24422)
Add IsEmpty function to TGUID	RTL, RTL\Delphi	RSP-24504 (https://quality.embarcadero.com/browse/RSP-24504)
DWRITE_FONT_METRICS - wrong field types	RTL, RTL\Delphi	RSP-24548 (https://quality.embarcadero.com/browse/RSP-24548)
[REST.Json.Interceptors] InitializeConverters have unfinished code	RTL, RTL\Delphi	RSP-24594 (https://quality.embarcadero.com/browse/RSP-24594)
Make QuickSort in System.Classes more efficient	RTL, RTL\Delphi	

		RSP-24620 (https://quality.embarcadero.com/browse/RSP-24620)
Incorrect declarations in Winapi.D3D11.pas	RTL, RTL\Delphi	RSP-25524 (https://quality.embarcadero.com/browse/RSP-25524)
32 bit Integer counters in TThreadedQueue	RTL, RTL\Delphi	RSP-25941 (https://quality.embarcadero.com/browse/RSP-25941)
[macOS 64] Wrong constants in StrOptsTypes.inc	RTL, RTL\Delphi	RSP-25963 (https://quality.embarcadero.com/browse/RSP-25963)
[macOS 64] Wrong declarations in Macapi.CocoaTypes	RTL, RTL\Delphi	RSP-26209 (https://quality.embarcadero.com/browse/RSP-26209)
Cannot set proper values for TThread Policy and Priority with Linux64 Compiler	RTL, RTL\Delphi	RSP-26280 (https://quality.embarcadero.com/browse/RSP-26280)
Strange RTL dependencies	RTL, RTL\Delphi	RSP-26378 (https://quality.embarcadero.com/browse/RSP-26378)
Missing Linux files	RTL, RTL\Delphi	RSP-26654 (https://quality.embarcadero.com/browse/RSP-26654)
AccessViolation on Const-ShortString Parameter in subroutine	RTL, RTL\Delphi	RSP-27112 (https://quality.embarcadero.com/browse/RSP-27112)
TBufferedFileStream - impossible to detect write errors	RTL, RTL\Delphi	

		RSP-27181 (https://quality.embarcadero.com/browse/RSP-27181)
FreeAndNil is written in unsafe way	RTL, RTL\Delphi	RSP-27208 (https://quality.embarcadero.com/browse/RSP-27208)
App crashing on Android 10 with targetSDK = 29 in AndroidManifest	RTL, RTL\Delphi	RSP-27218 (https://quality.embarcadero.com/browse/RSP-27218)
Incorrect enum values in Winapi.DirectShow9	RTL, RTL\Delphi	RSP-27288 (https://quality.embarcadero.com/browse/RSP-27288)
TJsonSerializer Deserialiize uses JsonConverterAttribute() where as Populate doesn't	RTL, RTL\Delphi	RSP-27315 (https://quality.embarcadero.com/browse/RSP-27315)
Method CreateFormFromStings spelling mistake	RTL, RTL\Delphi	RSP-27358 (https://quality.embarcadero.com/browse/RSP-27358)
GetMemoryErrorHandlingCapabilities is incorrectly defined	RTL, RTL\Delphi	RSP-27365 (https://quality.embarcadero.com/browse/RSP-27365)
GetProcessorSystemCycleTime incorrectly defined	RTL, RTL\Delphi	RSP-27366 (https://quality.embarcadero.com/browse/RSP-27366)
Win64 Multi tier application fails	RTL, RTL\Delphi	RSP-27376 (https://quality.embarcadero.com/browse/RSP-27376)
	RTL, RTL\Delphi	

SaferSetLevelInformation in winapi.winsafer is incorrectly defined		RSP-27408 (https://quality.embarcadero.com/browse/RSP-27408)
Optimize constructors of TStreamWriter and TBinaryWriter	RTL, RTL\Delphi	RSP-27670 (https://quality.embarcadero.com/browse/RSP-27670)
TGuid operator overloads should be marked as inline	RTL, RTL\Delphi	RSP-27706 (https://quality.embarcadero.com/browse/RSP-27706)
[Android] libFlatBox2D.a for 64-bits is missing	RTL, RTL\Delphi	RSP-27762 (https://quality.embarcadero.com/browse/RSP-27762)
DUnitX OutOfMemory in 64-Bit	RTL, RTL\Delphi	RSP-27815 (https://quality.embarcadero.com/browse/RSP-27815)
JSON Writer does not Escape all characters below 32 correctly	RTL, RTL\Delphi	RSP-27821 (https://quality.embarcadero.com/browse/RSP-27821)
Unnecessary declaration of E_NOINTERFACE in TInterfacedPersistent.QueryInterface	RTL, RTL\Delphi	RSP-27856 (https://quality.embarcadero.com/browse/RSP-27856)
DateTimeToXMLTime fails	RTL, RTL\Delphi	RSP-27865 (https://quality.embarcadero.com/browse/RSP-27865)
Starting and ending boundaries for a multi part content does not match	RTL, RTL\Delphi	RSP-27968 (https://quality.embarcadero.com/browse/RSP-27968)

Speed Improvement for TDoubleHelper.SpecialType: TFloatSpecial;	RTL, RTL\Delphi, RTL\Delphi\Arithmetic/Precision	RSP-27966 (https://quality.embarcadero.com/browse/RSP-27966)
Empty dates cause an exception when DST is off when using TTimeZone class	RTL, RTL\Delphi, RTL\Delphi\Date/Time	RSP-18396 (https://quality.embarcadero.com/browse/RSP-18396)
Calling UIDevice::uniqueIdentifier causes an access violation	RTL, RTL\Delphi, RTL\Delphi\Header Translations	RSP-15851 (https://quality.embarcadero.com/browse/RSP-15851)
real_pcre_extra in System.RegularExpressionsAPI bad in 64bit compile	RTL, RTL\Delphi, RTL\Delphi\Header Translations	RSP-18107 (https://quality.embarcadero.com/browse/RSP-18107)
[MacOS] Incorrect NSUserNotification declaration causes an exception	RTL, RTL\Delphi, RTL\Delphi\Header Translations	RSP-18136 (https://quality.embarcadero.com/browse/RSP-18136)
miss setTextContainerInset and textContainerInset in UITextView	RTL, RTL\Delphi, RTL\Delphi\Header Translations	RSP-18314 (https://quality.embarcadero.com/browse/RSP-18314)
Inappropriate parameter declaration about Thread Pool Functions in Winapi.Windows.pas	RTL, RTL\Delphi, RTL\Delphi\Header Translations	RSP-18439 (https://quality.embarcadero.com/browse/RSP-18439)
Generics.TList.List code breaking changes	RTL, RTL\Delphi, RTL\Delphi\List/Collections	RSP-27243 (https://quality.embarcadero.com/browse/RSP-27243)
TStringList and IndexOfObject issue	RTL, RTL\Delphi, RTL\Delphi\List/Collections	RSP-27893 (https://quality.embarcadero.com/browse/RSP-27893)
JSON classes do not have virtual constructors		

	RTL, RTL\Delphi, RTL\Delphi\Net	RSP-18515 (https://quality.embarcadero.com/browse/RSP-18515)
Implement Upload-Progress-Event for TNetHTTPClient	RTL, RTL\Delphi, RTL\Delphi\Net	RSP-20543 (https://quality.embarcadero.com/browse/RSP-20543)
Security bug of Httpclient	RTL, RTL\Delphi, RTL\Delphi\Net	RSP-23824 (https://quality.embarcadero.com/browse/RSP-23824)
TNetHTTPClient.OnReceiveData and TNetHTTPRequest.OnReceiveData cannot be associated with TNetHTTPClient/TNetHTTPRequest	RTL, RTL\Delphi, RTL\Delphi\Net	RSP-26403 (https://quality.embarcadero.com/browse/RSP-26403)
Invalid expires time caused infinite loop in THTTPClient	RTL, RTL\Delphi, RTL\Delphi\Net	RSP-27156 (https://quality.embarcadero.com/browse/RSP-27156)
NotificationCenter.CancelNotification always delete only the first	RTL, RTL\Delphi, RTL\Delphi\Other	RSP-24008 (https://quality.embarcadero.com/browse/RSP-24008)
TNetEncoding.URL.Encode(4-btyes utf8) is incorrect	RTL, RTL\Delphi, RTL\Delphi\Strings	RSP-26520 (https://quality.embarcadero.com/browse/RSP-26520)
Task created using TParallel.Join is executed again when exception is raised	RTL, RTL\Delphi, RTL\Delphi\Threads	RSP-20590 (https://quality.embarcadero.com/browse/RSP-20590)
Non-thread-safe code in System.Threading.pas	RTL, RTL\Delphi, RTL\Delphi\Threads	RSP-24031 (https://quality.embarcadero.com/browse/RSP-24031)
Reloading Package SOAPRTL (app crash)		

	RTL, RTL\Delphi, RTL\Delphi\Threads	RSP-26577 (https://quality.embarcadero.com/browse/RSP-26577)
TThread never gets freed/destroyed under ARC POSIX	RTL, RTL\Delphi, RTL\Delphi\Threads	RSP-27245 (https://quality.embarcadero.com/browse/RSP-27245)
TXSBaseCustomDateTime.GetAsDateTime (Soap.XSBuiltIns) is wrong for values near to the daylight saving time	RTL, RTL\Delphi, SOAP	RSP-17649 (https://quality.embarcadero.com/browse/RSP-17649)
DateTimeToXMLTime fails assigning UTC time to TXSDateTime	RTL, RTL\Delphi, SOAP	RSP-24149 (https://quality.embarcadero.com/browse/RSP-24149)
THTTPRIO calls ShowSelectCertificateDialog also when no client certificate is required	RTL, RTL\Delphi, SOAP	RSP-27523 (https://quality.embarcadero.com/browse/RSP-27523)
Force user and password credential on new TNetHttpClient	RTL, RTL\Delphi\Net	RSP-11247 (https://quality.embarcadero.com/browse/RSP-11247)
TObject.GetInterface has non optimal code	RTL\Delphi	RSP-27701 (https://quality.embarcadero.com/browse/RSP-27701)
InvokeImplGetter has non optimal code	RTL\Delphi	RSP-27702 (https://quality.embarcadero.com/browse/RSP-27702)
TObject.GetInterfaceEntry has non optimal code	RTL\Delphi	RSP-27705 (https://quality.embarcadero.com/browse/RSP-27705)
	RTL\Delphi	

Empty command line arguments crash System.SysUtils.FindCmdLineSwitch on POSIX		RSP-27715 (https://quality.embarcadero.com/browse/RSP-27715)
{$EXTERNALSYM} Mismatch with IMAGE_THUNK_DATA32 in Winapi.Windows.pas	RTL\Delphi	RSP-28202 (https://quality.embarcadero.com/browse/RSP-28202)
THTTPClient request can not be canceld	RTL\Delphi\Net	RSP-20827 (https://quality.embarcadero.com/browse/RSP-20827)
TNetHTTPClient OnRequestError lacks error code or exception object	RTL\Delphi\Net	RSP-23446 (https://quality.embarcadero.com/browse/RSP-23446)
Can I cancel a job of NetHTTPClient put	RTL\Delphi\Net	RSP-26495 (https://quality.embarcadero.com/browse/RSP-26495)
Delphi Android TNetHTTPClient OnReceiveData freeze	RTL\Delphi\Net	RSP-27307 (https://quality.embarcadero.com/browse/RSP-27307)
THTTPClient.ContentType should ensure that only one type can be set.	RTL\Delphi\Net	RSP-27634 (https://quality.embarcadero.com/browse/RSP-27634)
System.Net.Mime disobeys the standard for multipart content type	RTL\Delphi\Net	RSP-27964 (https://quality.embarcadero.com/browse/RSP-27964)
TLinuxHTTPResponse ReceiveData notifies DoReceiveDataProgress before writing into the stream	RTL\Delphi\Net	RSP-28205 (https://quality.embarcadero.com/browse/RSP-28205)
WSDL import (TByteDynArray to TArray<byte>)	SOAP	

		RSP-21850 (https://quality.embarcadero.com/browse/RSP-21850)
ESOAPHTTPException property StatusCode removed in Delphi 10.3	SOAP	RSP-23432 (https://quality.embarcadero.com/browse/RSP-23432)
10.3.1 Rio SOAP web services SendTimeout property is missing.	SOAP	RSP-24184 (https://quality.embarcadero.com/browse/RSP-24184)
Missing property HTTPWebNode	SOAP	RSP-24311 (https://quality.embarcadero.com/browse/RSP-24311)
Missing the SendTimeout property in the THTTPReqResp class (unit Soap.SOAPHTTPTrans)	SOAP	RSP-24600 (https://quality.embarcadero.com/browse/RSP-24600)
THTTPRIO.HTTPWebNode.SendTimeout undefined?	SOAP	RSP-24723 (https://quality.embarcadero.com/browse/RSP-24723)
SOAP HTTPRIO range check error in TSOAPDomConv.InitObjectFromSOAP	SOAP	RSP-25536 (https://quality.embarcadero.com/browse/RSP-25536)
THTTPReqResp.OnHttpError not exist	SOAP	RSP-25927 (https://quality.embarcadero.com/browse/RSP-25927)
UseDefaultCredentials can not be set in THTTPReqResp	SOAP	RSP-26210 (https://quality.embarcadero.com/browse/RSP-26210)
	SOAP	

Unable to set client certificate for all SOAP HTTP clients (TStreamLoader)		RSP-26414 (https://quality.embarcadero.com/browse/RSP-26414)
Missing the OnPostingData event in the THTTPReqResp class	SOAP	RSP-26494 (https://quality.embarcadero.com/browse/RSP-26494)
Correct Type Cast of Soap Data	SOAP	RSP-26554 (https://quality.embarcadero.com/browse/RSP-26554)
SOAP-Exception not thrown correct	SOAP	RSP-26630 (https://quality.embarcadero.com/browse/RSP-26630)
System.net exception absorbing ERemoteable exception (difference between RIO and Berlin)	SOAP	RSP-26989 (https://quality.embarcadero.com/browse/RSP-26989)
INTAEditViewNotifier in ToolsAPI is missing a GUID	Tools API	RSP-27238 (https://quality.embarcadero.com/browse/RSP-27238)
TDBNavigator in VCL High DPI button icon is very small	VCL	RSB-2477 (https://quality.embarcadero.com/browse/RSB-2477)
Vcl Styles do not DPI scale	VCL	RSB-2543 (https://quality.embarcadero.com/browse/RSB-2543)
TCategoryPanelGroup Panels do not scale as expected on a DPI change	VCL	RSB-3015 (https://quality.embarcadero.com/browse/RSB-3015)
Change pngimage Unit, so that CRC checking of chunks can be turned off with a property of TPNGImage	VCL	RSB-3348 (https://quality.embarcader

		o.com/brows e/RSB-3348)
VCL-Syles: In High-DPI Form Caption Height is not scaled	VCL	RSP-12115 (https://qualit y.embarcade ro.com/brow se/RSP-121 15)
Do not use nearest neighbor image interpolation for e.g. TImage and many other graphics functions	VCL	RSP-13461 (https://qualit y.embarcade ro.com/brow se/RSP-134 61)
VCL styles don't scale properly under high DPI configurations	VCL	RSP-13507 (https://qualit y.embarcade ro.com/brow se/RSP-135 07)
TUxThemeStyle is missing TUxThemeDataNavButtonElements, leading to exception when custom theme used	VCL	RSP-14287RSP-14262 (http s://quality.e mbarcadero. com/browse/ RSP-14262)
Popup menu drawn incorrectly on a styled form when inside a frame	VCL	RSP-14287 (https://qualit y.embarcade ro.com/brow se/RSP-142 87)
Error diplaying Tab-images in styled TPageControl	VCL	RSP-14732 (https://qualit y.embarcade ro.com/brow se/RSP-147 32)
TFileTypeItem misses Assign method	VCL	RSP-14904 (https://qualit y.embarcade ro.com/brow se/RSP-149 04)
TStatus Bar when a VCL Style is applied shows a grabber inappropriately.	VCL	RSP-16079 (https://qualit y.embarcade ro.com/brow se/RSP-160 79)
Titlebar wrong height 4K	VCL	RSP-16516 (https://qualit y.embarcade ro.com/brow

		se/RSP-165 16)
DPI-change (scale) after theme-change bug	VCL	RSP-16598 (https://qualit y.embarcade ro.com/brow se/RSP-165 98)
Allow scaling of Caption and non-client area in HighDPI aware app	VCL	RSP-16877 (https://qualit y.embarcade ro.com/brow se/RSP-168 77)
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Restoring minimized form with TMainMenu (VCL with Themes) impossible by double clicking because system menu appears on top	VCL	RSP-18262 (https://qualit y.embarcade ro.com/brow se/RSP-182 62)
tool form on TScrollBox is not movable when VclStyles are active	VCL	RSP-18590 (https://qualit y.embarcade ro.com/brow se/RSP-185 90)
Memory leak in TFormStyleHook.WMNCCalcSize()	VCL	RSP-18962 (https://qualit y.embarcade ro.com/brow se/RSP-189 62)
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		se/RSP-206 77)
PopupActionBar wrong position if running on secondary monitor	VCL	RSP-21011 (https://qualit y.embarcade ro.com/brow se/RSP-210 11)
Adding Jump items at incorrect locations in Vcl.JumpList.pas	VCL	RSP-21134 (https://qualit y.embarcade ro.com/brow se/RSP-211 34)
TControl.ScaleConstraints() is faulty	VCL	RSP-21162 (https://qualit y.embarcade ro.com/brow se/RSP-211 62)
TSpeedButton and TBitButton should support icons with alpha channel [add TImageList support]	VCL	RSP-21207 (https://qualit y.embarcade ro.com/brow se/RSP-212 07)
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		se/RSP-216 56)
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- Release Notes
- What's New

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