Toad for IBM DB2 7.2.x

Release Notes

Friday, May 22, 2020 Contents

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About Toad for IBM DB2

With Toad, developers and database administrators can use a familiar, proven tool to manage databases. Toad empowers developers and administrators, of varying skill levels, to rapidly create and execute queries, automate database object management, and develop SQL more efficiently.

Toad also provides utilities to compare, extract and search for objects, manage projects, import/export data and administer the database, while increasing your productivity and delivering access to an active user community.

Toad for IBM DB2 7.2 is a minor release with new features, security enhancements, and resolved issues.

New Features

In Toad for IBM DB2 7.2 the following new features were implemented:

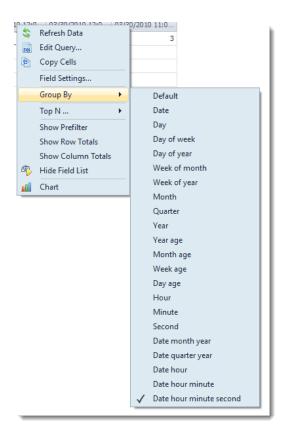
Database Support

IBM DB2 LUW 11.5 is now supported

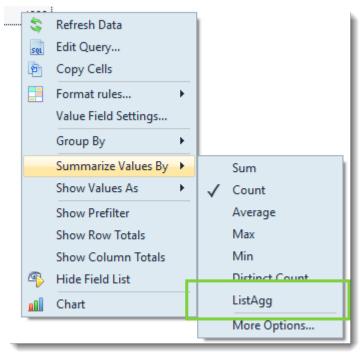
You now can use Toad to connect and use new features of IBM DB2 LUW 11.5 including external tables.

Pivot Grid

We added new options for Group By functions. Right-click a column header and Select from the available **Group By** options according to your data.



Now you can also summarize by ListAgg function.



See Resolved Issues for more enhancements and resolved issues in this release of Toad for IBM DB2.

Learn More

Get the latest product information, find helpful resources, and join a discussion with the Toad for IBM DB2 team and other community members. Join the Toad for IBM DB2 community at Toad World.

System Requirements

Client Requirements

Before installing Toad, ensure that your client system meets the following minimum hardware and software requirements:

Requirement	Details
Platform	2 GHz processor (recommended minimum)
Memory	 8 GB of RAM minimum, 16 GB recommended Note: The memory required may vary based on the following: Applications that are running on your system when using Toad Size and complexity of the database Amount of database activity Number of concurrent users accessing the database
Hard Disk Space	800 MB to install Toad 162 MB to run Toad Note: The disk space required may vary based on the edition of Toad selected for installation.
Operating System	Windows Server® 2012 Windows Server® 2012 R2 Windows Server® 2016 Windows Server® 2019 Windows® 8.1 (32-bit or 64-bit) Windows® 10
.NET Framework	Microsoft® .NET Framework 4.7.1
Database Client	When connecting to a DB2 database/subsystem, ensure that you have a DB2 Client or IBM Data Server Driver installed. Toad supports DB2 Client versions 9.7.6 through 11.5. Toad has been tested with the following versions of the DB2 Client: 9.7.6, 9.7.9, 10.1.0, 10.1.2, 10.1.3, 10.5.0, 10.5.2, 10.5.3, and 11.1.0.
Additional Requirements	Web BrowserMicrosoft® Internet Explorer® 11 or laterScreenRecommended maximum DPI settings for Toad are 125%. It is possible to use Toad up to200% but some dialog windows will not be completely usable anymore.Maximum tested resolution for Toad is 3800 x 2160 px.

Server Requirements

Before installing Toad, ensure that your server meets the following minimum hardware and software requirements:

Requirement	Details	
Database Server	IBM DB2 for LUW 9.7, 10.1, 10.5, 10.5.0.5, 11.1, 11.5	
	IBM DB2 for z/OS 11, 12	

Requirement	Details		
	Note: Toad may support IBM DB2 Express and SWE in addition to listed above servers but note that no testing was performed on it.		
	Note: Windows 8, 10 and Windows Server 2012 require the following Fix Pack in order to ensure registration of DLLs in Global Assembly Cache:		
	IBM DB2 LUW 10.5 Fix Pack 4		
	IBM DB2 LUW 10.1 Fix Pack 4		
	IBM DB2 LUW 9.7 Fix Pack 10		
	Note: To use Access 2016 64-bit to connect to an Access database in Toad, the Microsoft Access Database Engine is required and might not be included in the A installation. The engine must match the architecture (bitness) of Toad.		

Virtualization Support

Requirement	Details
Application Virtualization	When deploying Toad in a virtualization environment, for best results ensure the system accurately reflects the applicable client hardware and software requirements listed in this document.
	Toad has been developed using Microsoft guidelines (see Remote Desktop Services programming guidelines) and can be deployed and operated in virtualization environments such as Citrix XenApp, Microsoft App-V, and VirtualBox. See "Install Toad on Citrix Systems" (page 1) for more information.

User Requirements

User Requirements to Install Toad

Only Windows Administrators and Power Users can install Toad.

Note: The following exceptions exist for Power Users:

• A Power User can install Toad as long as this user belongs to the DB2ADMNS or DBUSERS group.

If an Administrator installs Toad, the Administrator can share the Toad shortcut icon on the desktop and menu items with any user—a Power User, Restricted User—on the computer.

If a Power User installs Toad, a Restricted User cannot do the following:

- Associate file extensions.
- View the Toad shortcut icon on the desktop or the Toad menu options in the Windows Start menu. As a workaround, Restricted Users can create a shortcut to Toad from the install directory and place the shortcut on their desktop.

User Requirements and Restrictions for Running Toad

The following describes the requirements and restrictions for users who launch and run Toad:

- A Windows Power User or Restricted User must belong to the DB2ADMNS or DB2USERS group. To add the user to one of these groups, select Start | Control Panel | Administrative Tools | Computer Management | System Tools | Local Users and Groups | Groups | DB2ADMNS or DB2USERS.
- A Windows Power User or Restricted User does not have the authority to add or remove DB2 catalog entries using the Toad Client Configuration wizard. However, these users can use the Import Profile function in the Toad Client Configuration wizard to import catalog entries to Toad.
- To take full advantage of Toad for DB2 LUW functionality, the user ID specified in the Toad connection profile for each DB2 for LUW database connection requires the authorizations listed in the following document:

ToadDB2LUWAuthorizations.xls

• As a minimum requirement to manage a DB2 for z/OS subsystem in Toad, the user ID defined in the

Toad connection profile for the subsystem must either have SYSADM privileges or SELECT privileges on the DB2 catalog tables. For a complete list of authorizations (and corresponding GRANT statements) a user requires to take full advantage of Toad for DB2 z/OS functionality, refer to the following document:

ToadDB2zOSAuthorizations.doc

- To create or modify the QuestSoftware.ToadSecurity table to enable Toad Security, the user who maintains this table must have privileges to create, insert, update, and delete it. All other users need only the ability to read the QuestSoftware.ToadSecurity table to use Toad Security features.
- For information about defining a RACF, Unix, or Linux group as a Toad Security role, see the *About Setting Up Toad Security* topic in the Toad online help. This topic explains how to add the Toad Security icons to your toolbar and how to define Toad Security roles that apply to your current connection. (The ability to define RACF, Unix, and Linux groups as Toad Security roles works with DB2 for LUW 9 or later databases and DB2 for z/OS 8 or later subsystems.)

Resolved Issues and Enhancements

The following is a list of issues addressed and enhancements implemented in this release of Toad for IBM DB2:

Automation	Publishing wizard now sets permissions of objects correctly in Automation script	QAT-15458/4603555
Code Completion	Dragging and dropping column names from Object Explorer to Editor now works correctly.	QAT-15117
Data Compare & Sync	We have implemented a new performance option for exporting to Excel. Enable it in Tools Options Data Compare General	15514/1713
Data Compare & Sync	An issue when Data Compare displayed incorrect results has been fixed	15603
Data Compare & Sync	Error during Data Compare with a Local Storage table has been fixed	15602
Data Compare & Sync	An error when not all data rows were returned in Data Compare has been fixed	1663/4556801
General	An error when parsing a TIC query with group_concat() function has been fixed	2593/4666051
General	Users that execute Automation script are not added to OS Admin group on server anymore	2509/4197716
General	Behavior of Toad at high resolutions since patch version 5.1.2 has been improved	2320/4620661, 4623009, 4685386, 4685115
General	Collation property while importing data using Automation script has been modified to improve performance with certain JOINS on Tables	QAT-15314/4572415
Import Wizard	Save Log option is now saved in Import Templates	2281/4628189
Import Wizard	It is now possible to import blank values	2293/4587201
Installation	Opening associated files with SQL extension now works correctly with Toad	
Installation	You now can deploy user settings during silent installation of Toad. Enter a full path to the Options Template that you generated in Tools Options General for a silent installation.	1820/4618673
Job Management	An issue with migration of a Task Manager item using a password has been fixed	QAT-15368/4524397

Object Details (DOV)	We fixed an issue in the DB2 z/OS Subsystem - Right- Hand-Side Dynamic Statement Cache tab where a DB2 error was being thrown when a DSC table was selected if that table creator began with an @.	TDB-3943/454799
Options	Up and Down arrows now work correctly in Tools Options Explorer Objects	QAT-15457/2221/2175
Pivot Grid	We have added options for Date Grouping and Formatting in Pivot Grid	QAT-15414/4556962
Pivot Grid	We improved backward compatibility of Pivot Grid	2688/4593313
Pivot Grid	Pivot Grid now allows you to use Aggregated data values in a calculated field.	QAT-14558/4415769
Query Builder	We improved attachment of Calculated fields in Query Builder to correct columns	2627/4650476
Query Builder	Several issues when using Where clause in Query Builder have been fixed	2292/4602617
Query Builder	An issue with WHERE clauses has been fixed	1653/15456/4555521
Query Builder	Adding additional AND clause in query tab and then visualizing does not create a Global Where clause	1371
Query Builder	You now can select LAG and LEAD in the list of functions for calculated fields in Query Builder	QAT-14252/4438857
Schema Compare	Now you can ignore differences in constraint names when one of the names is system generated	TSS-1525/4198363
Script Generation	Statistics profile is now preserved when you drop and recreate a table	TDB-3953
SQL Editor	AutoCommit on IBM DB2 connections now works as designed	TDB-3950/4576728
SQL Editor	Highlighting keyboard shortcuts now work correctly in Editor.	QAT-15111/4542078, 4555409, 4559368, 4564671
Team Server	Publishing a script with different schemas from the same database now works correctly	QAT-15319/4534571

Known Issues

The following is a list of issues known to exist at the time of this release.

Feature	Description	Support Case/Defect ID
Object Details	When a DB2 object is created, DB2 implicitly creates authority for the user who created that object. In the system catalog tables those are shown as SYSIBM as the Grantor. When migration\compare\extended alter scripts are generated Toad does not generate GRANT statements in those scripts for authorizations granted by SYSIBM because those are granted implicit authorizations that have been created by DB2.	TDB-870
Debugger	You might encounter issues with initializing Unified Debugger sessions if the version of the DB2 for LUW server on which you are debugging is earlier than 10.1 fix pack 2.	N/A

	 Workaround: If the DB2 server version is earlier than DB2 for LUW 10.1 fix pack 2, copy DB2DBGM.JAR from the Toad client installation to the following location on the server: DB2 instance home path/SQLLIB/JAR (Unix or AIX computer) DB2 instance home path/SQLLIB/JAR (Windows computer) 	
	Notes: If the DB2 server version is DB2 for 10.1 fix pack 2, use the JAR file supplied with your DB2 version. If replacing the JAR file as described in the workaround, make sure you back up the original JAR file on the server before replacing it with the one from the Toad client installation.	
Export Wizard/ One Click Export	Avoid using Excel for exporting if your data hasN/Anumeric values that require a high precision becauseExcel's precision is limited to 15 digits. If you exportnumbers with more precision, the values are rounded.If you export boundary numbers (max, min), roundednumbers will exceed the data type limit.	
Installation	Network and LAN installations are currently not supported.	N/A
	Toad uses hardcoded values instead of some variables such as %USERNAME% in several path names and therefore App-V environment is not supported. For installation adhere to Windows Installer Best Practices, see here.	TDB-1009/2297051-1
Space Management	 If running Toad for IBM DB2 6.0 or earlier in a pureScale environment and the QUEST.SH_SNAPSHOT procedure had been installed, the procedure will have to be redefined. Please, follow these steps: 1. Drop procedure QUEST.SH_SNAPSHOT 2. Right click a tablespace 3. Select Space Management View Space History 4. Click Yes when prompted to run the install script for the procedure 5. Execute the script 	N/A
SQL Editor	Toad does not handle DBMS_OUTPUT in the SQL Editor.	ST90710
z/OS Utilities	When using Utilities as the data preservation method and the length of a column tied to columns from other tables via RI is reduced. When executing the alter script the load fails with a DSNU334I INPUT FIELD INVALID error pointing to the altered column. The load cards show the old length for the altered column which appears to be the problem.	ST44753

Third Party Known Issues

The following is a list of third party issues known to exist at the time of release of Toad for IBM DB2 7.2.

Feature	Description	Support Case/Defect ID
DB2 Client	In case Toad and a 9.5, 9.7 or 10.1 DB2 client is installed on Windows 8 or Windows Server 2012 IBM setup recommendation #1618434 has to be applied.	N\A
Data Server Driver	Installer of Data Server Driver 10.5.4 and newer may need to be run with Administrator permissions.	TDB-2306
LUW Procedure Script Tab	After installing DB2 LUW v10.1.3, the script tab for LUW procedures is empty. This is due to an issue introduced by IBM in fixpack 3 regarding the NULLIF SQL function. IBM APAR IC96725 addresses this issue.	TDB-180/2303729-1
DB2 z/OS invalid Timestamp values returned	When the IBM DB2 Analytics Accelerator is used in conjunction with DB2 z/OS, along with an IBM DB2 .Net Data Provider v10.1.3, timestamp values returned from queries are invalid. Since Toad DB2 v5.6 uses the IBM DB2 v10.1.3 .Net Data provider, invalid timestamp values can be returned within Toad 5.6. IBM PMR 8862756 has been opened on this topic. Please consult that PMR for a work-around.	N\A
LUW Procedure Debugging	When the user is running DB2 Server 10.1.3 with a database that has been migrated from a previous release, the debugger will fail with a reference to SYSDEBUGPRIVATE. This occurs from an IBM bug in the db2updv10 update utility. IBM APAR IC96837 addresses this issue. This has been resolved in IBM DB2 10.1 FixPack 4.	TDB-708/2425004-1
Debugger	The Debugger may not advance to the next line under certain circumstances. Those circumstances include DECLARE statements with multiple variables defined on a single line and IF statements with multiple conditions defined on a single line. Workaround : In procedures that are to be debugged: The procedure text should be modified to separate DECLARE	ST70691
	variables onto different lines and IF statements separated to have conditions on separate lines.	
	LUW: The following error message is displayed when you attempt to modify a watch value during a Debug session on a DB2 for LUW 9 database: "ERROR [57011] [IBM][DB2/NT] SQL0954C Not enough storage is available in the application heap to process the statement. SQLSTATE=57011" The call to modify the watch value fails on DB2, and the server runs out of heap memory. Workaround : To avoid the heap memory issue,	CR188846
	increase the application heap size on the server.	N/A
Export Wizard/ One Click Export	To export to an Office 2003 or 2007 Excel instance, the Office Primary Interop Assemblies (PIAs) must be installed. You can install the PIAs from one of the following locations:	N/A
	 2003 PIAs: http://www.microsoft.com/en- us/download/details.aspx?id=20923 	

	 2007 PIAs: http://www.microsoft.com/en- us/download/details.aspx?id=18346 	
	Date formatting issues occur when exporting table data to an Excel file or instance. These issues seem to occur especially when exporting dates previous to 1900.	ST70817
	Workaround : For better results, try exporting the data to a CSV file.	
Object Editor (DOE)	z/OS: Executing a procedure causes "Invalid SQL syntax" message when parameter listing has a new line character separating parameters. IBM has opened PMR 80539,756 to investigate this issue.	ST87770
	Workaround : Remove the new line character and separate the parameters by the spaces.	

Getting Started

Contents of the Release Package

The Toad release package contains the following products:

1. Toad for IBM DB2 7.2

- 2. Product Documentation, including:
 - Installation Guide
 - Online Help
 - Release Notes

Installation Instructions

See the Toad for IBM DB2 Installation Guide for more information.

Toad for DB2 Editions

Each Toad for DB2 is packaged with additional Quest products to expand your experience. The following products may be part of your Toad for DB2 Edition:

Toad for DB2 7.2

Benchmark Factory

SQL Optimizer for IBM DB2 LUW

SQL Optimizer for IBM DB2 z/OS

Spotlight on IBM DB2 for LUW

Toad Data Modeler

The following Toad for IBM DB2 Editions are available:

Linux, Unix, and Windows (LUW) Editions

Edition	Licensed
Toad for IBM DB2 Base Edition	Toad for IBM DB2 Base
Toad for IBM DB2 Professional Edition	Toad for IBM DB2 Professional
Toad for IBM DB2 Xpert Edition	Toad for IBM DB2 Professional SQL Optimizer for IBM® DB2® LUW
Toad for IBM DB2 Developer Edition	Toad for IBM DB2 Professional SQL Optimizer for IBM® DB2® LUW Benchmark Factory™—IBM DB2 Edition
Toad for IBM DB2 DBA Edition	Toad for IBM DB2 Professional

SQL Optimizer for IBM® DB2® LUW Benchmark Factory™—IBM DB2 Edition Spotlight™ on IBM® DB2® LUW Toad Data Modeler

Toad DB Admin Module Toad DB Admin Module*

IBM DB2 z/OS Editions

Edition	Licensed
Toad for IBM DB2 Base Edition	Toad for IBM DB2 Base
Toad for IBM DB2 Professional Edition	Toad for IBM DB2 Professional
Toad for IBM DB2 Xpert Edition	Toad for IBM DB2 Professional SQL Optimizer for IBM® DB2® z/OS
Toad for IBM DB2Developer Edition	Toad for IBM DB2 Professional SQL Optimizer for IBM® DB2® z/OS Benchmark Factory™—IBM DB2 Edition
Toad DB Admin Module	Toad DB Admin Module*

NOTE: The DB Admin Module Add-on can be added to any edition of Toad.

i IMPORTANT: Your license key determines the edition and will enable Toad for DB2 functionality accordingly. In many cases, if functionality is disabled within Toad, you may not have an appropriate license to use it. When Toad is running, you can see which components are licensed by selecting **Help** | **About**.

Product Licensing

To activate a purchased commercial license

- 1. In the Licensing dialog, enter your license (Authorization) key.
- 2. Enter the site message included with the license key.

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. It supports simultaneous operation with multilingual data. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

This release has the following known capabilities or limitations: If the user overrides the default installation path during installation, the new path specification cannot contain Unicode characters.

** (This limitation applies ONLY to the Xpert edition of Toad for IBM DB2 for z/OS and to the DBA edition of Toad for IBM DB2 for LUW) SQL Optimizer for IBM DB2 z/OS and Toad Remote Script Execution (for IBM DB2 LUW or z/OS) support single-byte character sets only. These features do not support double-byte or multi-byte character sets. All IBM DB2 client and server installations should be configured to use the same or compatible character encodings and the same locale and regional options.

About Us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build communitydriven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece—you—to the community, to the new Quest.

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Technical Support Resources

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The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- · View services to assist you with your product

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