# Toad® for Oracle 16.1

# Release Notes

**Revised 6/17/2022**

**Contents**

# About Toad for Oracle

Toad for Oracle provides an intuitive and efficient way for database professionals of all skill and experience levels to perform their jobs with an overall improvement in workflow effectiveness and productivity. With Toad for Oracle you can:

- Understand your database environment through visual representations

- Meet deadlines easily through automation and smooth workflows

- Perform essential development and administration tasks from a single tool

- Deploy high-quality applications that meet user requirements; perform predictably and reliably in production

- Validate database code to ensure the best-possible performance and adherence to best-practice standards

- Manage and share projects, templates, scripts, and more with ease

The Toad for Oracle solutions are built for you, by you. Nearly two decades of development and feedback from various communities like Toad World have made it the most powerful and functional tool available. With an installed-base of over two million, Toad for Oracle continues to be the "de facto" standard tool for database development and administration.

## Toad for Oracle resources

Toad World is a unique and valuable resource available to all Toad users. Toad World provides forums, blogs, videos, product information, Beta releases (when available), and Trial downloads for Toad products. Visit Toad World at: https://www.toadworld.com.

Two of the most-often used features of Toad World are the Forums and the Idea Pond.

- On the Idea Pond page, you can submit your ideas to improve Toad and vote for or comment on other ideas. The Toad team takes your suggestions seriously, and you may even hear back from one of our developers on the topic. We encourage all Toad users—from new to experienced—to let us know how we can improve Toad.

- On the Forum page, you can ask a question or start a discussion and view all other forums within the Toad community.

The Toad World blog pages feature a broad range of information, including topics of interest to our industry, as well as instructions from team members on how to use the latest Toad features.

The Toad for Oracle web-based training is a perfect accompaniment to your product license. This free training walks you through major product features and explains how to perform frequent tasks. You'll also see how to utilize time-saving automation functionality. You'll receive a certificate of completion for each course once you pass the accompanying test.

## About this release

Toad for Oracle 16.1 is a minor release, with enhanced features and functionality.

Toad for Oracle 16.1 includes component and requirement upgrades. These upgrades address security vulnerabilities previously identified in the third party component.

# About Toad® for Oracle® Editions

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

- Toad for Oracle 16.1
- Benchmark Factory for Databases
- Code Tester for Oracle
- Spotlight on Oracle
- SQL Optimizer for Oracle
- Toad Data Modeler

The following Toad for Oracle Editions are available:

| Edition | Licensed |
| --- | --- |
| Toad for Oracle Base Edition | Toad® for Oracle® |
| Toad for Oracle Professional Edition | Toad® for Oracle® Professional |
| Toad for Oracle Xpert Edition | Toad® for Oracle® Xpert — Includes all features in Base and Professional Editions<br>SQL Optimizer for Oracle® |
| Toad for Oracle Developer Edition | Toad® for Oracle® Xpert<br>Code Tester for Oracle®<br>Benchmark Factory® for Databases - Oracle Edition |
| Toad for Oracle DBA Edition | Toad® for Oracle® Xpert<br>DB Admin Module Add-on<br>Spotlight on Oracle® — Includes Spotlight on Unix/Linux, Spotlight on Windows, and Spotlight on Oracle Data Guard<br>Benchmark Factory® for Databases - Oracle Edition<br>Toad® Data Modeler |
| Toad for Oracle DBA RAC Edition | Toad® for Oracle® Xpert<br>DB Admin Module Add-on<br>Spotlight on Oracle® with RAC Option — Includes Spotlight on Unix/Linux, Spotlight on Windows, and Spotlight on Oracle Data Guard<br>Benchmark Factory® for Databases - Oracle Edition<br>Toad® Data Modeler |
| Toad for Oracle DBA Exadata Edition | Toad® for Oracle® Xpert |

| Edition | Licensed |
| --- | --- |
| | DB Admin Module Add-on |
| | Spotlight on Oracle® with RAC and Exadata Options — Includes Spotlight on Unix/Linux, Spotlight on Windows, and Spotlight on Oracle® Data Guard |
| | Benchmark Factory® for Databases - Oracle Edition |
| | Toad® Data Modeler |

**NOTE:** The DB Admin Module can be added to any Toad Edition.

For more information about the products in your Toad for Oracle Edition and the minimum system requirements for running these products, see the Toad for Oracle Editions release notes at:
https://support.quest.com/technical-documents

# New Features and Enhancements

## Toad for Oracle 16.1

### Security

Several improvements to address OWASP Top 10 security risks.

### Spool SQL

Pause and resume capture for a focused log.

### Schema Browser

- Expanded subobject support
    - See the **Show LHS Subobjects** option located beneath the **Browser Style** tool button menu
- Team Coding status represented by images instead of text

### Editor

- Find dialog options to exclude or limit search to comments and/or strings
- Active editor tab is more prominently displayed when using dark themes
- Send errors from the **Script Output | Errors** tab to external editor

### Compare Table Data

An object in the target session matching the selected source object is automatically selected by default.

# Script Manager

- Save and restore list of connections to execute against
- Add ability to clear all output

# Connection Colors

Window border painting improvements for increased visibility.

# DBMS Output

Improved speed performance when fetching output.

# Toad for Oracle 16.0

## Color Schemes

Grid colors can be customized when a color scheme is applied.

## Code Insight

Fields of cursor loop variables, %ROWTYPE variables, and record variables are now shown when variables are included in the list of Code Insight objects. See the **Editor | Code** Assist page in Options.

## Schema Browser

A new option allows subobjects to be displayed beneath their parent object in the left-hand side. Click the **Browser Style** tool button and enable **Show LHS Subobjects**.

## Connections

- Toad for Oracle 15.1 introduced a new feature that allows for connections to be made without using an installed Oracle client. A new checkbox has been added to the Login window so you can make the connection without a client even if you have installed clients.
- Clientless connections will now populate the TNS tab from tnsnames.ora file if you have one present. The file can be in a path referenced by the TNS_ADMIN environment variable or even placed in the same folder as Toad.exe.

# Transactions

The transactions window was moved from the Output panel to its own dedicated dock panel and will update connection bar button images to indicate when a session is in transaction. Also, transactions will be refreshed when the window is closed if the **Always on** option is enabled before closing the Transactions panel.

# Alert Log Viewer

Added ability to load a local or remote files which are not the active alert log.

# Master-Detail Browser

- If a master-detail file cannot be loaded due to objects not being found, you will be prompted to choose another schema.
- Loading master-detail files gracefully handles dropped columns.
- A new tool button for adding missing columns has been added.

# Team Coding

Include/exclude filters can be set globally for a project.

# Toad for Oracle 15.1

## "Dark Mode" Theme

"Dark Mode" and several other new color themes are now available via **Options | Color Styles**.

## Connections

Toad can now connect to a database without an installed Oracle client using ODAC "Direct mode". To learn about the limitations of this method see ODAC Connection Modes - Client Mode vs Direct Mode" on devart.com.

## Native Support for XMLTYPE data type

Toad can now work with XMLTYPE data type using ODAC without limitations, or workarounds when using Oracle client 12.2 or newer.

# Improved Oracle 21c Support

Improvements have been made to support the following Oracle 21c features:

- JSON datatype supported throughout Toad.
  **Note:** Oracle fetches JSON as BLOB. Toad can convert it to CLOB or VARCHAR2 (to make the data readable and editable) if you configure it in Options|Schema Browser|Data Tab. You must add the conversion clause yourself in SQL from the Editor if you want to see the JSON data as text.

- Blockchain and immutable tables supported.

- In-memory clause supported for external partitioned tables.

- Password Rollover Time supported in profiles.

- Mandatory profiles supported.

- Information Lifecycle Management clause supported for indexes.

- Multivalue indexes supported on indexes of JSON columns.

You can find the most up-to-date list of new features for this release in the *Toad for Oracle Release Notes* found at: https://support.quest.com/toad-for-oracle/technical-documents.

# Discontinued Features

**Knowledge Xpert.** Knowledge Xpert is no longer available on Toad World. Beginning with release 13.1, Toad components no longer reference the online Knowledge Xpert.

**Ask a Question.** The **Go to Toad World** and **Ask a Question** commands on the Toad World toolbar have been replaced. To ask a question, click the **Forums** toolbar button to go directly to the forum. To go to Toad World, click the **Forums** or the **Browse Blogs** toolbar buttons. You can also use the Help menu: **Help | Toad World | Forums**. This change is found in Toad for Oracle 13.1 or later.

**Integration with Toad Intelligence Central.** Beginning with Toad for Oracle 13.1, Toad no longer provides integration with Toad Intelligence Central. The Toad Intelligence Central window is not available and you cannot publish scripts, files, Code Analysis results, and other resources to a Toad Intelligence Central server using Toad for Oracle. You cannot connect to Toad Intelligence Central through Toad for Oracle.

# Resolved issues

The following is a list of issues addressed and enhancements implemented in this release of Toad for Oracle.

## Toad for Oracle 16.1

The following list of resolved issues includes issues received from the Toad for Oracle forum, Toad Beta users, and exception data collected from the Toad Improvement Program.

| Issue ID | Link to Forum Post | Resolved Issue |
|----------|--------------------|----------------|
| TOR-1051 | link | Code Insight: Limited support for common table expressions. |
| TOR-4773 | | Connections: Connection colors are not observed when passing in connection string as command line argument. |
| TOR-5672 | link | Editor: Find Unused Variables false positives in some cases. |
| TOR-5742 | | SQL Tracker: Does not work with Toad for Oracle Subscription. |
| TOR-6087 | link | Alter Table: Cannot modify the DELETE RULE of a constraint. |
| TOR-6118 | link | Login Window: The Color column does not display all color names. |
| TOR-6129 | link | Editor: A modified script that references other scripts using relative paths fails to execute. |
| TOR-6132 | | Oracle Tuning Advisor: Unclear error message if SQL ID is invalid. |
| TOR-6134 | | Connection Bar: Database name is not shown for clientless, direct connections. |
| TOR-6141 | link | Automation Designer: Actions copied from another computer will not run if the Oracle client path is not the same on both computers. |
| TOR-6142 | link | Editor: Dock layout splitters are accessible even when no panels are visible. |
| TOR-6143 | link | Schema Browser: An extra scrollbar may appear on the right side when a theme is used. |
| TOR-6148 | link | Schema Browser: The table, detail data grid does not use all available space to maximize the number of displayed rows. |
| TOR-6149 | link | Schema Browser: Java Source DDL is incorrect when the "Schema name" script option is used. |
| TOR-6155 | link | Editor: Scroll position is lost when changing tabs. |

| Issue ID | Link to Forum Post | Resolved Issue |
|---|---|---|
| TOR-6161 | link | FTP: Secure FTP is unable to connect when using a private key file. |
| TOR-6167 | | SQL Recall: Access Violation occurs when opening SQL Recall when the Toad application style is set to SDI. |
| TOR-6172 | link | Editor: Executing a script having SET AUTOTRACE ON results in "Unable to retrieve autotrace statistics" and other errors. |
| TOR-6173 | link | Editor: The active tab is not distinguishable when using dark mode. |
| TOR-6184 | | Schema Browser: Collection types of the current schema are not shown in some cases when using treeview browser style. |
| TOR-6188 | link | Compare Table Data: A matching object in the target database should be selected by default. |
| TOR-6208 | link | Schema Browser: Expanding a package and then compiling it results in a List Index Out of Bounds error when using the treeview browser style. |
| TOR-6215 | link | Import Table Data: Date format error occurs when importing from an Excel spreadsheet in some cases. |
| TOR-6218 | link | Queues: The QUEUE_TO_QUEUE and DELIVERY_MODE parameters are unsupported and result in incorrect DDL generation and queue comparison results. |
| TOR-6276 | | Copy Table Data: Unicode characters in XMLTYPE fields are corrupt. |
| TOR-6290 | link | Data Grid: Blob edit window causes Toad to hang in some cases |

# Toad for Oracle 16.0

The following list of resolved issues includes issues received from the Toad for Oracle forum, Toad Beta users, and exception data collected from the Toad Improvement Program.

| Issue ID | Link to Forum Post | Resolved Issue |
|---|---|---|
| TOR-5740 | | Editor: Unable to run unit tests created with Code Tester for Oracle Schema Browser: Unable to view results of unit tests created with Code Tester for Oracle |
| TOR-5897 | | Ping: Unable to use Ping tool when Toad's Internet access has been disable |
| TOR-5904 | link | Export DDL: Trigger scripts omit DISABLE in some cases |
| TOR-5909 | | Alter Job: ORA-01858 encountered when changing the next execution time when locale settings are set to Korean |
| TOR-5910 | | Desktop: Dock panels set to auto-hide are not restored when restarting Toad |
| TOR-5917 | | Dark Mode: Windows lack borders and shadows when connection colors are used |

| Issue ID | Link to Forum Post | Resolved Issue |
|---|---|---|
| TOR-5920 | link | Window Bar: Button order is incorrect when the Connection Bar option "Save positions" is enabled |
| TOR-5930 | link | Schema Browser: The right side display when viewing a trigger is too small |
| TOR-5931 | link | Dark Mode: Cursor output colors are not good |
| TOR-5944 | | Administer Tablespaces: Access Violation occurs when refreshing the Objects tab quickly |
| TOR-5946 | link | Log Miner: The final step in the wizard is missing its toolbar |
| TOR-5955 | | Editor: Auto Replace may apply within strings and comments incorrectly when typing quickly |
| TOR-5958 | link | Schema Browser: Out of Memory exception occurs when filtering synonyms to include both Private and Public |
| TOR-5962 | | Editor: "Field not found" error occurs during execution with a cursor output variable in some cases |
| TOR-5967 | link | Editor: Describe (F4) fails in the Navigator panel when the text is set to lowercase |
| TOR-5969 | | Session Browser: Changing Current Statement subtabs cause a refresh when the "Refresh" option is unchecked |
| TOR-5972 | link | Editor: Access Violation occurs when dragging files from Windows Explorer in some cases |
| TOR-5982 | | Describe: Size and position are not remembered |
| TOR-6030 | link | Editor: Applying Auto Debugger generates code that will not compile in some cases |
| TOR-6042 | | Editor: Data Grid commits when it should not if the cached edits option is enabled (View \| Options \| Data Grids \| Data) |
| TOR-6048 | link | Alter Scheduler Job: Changes made to notifications are not committed |
| TOR-6049 | link | Schema Browser: Caption changes made to scheduler object tabs are not remembered |
| TOR-6050 | link | Schema Browser: Splitter between the left and right sides does not work when dark mode is in use |
| TOR-6052 | link | Rebuild Table: Script excludes the backup table name when the source table name is longer than 30 characters |
| TOR-6053 | link | Schema Browser: ORA-29275 is raised when selecting a scheduler job if data in the GLOBAL_UID column of DBA_SCHEDULER_JOBS is corrupt |
| TOR-6060 | link | Explain Plan: Plan table is created in the login schema when selecting a |

| | | schema other than TOAD or the login schema |
| TOR-6061 | | Editor: The code section becomes inaccessible if the bottom splitter is positioned near the top and the Editor is resized smaller |
| TOR-6066 | link | Alter Table: Cannot add a primary key constraint |
| TOR-6070 | link | Editor: Save dialog uses .SQL extension instead of .sql |
| TOR-6076 | | Compare Table Data: Error occurs when comparing external tables |
| TOR-6078 | | Session Browser: Splitter position is lost after minimizing Toad when the form layout is oriented with the detail tabs at the bottom |
| TOR-6079 | | Compare Multiple Tables: Unable to compare LOBs in different databases by LOB length |
| TOR-6080 | link | Schema Browser: Quick filter does not allow selecting the only item in the dropdown |
| TOR-6082 | link | Editor: Active tab text is lost when using the windows "pop out" feature |
| TOR-6083 | | Schema Browser: Table columns tab does not allow adding a virtual column |
| TOR-6084 | link | Data Grids: Popup Editor is slow to appear when using Dark Mode |
| TOR-6088 | link | Schema Browser: Adding a constraint to the selected table causes the table to become deselected on the left side |
| TOR-6091 | link | Data Grids: Save dialog in popup editor opens in the background |
| TOR-6097 | link | Data Grids: Posting edits to CLOB data visualizes the data as corrupt despite it being sent to the database properly |
| TOR-6098 | | Editor: Automatic backups of tab text do not stay up to date as the text is modified |
| TOR-6104 | link | Explain Plan: Error image is used incorrectly for some plan steps |
| TOR-6108 | | Schema Browser: Expanding indexes in multiple schemas leads to Access Violation when the browser style is set to treeview |
| TOR-6116 | link | Editor: "Operation aborted" error message is shown in cases where an ORA-06503 is the error returned by the database |
| TOR-6123 | link | Login: The Database dropdown of the TNS tab is slow to load if the tnsnames.ora file contains thousands of entries |
| TOR-6128 | link | Schema Browser: ORA-00904 is raised when editing data using the Foreign Key lookup feature if the column name requires double quotes |
| TOR-6131 | | Generate Database Script: Including two databases produces incorrect script output for the second database. |

# Toad for Oracle 15.1

The following list of resolved issues includes issues received from the Toad for Oracle forum, Toad Beta users, and exception data collected from the Toad Improvement Program.

| Issue ID | Link to Forum Post | Resolved Issue |
|---|---|---|
| TOR-4841 | | Export Dataset: Exporting a new sheet to an existing Excel File which contains a pivot table causes file corruption |
| TOR-5129/TMB-3814 | | Editor: Toad is truncating data when opening a file with an embedded 'NUL' character. |
| TOR-5135/TMB-1613 | | Editor: Query Builder removes the 'connect by' in a sql statement when trying to reverse engineer a hierarchy statement. |
| TOR-5258 | link | Toad Options: The Toad Improvement Program cannot be disabled if the internet connection is restricted. |
| TOR-5316 | link | Connections: Oracle client version 12.1.0.1 corrupts data received via output bind variables because Toad for Oracle does not support Oracle client 12.1.0.1. |
| TOR-5379 | link | Editor: The nested table dialog does not display the first character of VARCHAR2 nested tables. |
| TOR-5449 | link | Editor: Executing a query that includes a table with an XMLTYPE column results in ORA-00904. |
| TOR-5457 | link | Automation Designer: Using a system variable name in a query iterator does not work when scheduled. |
| TOR-5536 | link | Export DDL: Toad creating incorrect scripts from PL/SQL objects which exist in different versions in container and pluggable databases. |
| TOR-5599 | link | Connections: In the toolbar, Reconnect and Reconnect All use the same icon and have no tooltip. |
| TOR-5620 | link | Rebuild Table: Script includes "ALTER TABLESPACE {Tablespace Name} COALESCE;" command even if user does not have the alter tablespace privilege. |
| TOR-5623 | | Connections: The Transactions window auto-refresh fails if a connection is lost and then recovered. |
| TOR-5645 | link | Editor: When an error occurs executing a script Toad highlights the first line of the statement instead of the line where the error actually occurs. |
| TOR-5649 | link | Explain Plan: ORA-00905 is raised when PUBLIC is specified as the plan table schema in Toad options |

| Issue ID | Link to Forum Post | Resolved Issue |
|----------|----------|----------------|
| TOR-5667 | link | DBMS Output: Looks enabled after ORA-04068 is raised when it is actually disabled. |
| TOR-5669 | link | Schema Browser: ORA-00904 is raised when trying to browse the "Data" tab for SYS, TABLES, SYSTEM_PRIVILEGE_MAP. |
| TOR-5670 | link | Editor: HTML is incorrectly displayed in the error message when ORA-2000 is raised. |
| TOR-5671 | link | Editor: Variables are incorrectly flagged as unused when utilizing Refactor - Find Unused Variables. |
| TOR-5673 | link | Editor: When using an ANSI JOIN clause Code Assist is not listing the packages that are available. |
| TOR-5674 | link | Editor: Navigating between procedures in the package spec using the keyboard shortcut: Ctrl+Shift+Up/Down fails in some cases. |
| TOR-5675 | link | Editor: Ctrl+Click does not always find variable declarations. |
| TOR-5680 | link | Schema Browser: Tables with identity columns are not found in "Sequences - Used By" tab. |
| TOR-5682 | | Data Grids: The keyboard short cut Ctrl+X does not cut. |
| TOR-5684 | | Workspaces: When a window is minimized and the Workspace is then saved and re-loaded the window is no longer minimized. |
| TOR-5685 | link | Unit Test: The right click menu for entries in the tree view of UTPLSQL Manager is prevented from displaying by a tooltip. |
| TOR-5686 | link | Schema Browser: Hidden columns still display after they are unchecked via the "Scheduler Jobs - Run Log" tab. |
| TOR-5700 | | Compare Data: In specific cases when comparing data, Toad incorrectly identifies rows as "source only" and "target only". |
| TOR-5701 | link | Unit Test: If a database's decimal separator does not match Toad's, then UTPLSQL's execution time incorrectly displays as zero after the test is complete. |
| TOR-5710 | link | Connections: TNSNames entries with leading spaces do not appear in the login window |
| TOR-5714 | | Editor: The [F3] Shortcut for find is not highlighting the correct text if Greek letters are present. |
| TOR-5716 | | General: When copying and pasting the clipboard fails in some cases. |
| TOR-5718 | | Schema Browser: When logged into a database using Team Coding the refresh option is not visible in Materialized View. |
| TOR-5719 | link | Connections: The login window does not always remember the last |

| Issue ID | Link to Forum Post | Resolved Issue |
|---|---|---|
| | | connection. |
| TOR-5722 | link | Schema Browser: Execute Procedure returns "Invalid field size" error when "Scientific Notation" is unchecked. |
| TOR-5723 | link | SGA Trace/Optimization: SGA/Trace is missing some fields in newer Oracle versions. |
| TOR-5725 | link | Trace File Browser: The new trace file browser transfer mode (compress, transfer, decompress) sometimes fails. |
| TOR-5728 | link | Compare Schemas: Views are showing differences in column size when they should be identical. |
| TOR-5730 | link | Export Dataset: "Excel Instance" is not exporting strings as strings, which affects the exported data in some cases. |
| TOR-5731 | link | Rebuild Multiple Objects: ORA-00900 is raised when rebuilding LOB Segments via "Load LOB Segments of Checked Tables". |
| TOR-5737 | | Administer Tablespaces: Files tab incorrectly shows 0 free space for some datafiles. |
| TOR-5743 | | Editor: Auto-replace only replaces whole words. |
| TOR-5752 | | Editor: Large NUMBER bind variables are incorrectly converted to scientific notion. |
| TOR-5755 | link | Datagrids: BLOB editor dialog has no "Clear" button. |
| TOR-5758 | | Session Browser: Nothing happens when filtering parallel slaves. |
| TOR-5759 | | Copy data to another schema: Number precision is lost if Scientific Notation is checked. |
| TOR-5760 | | Session Browser: ORA-00029 is raised when clicking "Cancel SQL for selected session" for parallel processes. |
| TOR-5761 | link | Editor: Ctrl+PgUp/Down does not navigate correctly to package bodies. |
| TOR-5765 | link | QSR: Q-quotes do not work in QSR. |
| TOR-5770 | link | Import Table Data: Using expressions when importing table data fails in some cases. |
| TOR-5771 | | Editor: The "replace" functionality in the "Find/Replace" dialog is case sensitive even if the case sensitive box is not checked. |
| TOR-5774 | | Automation Designer: Multiple connections cannot be selected after using the "Change Connections" option. |
| TOR-5777 | | Automation Designer: The Query Iterator forces its connection on child actions. |

| Issue ID | Link to Forum Post | Resolved Issue |
|----------|--------------------|----------------|
| TOR-5782 | link | Editor: Ctrl+D always launches Quick Describe from Editor even when Ctrl+D is configured for other shortcuts. |
| TOR-5800 | | Schema Browser: Using a Foreign Key look up on large tables sometimes causes out of memory errors. |
| TOR-5804 | link | Connections: Sometimes when an Oracle DB is connected the Connection Bar Icon shows it as disconnected. |
| TOR-5817 | link | Schema Browser: Alter Table displays incorrect values for PCTFREE and PCTUSED in some cases. |
| TOR-5863 | link | Editor: Toad Script Runner (TSR) throws an error when substitution variables are used. |
| TOR-5864 | link | SQL Recall: The [F8] keyboard shortcut briefly displays the Right Hand Side Dock panels when opening the SQL Recall dialog. |
| TOR-5868 | | Schema Browser: ORA-00904 is raised when accessing the Schema Browser Favorites "Data" tab after altering a view. |
| TOR-5871 | | Export DDL: Toad produces an incorrect script when creating a table on 11gR2 in some cases. |
| TOR-5879 | link | Connections: The Transaction window is not displayed correctly after being resized, closed and then re-opened. |

You can find the most up-to-date list of resolved issues for this release in the *Toad for Oracle Release Notes* found at: https://support.quest.com/toad-for-oracle/technical-documents.

# Known issues

The following is a list of issues, including those attributed to third-party products, known to exist in this release line at the time of the current release.

## General known issues

| Known Issue | Issue ID |
| --- | --- |
| Toad's help cannot be opened from an installation path that contains Unicode characters. | 72966 |
| If you check "Indexes" on the Scripts tab for snapshots, then the primary key for the snapshot will be included in the script, even though the CREATE MATERIALIZED VIEW statement implicitly creates this primary key.<br><br>Toad currently does not differentiate between indexes created explicitly on the snapshot and indexes created automatically when the snapshot is created.<br><br>*Workaround:* If you are running the generated script to recreate the snapshot, then you can simply ignore the error that occurs when the script tries to recreate the primary key index for the snapshot. If you do not normally create indexes on snapshots, then you can uncheck "Indexes" when generating the snapshot script. | N/A |
| If you use 11g Oracle ODP.NET client or any other client that does not have the oci.dll in the BIN directory, Toad has the following problems:<br><br>1. Client shows as invalid<br><br>2. Client version is not detected<br><br>3. As a result of #2, columns of the following datatypes are not shown in the Schema Browser table data: CLOB, BLOB, NCLOB, XMLTYPE, TIMESTAMP, INTERVAL, BINARY_DOUBLE, and BINARY_FLOAT | N/A |
| Debugger<br><br>If there is an exception during debugging on a 10Gr2 or greater database, REFCURSOR output and DBMS output will not be available when debugging is completed. This is due to the target session not being available.<br><br>*Workaround*: To see REFCURSOR output and DBMS output, execute the procedure without the debugger. | N/A |
| Connections<br><br>While Toad supports LDAP connectivity, some features of Toad depend on tnsnames.ora file to operate correctly, such as Toad Script Runner (TSR). | N/A |

| Known Issue | Issue ID |
| --- | --- |
| Schema Browser<br><br>Sometimes after pressing "Compile invalid objects", you may get ORA-20000, ORA-06512, or ORA-06512 errors. This could mean that you do not have the privileges to compile the object, but it also happens when the schema contains a package body that does not have an associated spec.<br><br>*Workaround:* Look in the schema that you are trying to compile to see whether there are any orphan package bodies. If it is your own schema, then do:select * from user_objects o1 where object_type = "PACKAGE BODY" and not exists (select "x" from user_objects o2 where o2.object_name = o1.object_name and o2.object_type = "PACKAGE") Then drop any orphan package bodies that are found. | N/A |
| Virtualization<br><br>An access violation error may display when you close Toad in a Citrix XenApp environment. | 76354 |
| Import/Export<br><br>Constraint scripts from Export DDL do not contain the "using index" or "tablespace" clause. | 59228 |
| Data Modeler:<br><br>• Generation of HTML reports of large diagrams may fail during generation of an image of the ER Diagram.<br><br>• Comparison of large models may consume too much memory. | N/A |

# Oracle client known issues

| Known Issue | Issue ID |
| --- | --- |
| In some cases, connecting to an 11g database using a 19c or 21c client may result in a hang when cancelling a query or when using Code Insight.<br><br>*Workaround:* Use an 18c or older client when connecting to an affected database. | N/A |
| All versions of Oracle client 19c leak memory when working with LOB types. This includes simple SELECT statements against a table containing LOB types. | N/A |

# Proxy server known issues

| Known Issue | Issue ID |
| --- | --- |
| Toad does not support Proxy Automatic Configuration (PAC) scripts; however, Toad does allow you to specify Quest-specific proxy settings to work around this limitation. By default Toad will use non-PAC proxy settings configured within Windows automatically.<br><br>**Apply settings system-wide:** | 72966 |

HKEY_LOCAL_MACHINE\Software\Quest Software\Internet Settings:

- ProxyEnable (DWORD): 1 = enable proxy override at this level, 0 = don't enable proxy override at this level
- ProxyServer (string): semicolon-delimited "<protocol>=<server>:<port>" entries
    - For a shared proxy server across multiple protocols:
        - a single "<server>:<port>" entry is all that's needed (ex: "127.0.0.1:8888")
    - For individual proxy servers by protocol, specify multiple entries:
        - ex: "https=127.0.0.1:8888;http=127.0.0.1:8080;ftp=127.0.0.1:6300"

For 32-bit applications on a 64-bit machine:

- Key: HKEY_LOCAL_MACHINE\Software\WOW6432Node\Quest Software\Internet Settings:

**Apply settings to your own account:**

HKEY_CURRENT_USER\Software\Quest Software\Internet Settings:

- Same keys as above

**Notes for use:**

1. Override proxy settings will only be included if the corresponding ProxyEnable value is set to "1". Otherwise, it's ignored.
2. HKLM (system-wide) server settings will override Windows settings.
3. HKCU (local) server settings will override HKLM and Windows settings.
4. Users can also edit both the system proxy settings (existing in Toad 14.0) and now their user-specific proxy settings (from HKCU) within Toad's Proxy Settings dialog (View | Options | Online); however, system-wide settings (from HKLM) will not be editable inside of Toad since they're more for administrators in silent installs or system-wide configs.

# Data Grids known issues

| Known Issue | Issue ID |
| --- | --- |
| You may receive an "ORA-00902 invalid datatype" error when editing an object, nested table, or varray data if you have redefined the data type for that data during the current session.<br>*Workaround:* If you redefine an object type, nested table, or varray and then need to edit data in a table based on that type, end your current connection and begin a new one. | N/A |
| Full table data is not displaying in the live data grid (results from F9) if the data contains "zero" characers (ACII 0). In this case, all data after the zero character will not show in the grid.<br>*Workaround*: Double click on the data cell in the data grid to view full contents of data in a popup editor. | |

# Code Analysis known issues

| Known Issue | Issue ID |
| --- | --- |
| Saving results to a database: When dealing with nested procedures, Code Analysis can only insert run data from procs one level deep. | N/A |
| Saving PL/SQL results to a database may fail or save invalid data to the database for invalid PL/SQL objects.<br><br>*Workaround:* To ensure PL/SQL results are saved to the database correctly, verify the validity of all objects before running Code Analysis. | N/A |

# Editor known issues

| Known Issue | Issue ID |
| --- | --- |
| Toad errors when you query on a field of Oracle collection types.<br>*Workaround:* Execute using SQL*Plus. | 64373 |
| When spooling to an unpinned output window, the window becomes unresponsive and errors are given when Toad is closed ("Canvas does not allow drawing").<br>*Workaround:* Keep the output window pinned. | 68523 |
| If you use a non fixed-width font, the results are misaligned in the of Script Output tab in Editor after executing a SQL script.<br>*Workaround:* Go to Options \| Scripts and select a fixed-width font for script output. | 62234 |

# Session Browser known issues

| Known Issue | Issue ID |
| --- | --- |
| The Program name in the Session Browser may be blank or may be the full path to the executable instead of just the executable name. This depends on the Oracle client, not on Toad. | N/A |
| In RAC databases, version 10.1.0.3 (and possibly other 10.1 versions), the query used to populate the "Current Statement" in the Session Browser fails with the following error: Runtime error occurred: 12801 (ORA-12801: error signaled in parallel query server PZ99, instance <instance name> ORA-01008: not all variables bound) This problem does not occur in Non-RAC environments.<br><br>*Workaround:* Clear the "Use RAC Views" checkbox, and log into the appropriate instance of the database, if necessary. | N/A |

# Team Coding known issues

| Known Issue | Issue ID |
| --- | --- |
| Creating a new revision or attempting to force a check-in to Visual Studio Team Services may result in a "404: Not Found" error. The current version of Team Foundation Server used by Visual Studio Team Services compares the source being uploaded with the source already in the repository. If the source has not changed, it may incorrectly return an error rather than allowing the forced revision. This appears to be a Microsoft issue. As a result, these two commands may fail. | N/A |
| When using the Team Foundation Server internal client and Team Foundation Server 2012 or 2013 alternate Team Project Collections, workspaces created outside of Toad are not visible from within Toad. A workspace may be created from Toad by clicking the 'New' button during the Team Foundation Server log in.<br><br>This is not an issue when using the Team Foundation Server external client. | **114334** |
| Team Coding is disabled for mixed-case object names. | N/A |
| With CVS, Toad may fail to retrieve the list of projects for you to select from in the CVS browser or in the Code Control Groups configuration.<br>*Workaround:* See "Missing CVS\Entries File Error" in the online help. | N/A |
| Team Coding and Clearcase: Dynamic Views are not supported via SCC interface. Snapshot Views must be used instead. (Rational case ID v0830629, Rational Defect # CMBU00053934) | N/A |

# Unicode known issues

| Known Issue | Issue ID |
| --- | --- |
| The following features in Toad do not support Unicode:<br><br>• ASM Manager<br>• Export File Browser<br>• Hex Editor<br><br>In addition, Java itself does not allow Unicode class names or file names. This is relevant to the Java Manager, Editor, and Schema Browser. | N/A |
| Editor options to highlight object names may not work for object names that contain Unicode characters. | N/A |
| Script Execution in Editor: Error offset can be incorrect when running scripts with multi-byte object names. | N/A |
| XML (Plain) format creates bad XML if Unicode string values and Unicode column names are exported through Export Dataset. | N/A |
| Import mapping for Unicode characters is incorrect if the characters are not a fixed width (such as Korean). | 63221 |

| Known Issue | Issue ID |
|---|---|
| In Team Coding, objects with Unicode *contents* are supported, objects with Unicode *names* are not. Supported Version Control Providers do not support Unicode names. | N/A |
| The OCI option ORA_NCHAR_LITERAL_REPLACE affects the NCHAR String Literal Replacement behavior when connected to non-Unicode databases. The option can be enabled or disabled. See the "Enable ORA_NCHAR_LITERAL_REPLACE" option (View \| Options \| Oracle \| General). The option has adverse behavior regardless of its value.<br><br>• **Enabled** - ORA-01756 error when executing SQL using the Q-quote operator where the end delimiter appears within the string literal and is followed by a single quote that is also part of the string literal. The single quote does not have to immediately follow the delimiter.<br><br>• **Disabled** - NCHAR string literal corruption when connected to non-Unicode database. | N/A |

# High DPI known issues

| Known Issue | Issue ID |
|---|---|
| Toolbars<br><br>(Affects Windows Server 2019 only)<br><br>Toolbar button images may disappear when you mouse over them if the "High DPI scaling override" option is set to "System (Enhanced)" in the Windows file properties dialog for Toad.exe | N/A |

# Third-party known issues

| Known Issue | Issue ID |
|---|---|
| Help<br><br>(Affects the 64-bit version of Toad only)<br><br>If IE9 is installed, clicking a link in the Help file may crash Toad 64-bit, even if IE9 is not the default browser.<br><br>*Workaround*: Users who have IE9 installed can open Help from outside of Toad. | N/A |

# System requirements

This section contains the hardware, software, and privileges required to run Toad for Oracle, as well as the database and virtual environments that Toad for Oracle supports.

## Hardware requirements

| Requirement | Details |
| --- | --- |
| Processor | 1 GHz processor |
| Memory | • 1 GB RAM - Toad for Oracle 32 bit<br>• 2 GB RAM - Toad for Oracle 64 bit<br><br>**NOTE:** The memory required may vary based on the following:<br><br>• Applications that are running on your system<br>• Size and complexity of the database<br>• Amount of database activity<br>• Number of concurrent users accessing the database |
| Hard disk space | • 120 MB - Toad for Oracle 32 bit<br>• 150 MB - Toad for Oracle 64 bit |
| Operating system | • Windows 8.1<br>• Windows 10<br>• Windows 11<br>• Windows Server 2012 R2 - 2 CPU required<br>• Windows Server 2016<br>• Windows Server 2019<br>• Windows Server 2022 |

# Database requirements

| Requirement | Details |
| --- | --- |
| Database client | An Oracle client must be installed and configured on the system where you are running Toad. The following are supported:<br><br>• Oracle Client or Instant Client 10.2.0.5<br>• Oracle Client or Instant Client 11.2.0.1/11.2.0.3<br>• Oracle Client or Instant Client 12c Release 1 and 2<br>• Oracle Client or Instant Client 18c<br>• Oracle Client or Instant Client 19c<br>• Oracle Client or Instant Client 21c<br><br>**NOTE:** You must use the 32-bit version of Toad with the 32-bit Oracle client, and the 64-bit version of Toad with the 64-bit Oracle client. |
| Database server | **Oracle versions:**<br><br>• 10g Release 2<br>• 11g Release 1 and 2<br>• 12c Release 1 and 2<br>• 18c<br>• 19c<br>• 21c<br><br>**IMPORTANT:** It is recommended that your client version be of the same release (or later) as your database server. This is an Oracle recommendation to prevent performance issues. |
| Cloud database service | Oracle Database as a Service on Amazon EC2 and Oracle Cloud |

# Network

- Internet Protocol Version 6 (IPv6) is being adopted by the US Federal Government and industries around the world. In its most basic format, the new protocol uses 128-bit addresses instead of 32-bit addresses, which are used by the current IPv4 to route packets over the Internet. Toad for Oracle features, such as FTP, access the Internet through third-party vendors that are IPv6 compliant, such as /nSoftware's IP*Works. For access to Web sites by way of the Toad Online window, Toad simply invokes the user-defined or default Web browser.

- Toad for Oracle Subscription editions require the user to sign in when using the product. This enables the product to verify the user's identity and to check that they are entitled to use the subscription. To complete this entitlement check internet access is required to connect to Quest Software's Licensing Servers.

- Toad for Oracle Subscription edition is bundled with Quest Auto Update, a service to periodically check for and deliver product updates. Quest Auto Update requires internet access and must be able to reach the cloud service at https://autoupdate.toadworld.com.

# Additional requirements

| Requirement | Details |
| --- | --- |
| Additional Software | - Microsoft Internet Explorer 6.0 or later (to view video from the **Jump** list within Toad, and to view the product documentation in HTML format).<br>- Microsoft Office 2016 and recent earlier releases are supported for Word and Excel output.<br>- Adobe Acrobat Reader 7.0 or later (to view the product documentation in PDF format).<br>- Microsoft .NET Framework 4.0 to support the Toad for Oracle Editions Installer. |

# Virtualization support

| Type | Details |
| --- | --- |
| Application virtualization | Citrix$^®$ XenApp |
| Desktop virtualization (VDI) | vWorkspace™ 7.0 has been tested. |
| Server virtualization | Oracle VM 3.1 has been tested.<br>VMware ESX Server 3.5, 4.0, and 5.5 have been tested. |

**NOTE:** Toad may work in virtualization environments other than the ones listed.

# Windows Privileges

In order to install and run Toad, make a connection, and do basic operations, you must have the following privileges.

| Operating System | Requirements |
| --- | --- |
| Windows 8.1 and 10<br>Windows Server 2012 R2, 2016, 2019, and 2022 | - Read access to the Oracle client folder<br>- Read/write privileges on the Oracle Home directories that you use for your connections |

**NOTE:** Toad for Oracle Subscription edition is bundled with Quest Auto Update, a service to periodically check for and deliver product updates. Installation requires administrator privileges on all supported operating systems.

**NOTE:** Other functionality in Toad may require additional privileges.

# Product licensing

## Legacy Toad for Oracle with offline license keys

***To activate a trial***

1. Go to the trial download web page: https://www.quest.com/products/toad-for-oracle/software-downloads.aspx, accessed through the product page.

2. Select the Toad for Oracle Edition that you want to try.

3. Log in to your account or register.

4. Accept the license terms.

5. Download the trial file.

***To activate a purchased commercial license***

1. Go to the Quest Support website: https://support.quest.com/

2. Type the name of the product that you want to activate in the **Enter your product to find support** field.

3. Select **Download New Releases**.

4. Download the installer file.

**NOTES:**

- License keys compatible with Toad for Oracle 9.7 and earlier versions are no longer supported.

- Only the newer 48-character license keys are supported.

- If you have an older license type, the Editions installer points you to the license web page where you can update it.

- Toad supports cumulative licensing. You can add multiple licenses, including those for add-ons like Sensitive Data Protection, to Toad. Toad will use the licenses providing the highest degree of features.

## Toad for Oracle Subscription with online licensing (including Editions)

Toad for Oracle Subscription requires you to sign in with your Quest.com account. Licenses are tied to your account giving you the flexibility to use Toad from multiple computers without having to move your license.

### Sign in with existing Quest.com account

1. Enter your account email address and password when prompted

2. If you already have a Toad for Oracle Subscription license, no further action is needed

3. If you do not have a Toad for Oracle Subscription license, see **Activating a new license** below

### Create a new Quest.com account

1. Select **Sign up for a new account**

2. Enter your account details and select **Sign Up**

3. A confirmation email is sent containing a verification code

4. Enter the code from the email and select **Verify**
   **NOTES:**

   - It may take a few minutes for the verification email to arrive

   - Check your spam/junk folders for the email sent from supportadmin@quest.com if you do not receive it

   - For additional assistance, please contact Quest support

### Activating a new license

1. Toad for Oracle Subscription automatically provides a fully functioning, 30-day Trial license

2. To purchase a new license, click **Buy Now** from Toad's title bar

3. After completing your transaction, restart Toad and your license is automatically detected

4. To manage licenses, select **Account Settings** beneath your account shown at the top-right of Toad
   **NOTE:** You can view your licenses from within Toad by selecting **Help | Licensing**

# Getting started with Toad for Oracle

Toad for Oracle is distributed in the Toad for Oracle Editions at https://support.quest.com/download-product-select.

## Upgrade and installation instructions

Please refer to the Toad for Oracle *Installation Guide* at https://support.quest.com/technical-documents for installation and upgrade instructions.

Upgrades for Toad for Oracle can install side-by-side with any previous versions you have installed. You can run the new and previous versions concurrently.

The first time you run the new version of Toad, the settings files from the previous version are automatically imported. To start with a clean set of user files, go to **Utilities | Copy User Settings**, then select **Create a clean set of user files from the base installation**.

> **NOTE:** Toad supports importing settings only if the new version is within two releases of the previous version. If your versions are more than two releases apart, you need to install an intermediate version to successfully import the files.

## User instructions

To get started with using Toad for Oracle, see the *Guide to Using Toad* at https://support.quest.com/technical-documents. For detailed information about any Toad window or feature, see the online help, which can be accessed from the **Help** menu.

## Additional resources

Additional information is available from the Toad for Oracle Community on Toad World:

https://www.toadworld.com/products/toad-for-oracle

# Globalization

## Global Operation Statement

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 was not enabled and tested for international operation. Only U.S. English configurations of this product and U.S. English datasets are fully supported. Support for non-ASCII characters or non-English configurations may work appropriately, but these configurations have not been tested and this release should be used with caution in these environments.

This release has the following known capabilities or limitations: Toad 13.1 is a Unicode application. As such, it has support for any Oracle Unicode character set, such as UTF8 or AL32UTF8. There are some features in Toad which use or invoke Oracle Utilities or applications which are not themselves Unicode applications. Their functionality is therefore limited to the character set of the client on which Toad is running, and NLS_LANG must be carefully set to match the Windows character set

We have also observed issues with US7ASCII when used with non Latin characters.

# 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 community-driven 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.

## Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

## Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

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