

Toad[®] for Oracle[®] 12.12

Release Notes

Revised 9/29/2017

Contents

- About Toad for Oracle** **3**
- Toad for Oracle resources** **4**
- About this release** **5**
- About Toad[®] for Oracle[®] 2017 Editions** **6**
- New features** **8**
- Enhancements** **9**
 - Enhancements from Toad Idea Pond 9
 - Other enhancements 9
- Resolved issues** **11**
- Known issues** **16**
 - General known issues 16
 - Data Grids known issues 17
 - Code Analysis known issues 17
 - Editor known issues 18
 - Session Browser known issues 18
 - Team Coding known issues 18
 - Unicode known issues 19
 - Third-party known issues 20
- System requirements** **21**
 - Hardware requirements 21
 - Database requirements 22
 - Network 22
 - Additional requirements 23
 - Virtualization support 23
 - Windows Privileges 23

Product licensing	24
Getting started with Toad for Oracle	25
Upgrade and installation instructions	25
User instructions	25
Additional resources	25
Globalization	26
Global Operation Statement	26
About us	27
Contacting Quest	27
Technical support resources	27

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

The parent site for all Toad family products is [ToadWorld.com](https://www.toadworld.com), where you will find videos, white papers, web-based training, expert blogs and podcasts, as well as beta releases, trial downloads and much more. The [Toad for Oracle Community](#) on this site focuses this content specifically on Toad for Oracle.

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 against other customers' 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 12.12 is a minor release, with enhanced features and functionality.

About Toad[®] for Oracle[®] 2017 Editions

All commercial versions of Toad for Oracle are bundled with additional Quest products, based upon the license that you purchased. These bundles are known as Editions and include the following:

Toad for Oracle Base Edition

- Toad[®] for Oracle[®]
- Toad[™] Data Modeler (free use)

Toad for Oracle Professional Edition

- Toad[®] for Oracle[®] Professional
- Toad[™] Data Modeler (free use)

Toad for Oracle Xpert Edition

- Toad[®] for Oracle[®] Xpert
Includes all features in Base and Professional Editions
- SQL Optimizer for Oracle[®]

Toad for Oracle Developer Edition

- Toad[®] for Oracle[®] Xpert
- Code Tester for Oracle[®]
- Benchmark Factory[®] for Databases - Oracle Edition

Toad for Oracle DBA Edition

- Toad[®] for Oracle[®] Xpert
- DB Admin Module Add-on
- Spotlight on Oracle[®]
Includes Spotlight on Unix/Linux, Spotlight on Windows, and Spotlight on Oracle Data Guard
- Benchmark Factory[®] for Databases - Oracle Edition
- Toad[®] Data Modeler

Toad for Oracle DBA RAC Edition

- Toad[®] for Oracle[®] Xpert
- DB Admin Module Add-on
- Spotlight on Oracle[®] with RAC Option
Includes Spotlight on Unix/Linux, Spotlight on Windows, and Spotlight on Oracle Data Guard
- Benchmark Factory[®] for Databases - Oracle Edition
- Toad[®] Data Modeler

Toad for Oracle DBA Exadata Edition

- Toad[®] for Oracle[®] Xpert
 - 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
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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 2017 Editions release notes at:
<https://support.quest.com/technical-documents>

New features

- The Automation Designer now has a Connection Iterator, which enables you to set up an action to run against multiple connections. Although you can run an action against multiple connections in the Automation Designer (right click, then select **Run with Connections**), the iterator will persist for future use. This action is available from the **Control** tab.
- The legacy Schema Compare feature (Toad 12.10) has been combined with the Compare Multiple Schemas feature (Toad 12.11) to produce a new Compare Multiple Schemas feature. The 12.11 Compare Multiple Schemas window is now called “Compare Multiple Schemas – Legacy” and is removed from the menu. To restore it, right-click the main toolbar, then choose **Customize**. In the dialog, select the **Commands** tab, then click **Compare**, then drag **Multiple Schemas – Legacy** to the main menu under **Database | Compare** or any other location of your choice.
- The Action Console has been mostly deprecated. The existing shortcut (Shift+F4) will continue to show Action Console in all places where it existed, but all right-click menus for Action Console and all toolbar buttons for it have been removed. These are replaced by a new advanced-context menu. When you **SHIFT + right-click** the name of an object in the Editor or other relevant areas of Toad, an advanced menu is displayed if the object can be resolved. If the object cannot be resolved, Toad shows the normal context menu.

Enhancements

Enhancements from Toad Idea Pond

The following is a list of enhancements requested by Toad for Oracle users on the Toad Idea Pond and implemented in this release.

The [Idea Pond on Toad World](#) is a site where you can submit your ideas to improve Toad and vote or comment on ideas submitted by other people. The Toad development team has always been driven by our customers, and the Idea Pond makes it easy for you to tell us what changes are most important. This site is free for all Toad customers.

Enhancement	Link to Idea Pond
Displaying schema browser and editor on separate tabs	Link
Allow multiple objects to have their Team Coding Lock Broken	Link
Wrong number of blocks in partition grid	Link
Is there a way to let TOAD detect the newline style?	Link

Other enhancements

- The **Properties** dialog of the Code Analysis action has been modified to allow just one file name, because users specify the same name for all output types in most cases. Now you specify one base file name and then select the output formats. Toad creates the files with the specified name and the appropriate file extension.
- The pass/fail logic in Team Coding is now also in the Code Analysis functionality so that a user can fail the Code Analysis action if it does not meet specifications.
- The icons in various areas of Toad have been updated to have a more contemporary appearance.
- When you create a pluggable database, the final dialog now includes the option "Pluggable database management is available in the Database Browser" which opens the Database Browser for further work with the new database.
- Support was added for "Authentication required" proxy connections. Note that SQL*Plus does not allow these types of connections, so if you attempt to launch SQL*Plus from this kind of connection in Toad, it will fail.
- Added a tab on the RHS of the Schema Browser to display Code Tester unit tests that are associated with a selected PL/SQL object.

- The right-click menu of a database object has been updated throughout Toad to remove redundancy and logically categorize the list of options and capabilities.
- Toad Security was removed from the default menu due to lack of use.
- The layouts of Compare Data and Compare Multiple Tables has been improved to make the interface easier to use.
- An additional check was added to Team Coding to recognize when an object has been opened in the Editor (but not checked out) and another user changes that object's DDL before the first user can press compile. When this happens, Toad will prompt the first user that the database object has changed and give that user the option of merging the differences. This check helps prevent overwrites between users.
Note: This only applies to objects opened in the Editor. It does not apply to objects being altered manually through free-form typing by the user.
- When you mouse over a node in the Navigator to get the tooltip text, instead of showing the text for the entire anonymous block, Toad now shows the text of the cursors.

Resolved issues

This section contains a list of the issues that were resolved in this release of Toad for Oracle.

Resolved Issue	Issue ID
Editor: Alignment brackets (block staples) feature removed in 12.7 27 of 27 Return to search	TOR-881
F5: wrong data format display for Oracle Type with date	TOR-891
Toad doesn't release memory when 'execute as script' is cancelled	TOR-901
Non-SYS User logs in as SYSDBA, sees SYS's objects in dropdown	TOR-940
Alt+Left Arrow does not always take you back to package body	TOR-988
Disable "show diff details" for sys-named constraints where DDL cannot be fetched	TOR-1003
Double-clicking in TC Manager opens VCS version of file vs local copy	TOR-1022
Named SQL Drop down list is hard to read	TOR-1031
Toad: FTP tool in Toad shows incorrect modified timestamp when connected via Secure FTP	TOR-1180
When importing from *.xls version 5.0/95, Dates import as numbers	TOR-1210
Add scrollbars to data compare	TOR-1218
ora-00936 Missing Expression when clicking on the Locks System tab of Session Browser	TOR-1219
Scheduler Jobs > Scheduled Run Times tab not showing correct run times	TOR-1222
Cursor jumps when dragging from OP to Editor	TOR-1224
Anonymous Block with Bind Variable Executing Twice	TOR-1225
Minimum size for tablespesce file definition is computed incorrectly	TOR-1236
Scheduler Jobs notifications not created when Schema is different than login schema	TOR-1255
Explain plan window does not display content properly in Session Browser	TOR-1256
12c: Users > Object grants tab uses bad query for low priv users	TOR-1259
AV when formatting files with Execute Queries in Threads option turned on	TOR-1265
Session Browser Disconnect Sessions and Kill Session buttons not active when setting DBA Role	TOR-1277
List Index Out of Bounds error when comparing large files	TOR-1310
Can't debug on Pluggable RAC	TOR-1330
Export File Browser hanging	TOR-1333

Resolved Issue	Issue ID
Temporal Validity not supported in table scripts	TOR-1345
Reporting GMT time in its history, rather than local time	TOR-1346
Issue found in Schema Browser refresh for TC objects	TOR-1411
Breaking a lock in Team Coding doesn't update the VCS	TOR-1415
Resolved formatting/parser issues:	TOR-1469
<ul style="list-style-type: none"> • Formatter: The alignment within the first statement ("chunk") of SQL text was offset by one position at times, as shown in the following example: <pre>GRANT ALTER, CONTROL, DELETE, INDEX, INSERT, REFERENCES, SELECT, UPDATE ON "ADVISE_INSTANCE" TO ROLE "RL1";</pre> In a few other cases tokens were not correctly positioned. • Formatter: CREATE/ALTER TABLE/SEQUENCE: Moving some left hand side commas at the right hand side. • Code Analysis: Possible access violation in component QP5CA.dll on invalid Oracle \$IF/\$ELSE/\$ENDIF syntax. • Code Analysis: After the work on rule 6406 ("Avoid multiple definitions of the same element in nested scopes.") the Rule Universe was wrongly left unchanged causing the old legacy logic still to be used. • Code Analysis: Rule 5809 ("Ensure elements in the SELECT list (either columns or expressions) are qualified by a table/view name.") now only hits when more than one table reference, unless we have queries in the WHERE clause. • Code Analysis: Rule 3807 ("Avoid using a RETURN statement in a procedure.") has been removed as it duplicates Rule 5601 ("Avoid using RETURN statements in a PROCEDURE."). 	
Resolved formatting/parser issues:	TOR-1740
<ul style="list-style-type: none"> • Queries: FLASHBACK clause: support for AS OF clauses in mixed order. • CREATE MATERIALIZED VIEW LOG: support for any kind of PARALLEL clause. • ALTER MATERIALIZED VIEW LOG: supports the same partitioning clauses as in ALTER TABLE. • GRANT/REVOKE: Indenting ON and TO clauses. 	

- Code Analysis:
 - New Rule 5920 ("Apply the invoker rights method to all stored code that executes dynamic SQL")
 - Rule 5906 ("Found a literal containing an email address or URL.") : This customer specific rule has been generalized to recognize email addresses and URLs.
 - Rule 5916 ("Beware of and avoid implicit data type conversions.") : Will detect many more forms of TO_DATE, TO_TIMESTAMP and TO_CHAR(date).
 - Rule 2812 ("Consider defining subtypes for variables with identical datatypes.") : This rule was defective.
 - Rule 2131 ("Use CONSTANT keyword wherever possible.") : Did unexpectedly fire on an object method invocation.

Resolved formatting/parser issues:

TOR-1772

- Fixed access violation when running in 64 bit mode on Windows 10 when calling the formatter and options GUI.
- - Fixed possible access violation when running in 64 bit mode on Windows 10 when calling the formatter and options GUI.
- Code Analysis Rule 5901 ("FND_GLOBAL.apps_initialize string found within code. Please use xxccs_fea_utl_session.apps_initialize() instead.") This rule has been removed as it all customer specific. Private rules can be created as needed (range 7000-9999).
- Code Analysis Rule 2911 ("Replace DECODE function with CASE construct .") partially duplicated Rule 5816 ("Use CASE construct rather than DECODE."). It has been combined with Rule 5816 and removed.
- Code Analysis Rule 4537 ("Utilize the CONTINUE statement rather than a GOTO or an extra level of conditional logic within a looping construct.") This will now work with back GOTOs only.
- Code Analysis Rule 5003 ("Avoid initializing variables to NULL.") CONSTANT declarations are now skipped.
- Code Analysis Rule 5809 ("Ensure elements in the SELECT list (either columns or expressions) are qualified by a table/view name.") False positive with inline queries and CAST.


```
SELECT ( SELECT 1 FROM dual d3 ) FROM dual d1 CROSS JOIN dual d2;
SELECT CAST( 1 AS INTEGER )
FROM dual
CROSS JOIN dual;
```

Resolved formatting/parser issues:

TOR-1804

GRANT/REVOKE: Added missing 12cR2 privileges.

Queries: Support for a sequence of multiple PIVOT/UNPIVOT clauses in a table reference.

SqlPlus: Removed unwanted space in @- and @@-commands.

Resolved Issue**Issue ID**

Code Analysis Rule 2106 ("Avoid unnecessary references to schema names.") This rule has been removed because it is too context dependent.

Code Analysis Rule 2120 ("Avoid SELECT statements with more than two UNION operations.") Now has a "variable" for the maximum number of subqueries.

Code Analysis Rule 2752 ("Use named parameter notation") Will now exclude all Oracle built-in functions.

Code Analysis Rule 2832 ("Avoid hard-coded constraints on VARCHAR2 variables by anchoring the declaration to a variable or column with %TYPE, or by defining a SUBTYPE and then declaring the variable based on that subtype.") Will no longer raise inside XMLTABLE function.

Compare Schemas comparing a schema to itself with direct connections

TOR-1813

Schema Browser can be slow to refresh TC status columns

TOR-1833

Resolved formatting/parsing issues:

TOR-1846

- Improved syntax check on PLS_INTEGER data type usage.
- The function LISTAGG can now have one argument as well.
- Formatting enhanced for some or all forms of:
 - CREATE TABLE
 - ALTER TABLE (each clauses on its own line)
 - CREATE DATABASE
 - ALTER DATABASE
 - TRUNCATE TABLE
 - CREATE SEQUENCE
 - ALTER PROCEDURE
 - ALTER INDEX
- CREATE VIEW and CREATE MATERIALIZED VIEW had different column arrangements. Both are now unified.
- Column alignment in CREATE TABLE is fixed.
- Model clause formatting is enhanced.
- Rule 2831 ("Use PLS_INTEGER instead of INTEGER or equivalent subtypes.") No longer raising in CAST(... AS data-type), and in column definitions or attributes found in CREATE/ALTER TABLE, CLUSTER, TYPE.
- Rule 2118 ("Avoid DDLs other than Truncate, Exchange/Split partition.") Will now process DDL quoted inside an EXECUTE IMMEDIATE statement only, excluding all other DDL statements.
- Fixed access violation during legacy rule processing when having a token larger than 1,000 characters in the input text. The new limit is 500 KB.

Debugging on RAC doesn't always work

TOR-1847

Resolved formatting/parser issues:

TOR-1907

-
- Fixed access violation that occurred while editing.
 - Enhanced Parser support for SQL*Plus 12c Release 2.
 - Code Analysis Rule 4204 ("Avoid IF when assigning values to boolean variables.") : Renamed the rule. Old name was "Use a Boolean rather than a complex condition".
 - Code Analysis Rule 4503 ("Calls to DBMS_ADDM require optional OEM packs for DIAGNOSTIC + TUNING.") : Fixed a typo: Using the name DBMS_ADDM rather than DBMS_ADM.
 - Code Analysis Rule 5914 ("Use untransformed column values in the WHERE clause.") : This rule should now only hit real columns.
 - Added new Code Analysis rules detecting redundant parentheses:
 - Rule 6812 ("Avoid parentheses around the entire condition.")
 - Rule 6813 ("Avoid parentheses around simple conditions.")
 - Rule 6814 ("Avoid parentheses around expressions with same precedence.")
 - Rule 6815 ("Avoid parentheses around one side of a condition.")

Schema compare treating system named FK constraints as different

TOR-1826

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
<p>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.</p> <p>Toad currently does not differentiate between indexes created explicitly on the snapshot and indexes created automatically when the snapshot is created.</p> <p><i>Workaround:</i> 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.</p>	N/A
<p>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:</p> <ol style="list-style-type: none">1. Client shows as invalid2. Client version is not detected3. 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
<p>Debugger</p> <p>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.</p> <p><i>Workaround:</i> To see REFCURSOR output and DBMS output, execute the procedure without the debugger.</p>	N/A
<p>Connections</p> <p>While Toad supports LDAP connectivity, some features of Toad depend on tnsnames.ora file to operate correctly, such as Toad Script Runner (TSR).</p>	N/A

Known Issue	Issue ID
<p>Schema Browser</p> <p>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.</p> <p><i>Workaround:</i> 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.</p>	N/A
<p>Virtualization</p> <p>An access violation error may display when you close Toad in a Citrix XenApp environment.</p>	76354
<p>Import/Export</p> <p>Constraint scripts from Export DDL do not contain the "using index" or "tablespace" clause.</p>	59228
<p>Data Modeler:</p> <ul style="list-style-type: none"> • Generation of HTML reports of large diagrams may fail during generation of an image of the ER Diagram. • Comparison of large models may consume too much memory. 	N/A

Data Grids known issues

Known Issue	Issue ID
<p>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.</p> <p><i>Workaround:</i> 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.</p>	N/A
<p>Full table data is not displaying in the live data grid (results from F9) if the data contains "zero" characters (ASCII 0). In this case, all data after the zero character will not show in the grid.</p> <p><i>Workaround:</i> Double click on the data cell in the data grid to view full contents of data in a popup editor.</p>	

Code Analysis known issues

Known Issue	Issue ID
<p>Saving results to a database: When dealing with nested procedures, Code Analysis can only insert run data from procs one level deep.</p>	N/A

Known Issue	Issue ID
<p>Saving PL/SQL results to a database may fail or save invalid data to the database for invalid PL/SQL objects.</p> <p><i>Workaround:</i> To ensure PL/SQL results are saved to the database correctly, verify the validity of all objects before running Code Analysis.</p>	N/A

Editor known issues

Known Issue	Issue ID
<p>Toad errors when you query on a field of Oracle collection types.</p> <p><i>Workaround:</i> Execute using SQL*Plus.</p>	64373
<p>When spooling to an unpinned output window, the window becomes unresponsive and errors are given when Toad is closed ("Canvas does not allow drawing").</p> <p><i>Workaround:</i> Keep the output window pinned.</p>	68523
<p>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.</p> <p><i>Workaround:</i> Go to Options Scripts and select a fixed-width font for script output.</p>	62234

Session Browser known issues

Known Issue	Issue ID
<p>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.</p>	N/A
<p>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.</p> <p><i>Workaround:</i> Clear the "Use RAC Views" checkbox, and log into the appropriate instance of the database, if necessary.</p>	N/A

Team Coding known issues

Known Issue	Issue ID
<p>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</p>	N/A

Known Issue	Issue ID
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.	
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. 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
Team Coding and SourceSafe: <ul style="list-style-type: none"> Integration via the SCC API is available but not recommended for SourceSafe 6.0 SourceSafe 5.0 ignores the "Force revision" flag and "Create a new revision for existing objects" option when exporting. 	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. <i>Workaround:</i> 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: <ul style="list-style-type: none"> ASM Manager Export File Browser Hex Editor <p>In addition, Java itself does not allow Unicode class names or file names. This is relevant to the Java Manager, Editor, and Schema Browser.</p>	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 <i>contents</i> are supported, objects with Unicode <i>names</i> are not. Supported Version Control Providers do not support Unicode names.	N/A

Third-party known issues

Known Issue	Issue ID
<p>Help</p> <p>(Affects the 64-bit version of Toad only)</p> <p>If IE9 is installed, clicking a link in the Help file may crash Toad 64-bit, even if IE9 is not the default browser.</p> <p><i>Workaround:</i> Users who have IE9 installed can open Help from outside of Toad.</p>	N/A
<p>ODAC</p> <p>ODAC does not support Unicode in XMLTYPE (editing of XMLTYPE data is not supported). Querying of XMLTYPE with binary storage will lead to an error.</p>	62654

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
Memory	<ul style="list-style-type: none">• 1 GB RAM - Toad for Oracle 32 bit• 2 GB RAM - Toad for Oracle 64 bit <p>NOTE: The memory required may vary based on the following:</p> <ul style="list-style-type: none">• Applications that are running on your system• Size and complexity of the database• Amount of database activity• Number of concurrent users accessing the database
Hard disk space	<ul style="list-style-type: none">• 120 MB - Toad for Oracle 32 bit• 150 MB - Toad for Oracle 64 bit
Operating system	<ul style="list-style-type: none">• Windows Vista (32-bit and 64-bit)• Windows Server 2008 (32-bit and 64-bit) - 2 CPU required• Windows Server 2008 R2 (64-bit) - 2 CPU required• Windows 7 (32-bit and 64-bit)• Windows 8 and 8.1 (32-bit and 64-bit)• Windows Server 2012 (32-bit and 64-bit) - 2 CPU required• Windows Server 2012 R1 and R2 (64-bit) - 2 CPU required• Windows Server 2016• Windows 10

Database requirements

Requirement	Details
Database client	<p>An Oracle client must be installed and configured on the system where you are running Toad. The following are supported:</p> <ul style="list-style-type: none">• Oracle Client or Instant Client 10.2.0.5• Oracle Client or Instant Client 11.2.0.1/11.2.0.3• Oracle Client or Instant Client 12c Release 1 and 2 <p>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.</p>
Database server	<p>Oracle versions:</p> <ul style="list-style-type: none">• 10g, 10g R2• 11g, 11g R2• 12c Release 1 and 2 <p>Exadata:</p> <p>Toad has been tested on Oracle Exadata 2.0 running Oracle database 11g R2.</p> <p>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.</p>
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.

Additional requirements

Requirement	Details
Additional Software	<ul style="list-style-type: none">• 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).• Microsoft Office 2016 and recent earlier releases are supported for Word and Excel output.• Adobe Acrobat Reader 7.0 or later (to view the product documentation in PDF format).• Microsoft .NET Framework 4.0 to support the Toad for Oracle Editions Installer.

Virtualization support

Type	Details
Application virtualization	Citrix® XenApp
Desktop virtualization (VDI)	Dell™ vWorkspace™ 7.0 has been tested.
Server virtualization	Oracle VM 3.1 has been tested. 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 Vista Windows 7	<ul style="list-style-type: none">• Read access to the Oracle client folder• Read/write privileges on the Oracle Home directories that you use for your connections
Windows 8 and later Windows Server 2012 and 2016	<ul style="list-style-type: none">• Read access to the Oracle client folder• Read/write privileges on the Oracle Home directories that you use for your connections

NOTE: Other functionality in Toad may require additional privileges.

Product licensing

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.
- Beginning with Toad for Oracle 12.5, 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.

Getting started with Toad for Oracle

Toad for Oracle is distributed in the Toad for Oracle 2017 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:
<http://www.toadworld.com/products/toad-for-oracle/default.aspx>

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 is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. 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.

The release is localized to the following languages: Chinese (Simplified), Korean.

This release has the following known capabilities or limitations: Toad 12.12 is a Unicode application. As such, it has native 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.

The UI is localized into simplified Chinese. Reports are localized to simplified Chinese and Korean.

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

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Toad for Oracle Release Notes

Updated - 9/29/2017

Version - 12.12