

# Toad® DevOps Toolkit 1.4

## Release Notes

6/29/2021

These release notes provide information about the Toad DevOps Toolkit release.

## About this release

Toad DevOps Toolkit 1.4 is a minor release, with enhanced features and functionality.

## About Toad DevOps Toolkit

Toad DevOps Toolkit exposes key Toad for Oracle functionality (such as Code Analysis and Unit Testing) as programmable objects that can be called from DevOps scripts such as PowerShell or Visual Basic. This enables you to include database-development steps into your Continuous Integration model through tools such as Jenkins or Bamboo. What this all really means is that the deployment of Oracle application and database upgrades is now made much easier, keeping your team more productive and your end users satisfied with their business tools.

Toad DevOps Toolkit is standalone and independent from Toad for Oracle. The only requirement is that a Code Tester for Oracle repository is installed on the same system as Toad DevOps Toolkit. For version requirements, see the System Requirements.

## Toad resources

The parent site for all Toad family products is [ToadWorld.com](https://www.toadworld.com). There you will find videos, blogs, and much more. The home of the Toad DevOps Toolkit community is <https://www.toadworld.com/products/toad-devops-toolkit>. Keep checking this site as Toad DevOps Toolkit continues to grow and add features to help you increase your productivity.

Two of the most-often used features of Toad World are the Forums and the Idea Pond. Find the Toad DevOps Toolkit Forum at: <https://forums.toadworld.com/c/toad-devops-toolkit>. Find the Toad DevOps Toolkit Idea Pond at: <https://forums.toadworld.com/c/toad-devops-toolkit/idea-pond>.

- On the Idea Pond page, you can submit your ideas to improve Toad DevOps Toolkit and vote for 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.

# System requirements

## Hardware requirements

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

## Database requirements

Requirement	Details
Database client	<p>An Oracle client must be installed and configured on the system where you are running Toad DevOps Toolkit. The following are supported:</p> <ul style="list-style-type: none"><li>• Oracle Client or Instant Client 10.2.0.5</li><li>• Oracle Client or Instant Client 11.2.0.1/11.2.0.3</li></ul>

Requirement	Details
	<ul style="list-style-type: none"> <li>• Oracle Client or Instant Client 12c Release 1 and 2</li> <li>• Oracle Client or Instant Client 18c</li> <li>• Oracle Client or Instant Client 19c</li> </ul> <p><b>NOTE:</b> You must use the 32-bit version of Toad DevOps Toolkit with the 32-bit Oracle client, and the 64-bit version of Toad DevOps Toolkit with the 64-bit Oracle client.</p>
Database server	<p><b>Oracle versions:</b></p> <ul style="list-style-type: none"> <li>• 10g R2</li> <li>• 11g, 11g R2</li> <li>• 12c Release 1 and 2</li> <li>• 18c</li> <li>• 19c</li> </ul> <p><b>IMPORTANT:</b> 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

## Additional requirements

- Microsoft .NET Framework 4.5 is required to run the Quest Installer, which installs Toad DevOps Toolkit.
- Microsoft ASP.NET Core 3.1 and .NET Core 3.1 are required to run the REST API.
- If you want to run unit testing for database objects, a Code Tester repository (3.2 or greater) must exist on the system where Toad DevOps Toolkit is being used.

## Windows Privileges

In order to run Toad DevOps Toolkit against the database, the following privileges are required:

Operating System	Requirements
Windows 7	<ul style="list-style-type: none"> <li>• Read access to the Oracle client folder</li> <li>• Read/write privileges on the Oracle Home directories that you use for your connections</li> </ul>
Windows 8 and later Windows Server 2012 and 2016	<ul style="list-style-type: none"> <li>• Read access to the Oracle client folder</li> <li>• Read/write privileges on the Oracle Home directories that you use for your connections</li> </ul>

## Toad DevOps Toolkit 1.4

### REST API Security

All requests must supply an API token to validate the request. Failure to do so results in an error response status code.

- Visit <https://localhost:5000/> in your browser to generate or later refresh the token's value
  - This step must be performed using a Windows Administrator account
  - If the REST API has been configured to listen on a different port then use the new port in the URL
- Supply the token with each request by including the X-API-Key header and using the token as its value

## Toad DevOps Toolkit 1.3

### REST API

A new REST API has been added. The REST API runs a localhost web service that listens on port 5000, by default.

Perform the following steps to change the port:

- Stop the "Quest Software Toad DevOps Toolkit (REST)" Windows Service
- Edit the ".\Service\appsettings.json" file found in Toad DevOps Toolkit installation folder and change the port to a new value
- Start the "Quest Software Toad DevOps Toolkit (REST)" Windows Service

### Code Analysis Enhancements

- Running a Code Analysis now returns a result code. This allows you to execute a second action based on the result code returned after running a Code Analysis.
- A new property, RulesetName, allows you to find the list of available ruleset names so you can choose a ruleset (pre-defined or user-defined).

# Discontinued Features

**Licensing Manager.** Beginning with Toad DevOps Toolkit 1.2, the Licensing Manager is no longer available. For more information about managing Toad DevOps Toolkit licenses, see the *Toad DevOps Toolkit Installation Guide* and *Toad DevOps Toolkit Help*.

# Resolved issues

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

## Toad DevOps Toolkit 1.4

The following list of resolved issues includes issues received from the Toad DevOps Toolkit forum.

Issue ID	Link to Forum Post	Resolved Issue
TDT-402		.NET Core 2.2 has reached end of life yet it is required for the REST API

## Toad DevOps Toolkit 1.3

The following list of resolved issues includes issues received from the Toad DevOps Toolkit forum.

Issue ID	Link to Forum Post	Resolved Issue
TDT-180		Code Analysis does not load object DDL unless object type is upper case
TDT-181		Code Analysis job succeeds when it should fail

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

# Product licensing

Before you can use Toad DevOps Toolkit, you must apply your license key. A **.dlv** license file containing a valid license key is used to license Toad DevOps Toolkit.

## License Files

Quest provides you with a license file (.dlv) containing a valid license.

When Toad DevOps Toolkit is installed, a license configuration file (License.cfg) is installed in C:\ProgramData\Quest Software\Toad DevOps Toolkit. This configuration file specifies a default path to the .dlv file.

You can place the .dlv file in the default location specified in the configuration file, or you can place the .dlv file in a new location and then change the specified path in the License.cfg file.

Upon initial launch, Toad DevOps Toolkit reads the .dlv file and caches the license locally (in the ProductLicenses.xml file). When the locally-cached license expires, Toad DevOps Toolkit again searches the .dlv file (location specified by the License.cfg file) for a valid license.

## To manually apply a license for Toad DevOps Toolkit

1. Obtain a **.dlv** license file containing a valid license from Quest. In most cases, Quest provides this file to you by email.
2. Then do one of the following:
  - Place this file in the location specified in the **License.cfg** file.
  - Place the file in a location of your choosing and then follow the steps in “To add a license using a script.”
3. Start Toad DevOps Toolkit.

## To add a license using a script

- You can add a license from a **.dlv** file by running the following command using PowerShell:

```
$TDT = New-Object -ComObject 'Toad.ToadAutoObject'  
$TDT.Licensing.AddLicense('full_path')  
$TDT.Quit()
```

where *full\_path* is the full path and file name of the **.dlv** file containing the license to add

Example: `$TDT.Licensing.AddLicense('C:\mynewlicense.dlv')`

**NOTE:** For more information about managing Toad DevOps Toolkit licenses, see the *Toad DevOps Toolkit Installation Guide* and *Toad DevOps Toolkit Help*.



# 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.

This release has the following known capabilities or limitations: Toad DevOps Toolkit 1.4 is a Unicode application. As such, it supports Oracle Unicode character sets, such as UTF8 and AL32UTF8. There are some features in Toad DevOps Toolkit 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 DevOps Toolkit 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.

# Third-party contributions

This product contains the following third-party components. For third-party license information, go to <https://www.quest.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (\*) is available at <https://opensource.quest.com>.

Component	License or Acknowledgement
Google-Gson 2.8.4	<p>Apache License Version 2.0, January 2004 <a href="http://www.apache.org/licenses/">http://www.apache.org/licenses/</a> The full license text is available at: <a href="https://www.quest.com/legal/third-party-licenses.aspx">https://www.quest.com/legal/third-party-licenses.aspx</a>.</p> <p>TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION</p> <p>1. Definitions.</p> <p>"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.</p> <p>"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.</p> <p>"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.</p> <p>"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.</p> <p>"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.</p> <p>"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.</p> <p>"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work</p>

(an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct

or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Component	License or Acknowledgement
	<p>Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.</p> <p>6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.</p> <p>7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.</p> <p>8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.</p> <p>9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.</p> <p>END OF TERMS AND CONDITIONS</p>
KControls 1	Portions copyright 2009 Tomas Krysl
Scintilla 3.6.1.2	Copyright 1998-2002 by Neil Hodgson <neilh@scintilla.org> All Rights Reserved

Component	License or Acknowledgement
	<p>License for Scintilla and SciTE</p> <p>Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation.</p> <p>NEIL HODGSON DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL NEIL HODGSON BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.</p>
Virtual Treeview 5	<p>Mozilla Public License Version 1.1</p> <p>1. Definitions.</p> <p>1.0.1. "Commercial Use"</p> <p>means distribution or otherwise making the Covered Code available to a third party.</p> <p>1.1. "Contributor"</p> <p>means each entity that creates or contributes to the creation of Modifications.</p> <p>1.2. "Contributor Version"</p> <p>means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor.</p> <p>1.3. "Covered Code"</p> <p>means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof.</p> <p>1.4. "Electronic Distribution Mechanism"</p> <p>means a mechanism generally accepted in the software development community for the electronic transfer of data.</p> <p>1.5. "Executable"</p> <p>means Covered Code in any form other than Source Code.</p> <p>1.6. "Initial Developer"</p> <p>means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A.</p> <p>1.7. "Larger Work"</p> <p>means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.</p> <p>1.8. "License"</p> <p>means this document.</p> <p>1.8.1. "Licensable"</p> <p>means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.</p> <p>1.9. "Modifications"</p> <p>means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is:</p>

Component	License or Acknowledgement
-----------	----------------------------

Any addition to or deletion from the contents of a file containing Original Code or previous Modifications.

Any new file that contains any part of the Original Code or previous Modifications.

#### 1.10. "Original Code"

means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License.

##### 1.10.1. "Patent Claims"

means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

##### 1.11. "Source Code"

means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge.

##### 1.12. "You" (or "Your")

means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 2. Source Code License.

### 2.1. The Initial Developer Grant.

The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims:

under intellectual property rights (other than patent or trademark) Licensable by Initial Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof).

the licenses granted in this Section 2.1 (a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License.

Notwithstanding Section 2.1 (b) above, no patent license is granted: 1) for code that You delete from the Original Code; 2) separate from the Original Code; or 3) for infringements caused by: i) the modification of the Original Code or ii) the combination of the Original Code with other software or devices.

### 2.2. Contributor Grant.

Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license

under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by

such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and

under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

the licenses granted in Sections 2.2 (a) and 2.2 (b) are effective on the date Contributor first makes Commercial Use of the Covered Code.

Notwithstanding Section 2.2 (b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor.

### 3. Distribution Obligations.

#### 3.1. Application of License.

The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5.

#### 3.2. Availability of Source Code.

Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party.

#### 3.3. Description of Modifications.

You must cause all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code.

#### 3.4. Intellectual Property Matters

##### (a) Third Party Claims

If Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2,



Component	License or Acknowledgement
-----------	----------------------------

Contributor must include a text file with the Source Code distribution titled "LEGAL" which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained.

(b) Contributor APIs

If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the legal file.

(c) Representations.

Contributor represents that, except as disclosed pursuant to Section 3.4 (a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License.

3.5. Required Notices.

You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.6. Distribution of Executable Versions.

You may distribute Covered Code in Executable form only if the requirements of Sections 3.1, 3.2, 3.3, 3.4 and 3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.7. Larger Works.

You may create a Larger Work by combining Covered Code with other code not governed by

Component	License or Acknowledgement
-----------	----------------------------

the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Code.

#### 4. Inability to Comply Due to Statute or Regulation.

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the legal file described in Section 3.4 and must be included with all distributions of the Source Code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

#### 5. Application of this License.

This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code.

#### 6. Versions of the License.

##### 6.1. New Versions

Netscape Communications Corporation ("Netscape") may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number.

##### 6.2. Effect of New Versions

Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License.

##### 6.3. Derivative Works

If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases "Mozilla", "MOZILLAPL", "MOZPL", "Netscape", "MPL", "NPL" or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.)

#### 7. Disclaimer of warranty

Covered code is provided under this license on an "as is" basis, without warranty of any kind, either expressed or implied, including, without limitation, warranties that the covered code is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the covered code is with you. Should any covered code prove defective in any respect, you (not the initial developer or any other contributor) assume the cost of any necessary servicing, repair or correction. This disclaimer of warranty constitutes an essential part of this license. No use of any covered code is authorized hereunder except under this disclaimer.

#### 8. Termination

8.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

8.2. If You initiate litigation by asserting a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") alleging that:

such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice You either: (i) agree in writing to pay Participant a mutually agreeable reasonable royalty for Your past and future use of Modifications made by such Participant, or (ii) withdraw Your litigation claim with respect to the Contributor Version against such Participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by Participant to You under Sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.

any software, hardware, or device, other than such Participant's Contributor Version, directly or indirectly infringes any patent, then any rights granted to You by such Participant under Sections 2.1(b) and 2.2(b) are revoked effective as of the date You first made, used, sold, distributed, or had made, Modifications made by that Participant.

8.3. If You assert a patent infringement claim against Participant alleging that such Participant's Contributor Version directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.

8.4. In the event of termination under Sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or any distributor hereunder prior to termination shall survive termination.

#### 9. Limitation of liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall you, the initial developer, any other contributor, or any distributor of covered code, or any supplier of any of such parties, be liable to any person for any indirect, special, incidental, or consequential damages of any character including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party's negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to you.

#### 10. U.S. government end users

The Covered Code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

#### 11. Miscellaneous

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its

Component	License or Acknowledgement
-----------	----------------------------

conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the United States of America, any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California, with venue lying in Santa Clara County, California, with the losing party responsible for costs, including without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License.

#### 12. Responsibility for claims

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

#### 13. Multiple-licensed code

Initial Developer may designate portions of the Covered Code as "Multiple-Licensed". "Multiple-Licensed" means that the Initial Developer permits you to utilize portions of the Covered Code under Your choice of the MPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

Exhibit A - Mozilla Public License.

"The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.mozilla.org/MPL/>

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is \_\_\_\_\_.

The Initial Developer of the Original Code is \_\_\_\_\_.

Portions created by \_\_\_\_\_ are Copyright (C) \_\_\_\_\_  
\_\_\_\_\_. All Rights Reserved.

Contributor(s): \_\_\_\_\_.

Alternatively, the contents of this file may be used under the terms of the \_\_\_\_\_ license (the "[ ] License"), in which case the provisions of [ ] License are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of the [ ] License and not to allow others to use your version of this file under the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the [ ] License. If you do not delete the provisions above, a recipient may use your version of this file under either the MPL or the [ ] License."NOTE: The text of this Exhibit A may differ slightly from the text of the notices in the Source Code files of the Original Code. You should use the

Component	License or Acknowledgement
-----------	----------------------------

---

	text of this Exhibit A rather than the text found in the Original Code Source Code for Your Modifications.
--	--

# 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](http://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

**© 2021 Quest Software Inc. ALL RIGHTS RESERVED.**

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

**Patents**

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

**Trademarks**

Quest, the Quest logo, and Join the Innovation are trademarks and registered trademarks of Quest Software Inc. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Toad DevOps Toolkit Release Notes  
Updated - 6/29/2021  
Version - 1.4