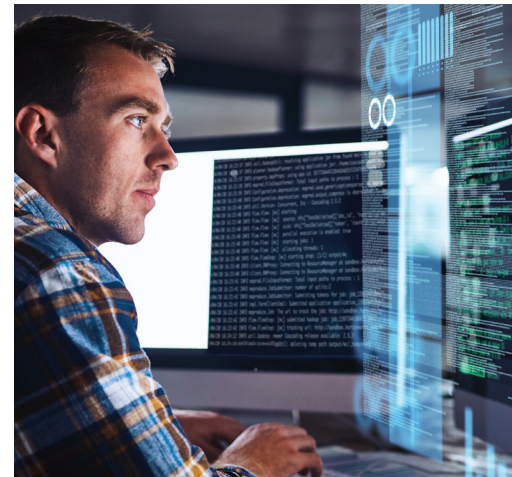# Quest® Toad® for Oracle Xpert Plus Subscription vs SQL Developer

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CODE QUALITY

Like application code, database code quality matters, too. If you want high-performing, reliable software, it's essential that you address database code development with the same rigor and discipline as all your code. With more organizations striving for continuous integration (CI) and deployments, there is more pressure to ensure database code quality and reduce the burden of technical debt that inhibits progress.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
Quest® Toad® for Oracle allows users to apply automated rules-based code reviews through Code Analysis. This allows database professionals to view coding violations dynamically in the Editor or in a published report.	Other than basic code templates and formatting, SQL Developer offers little that specifically addresses code quality and best practices.
Toad comes with out-of-the-box rules that have been approved by Quest's Oracle experts to make sure PL/SQL coding standards are upheld. Your team can also customize rules. Different coding rule sets can be adopted to suit different projects.	Absence of complete and in-depth code quality assessments increases unplanned development cycles.

SQL Developer only provides unit testing via the open-source utPLSQL framework and it is not integrated into other parts of the development workflow. Advanced test cases covering complex scenarios must be built manually before they can be used, which is labor-intensive. |
| With Toad you can integrate code reviews into your automated CI build process. | |
| Toad allows you to build test cases automatically and store them right alongside your code. This makes it easy to integrate unit testing into an automated CI build process. Toad also offers higher editions that allow for even more automated test case functionality. | Unit testing can be integrated into an automated CI build process. |

If you want high-performing, reliable software, it's essential that you address database code development with the same rigor and discipline as all your code.

With today's emphasis on continuous integration and continuous deployment, having hard-to-maintain code takes too much time and introduces too much risk.

CODE MAINTAINABILITY

Every database professional knows the frustration of having to work with code that is difficult to maintain. With today's emphasis on continuous integration and continuous deployment, having hard-to-maintain code takes too much time and introduces too much risk.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
Toad recommends coding best practices. Code quality rules are based on expertise gathered from Oracle experts and implemented in the Code Analysis feature. Rules can be customized to suit specific project or company requirements. Toad ensures that coding changes are simplified, improve consistency and reduce errors.	Offers basic code refactoring templates and formatting. SQL Developer offers little that specifically addresses coding best practices designed to reduce code maintenance. This is likely to lead to an increase in errors, problems in production and expensive rework.

APPLICATION PERFORMANCE

Slow SQL transactions that come from PL/SQL code or SQL scripts can make or break application performance. High-performing teams need to equip database professionals with the right tools to ensure application performance SLAs and other goals are achieved.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
With Toad, developers can identify and tune PL/SQL and SQL statements using a simple interface right in their coding environment. This ensures that developers can remediate application performance issues themselves while they are working on code rather than relying on a DBA to do it downstream. Toad also provides DBAs and developers with an additional comprehensive SQL optimization application they can use to:	Uses Oracle Tuning Advisor for SQL tuning. Provides advice for the developer but may fail to provide the most optimal solution, causing the developer to ask a DBA for assistance. Tuning Advisor requires the Oracle Enterprise Manager (OEM) Diagnostics and Tuning Packs (part of Enterprise Edition) and must be licensed.

- Detect and analyze problems in code and receive better alternatives
- Improve SQL statements with artificial intelligence that rewrites syntax
- Refine execution plans without altering source code (particularly for third-party applications)
- Generate equivalent and correct SQL statements for test runs
- Improve performance by analyzing an application's SQL workload

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TEAM COLLABORATION

Collaboration within coding teams is an accepted best practice across all industries and verticals. The simple truth is that team collaboration accelerates product development and allows organizations to get more stable products out to market faster with less risk. If implemented correctly, team collaboration saves time, money and effort.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
Team collaboration is built into Toad and users can easily share settings, database connections, templates, scripts and code review standards among team members via its Project Manager feature. Toad's Team Coding feature dramatically improves the use of version control systems (VCS) such as Subversion or Git, by enabling developers to work on database objects and not on the files in the VCS. This helps drive productivity and reduce conflicts and errors while maintaining an audit trail of changes.	Team collaboration appears to be weaker in SQL Developer, providing only the ability to share some templates via file sharing. SQL Developer supports a number of VCS providers, but only through direct access to their file system. This complicates the code editing workflow and slows productivity as developers access objects.

PRODUCTIVITY & AUTOMATION

Achieving increased productivity is one of the most basic reasons database professionals adopt any tool. Engineering groups want tools that speed up and automate routine tasks, enabling them to focus on more challenging projects and problems.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
According to feedback from our customers and review sites such as G2 Crowd, TrustRadius and TechValidate, the functional depth, superior workflow and task automation in Toad provide time savings that can be measured in hours, not minutes. Toad has a robust automation engine that enables users to create simple and complex apps to perform routine tasks and minimize errors.	SQL Developer lacks deep functional features like DB Schema Compare and Sync. SQL Developer's workflow seems reasonably logical, but developers may quickly find that it offers little help for performing some essential tasks. SQL Developer does not offer any desktop task automation capabilities.

The simple truth is that team collaboration accelerates product development and allows organizations to get more stable products out to market faster with less risk.

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DATABASE ADMINISTRATION

Today's DBAs manage a growing number of databases and are increasingly looking for ways to improve productivity through streamlined workflows and task automation. While database professionals might turn to Oracle Enterprise Manager (OEM), some of its workflows are slower because of its web interface.

Toad for Oracle Xpert Plus Subscription has many more features with more robust capabilities than SQL Developer, along with stronger workflow integration.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
Toad provides a comprehensive selection of database administration functions, visible through the Database Browser which displays all the servers and databases the DBA is managing.	SQL Developer has added several database administration functions recently, some of which require the Diagnostics and Tuning Packs in order to work.
Toad supports database administration for multi-tenant databases, including those in the Oracle cloud.	SQL Developer does not provide a database health check, an easy way to read trace files or any way to recover transactions from redo logs.
Features such as Database Health Check, Trace File Browser (detailed reports from trace files) and Log Miner (recover transactions from redo logs) are valuable time-savers.	SQL Developer supports database administration for multi-tenant databases including those in the Oracle cloud.
Toad enables DBAs to view database activity with its Database Monitor, and user activity with its Session Browser. Integration from these features to other features such as SQL tuning are better in Toad.	SQL Developer has an Oracle instance viewer which graphically shows database activity and user session activity.
Toad enables DBAs to manage database user access and audit transactions via Oracle Audit features in Enterprise Edition.	SQL Developer enables DBAs to manage database user access and to audit transactions via Oracle Audit features in Enterprise Edition.
Toad provides good access to both Oracle Import/Export as well as Data Pump. Toad does not have access to RMAN backups.	SQL Developer provides good access to both Oracle Import/Export as well as Data Pump. It also has access to RMAN backup for creating backups and performing restores.

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SENSITIVE DATA PROTECTION

Finding and protecting sensitive data, whether due to PCI, GDPR or other requirements are important tasks for every business. Not only does it protect your company, but it helps instill confidence in your customers knowing that their data is protected.

Toad for Oracle Xpert Plus Subscription	SQL Developer v19.2
Find and protect your sensitive data. A built-in library of rules to identify common formats for sensitive information. With a little bit of knowledge of regular expressions, you can also add your own custom rules to identify sensitive data specific to your business. You can then use those rules to find and protect sensitive data within your database and even set up tasks to monitor your database for any new unprotected data that may be added.	SQL Developer does not have sensitive data awareness or protection.

In summary, while SQL Developer has a good set of database administration and development features, some them require access to Oracle features that are only available at additional cost. Toad for Oracle Xpert Plus Subscription has many more features with more robust capabilities than SQL Developer, along with stronger workflow integration. These features increase code quality, improve team collaboration and streamline database administration.

Did you know Toad for Oracle has subscription products? With the same features and functionality (or better) as our perpetual license products, subscription products also offer lower up-front costs, auto update/renew, full support and online license administration.

To learn more about Toad for Oracle Xpert Plus Subscription and download your free 30-day trial, please visit https://www.toadworld.com/products/toad-for-oracle.

ABOUT QUEST

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Quest Software. Where next meets now.

Finding and protecting sensitive data helps safeguard your company while instilling confidence in customers.