

## Development Best Practices

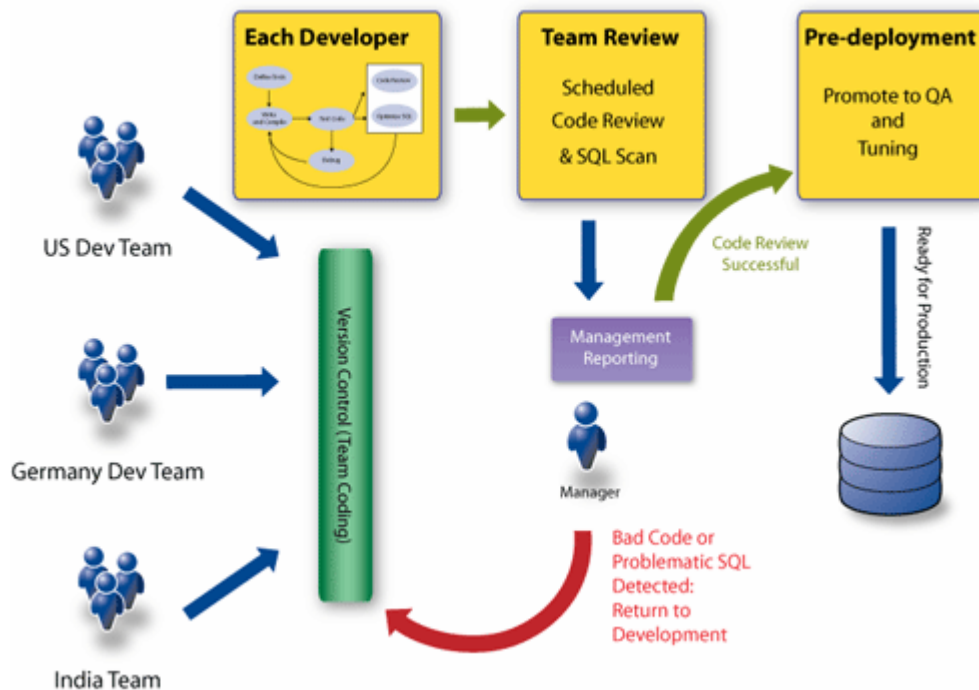
Building on the foundation of Toad® and leveraging a proactive automated methodology developed by industry experts, the Toad Development Suite provides an integrated toolset to ensure that the highest quality of code is delivered, optimized and scaled for better performance -- regardless of user skill set or platform.

### Database Development Best Practices Workflow



### Steps for Delivering the Highest Quality Code:

1. **Develop :**  
Develop the highest quality code faster and receive better performing applications from day one.
2. **Optimize:**  
Toad's SQL Optimizer maximizes SQL performance by automating the manual, tedious and uncertain process of ensuring the fastest possible performance of SQL statements.
3. **Validate:**  
Test critical SQL and stored procedure code for scalability and performance under various user loads in pre-production.



### Why do we need Best Practices?

Industry experts estimate that software bugs cost the worldwide economy billions of dollars. These bugs pose tremendous financial burdens, due to the poor performance and logic errors they create. In addition, they also decrease productivity, increase frustration, and make it difficult for companies to meet changing business requirements.

In an age of outsourcing and multi-skilled developers -- whose focus may not be on database development -- there is a pressing need for a process to ensure the deployment of the highest quality code to production.

Currently organizations lack the ability to automate the process, thus inhibiting all development teams, regardless of skill set, from consistently producing the highest quality performing code. In addition, management has no way to effectively validate code before it's deployed into production.

Following the development best practices workflow to developing, optimizing and validating code will result in top quality and easy-to-maintain SQL code as well as eliminate a bottleneck in the development process.

As individual developers assume responsibility for quality SQL production, the development cycle decreases and management's visibility into code quality increases.

By implementing development best practices, organizations can achieve these goals and measure which development teams or developers are producing the highest quality code.

Toad Development Suites are available on Oracle, SQL Server and DB2 on LUW