





# Toad 101 Series

## Episode 3

### The Importance and Process of Upgrading

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# Agenda

- Why Upgrading Matters & the Process
- Keeping Toad Secure
- Recent Feature Highlights
- Myths about Updates
- How to Update & Migrate



# Security is a Collective Effort

As software evolves, so do threats

Updates Go Beyond New Features:

- Security patches
- Compliance Enhancements
- Performance & UI Improvements

Updating Toad Is Quick and Simple





# Real World Insights

# The Dangers of Outdated Software

- **Equifax Data Breach**

- Attackers exploited a vulnerability in Apache web server software
- Patch was available in March 2017 but not applied
- Breach occurred between May and July 2017
- Personal data of ~147 million individuals exposed (SSNs, birth dates, addresses, driver's licenses)
- Led to significant financial losses, fines, lawsuits, and CEO resignation



# The Dangers of Outdated Software

- **WannaCry Ransomware**

- Global ransomware attack impacting 200,000+ computers
- Exploited a known SMB vulnerability in older Windows versions.
- Microsoft released a patch a month prior, but many systems remained unpatched.
- Significant financial and operational disruption to companies (e.g., FedEx, Renault, Telefonica).

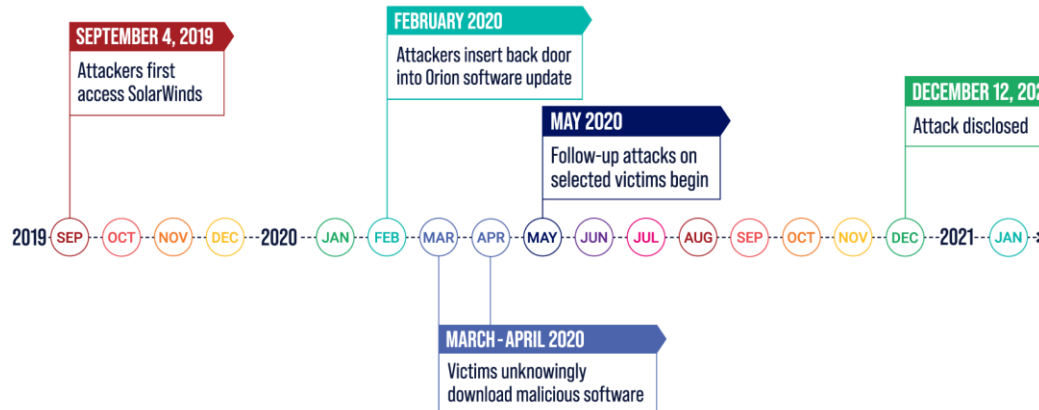




# Case Study: Supply Chain Risks in Action

- **SolarWinds**

- Attackers compromised SolarWinds' source code and injected malware
- SolarWinds unknowingly distributed infected updates to thousands of customers
- Over 18,000 organizations, including US government agencies, Microsoft, Cisco, and Intel, were affected














# Toad's Secured Development

Each release undergoes

- Penetration testing
- SAST/DAST vulnerability scanning
- Malware scans using multiple engines
- Third-party library patch reviews
- FIPS 140-2 compliance for cryptography

Security Control	Description
 <b>1. Security Training</b>	<p>Developers, managers and directors are required to take 2.5 hours of assigned Security Training.</p>
 <b>2. Secure Software Development Lifecycle</b>	<p>Development lifecycle is based on best practices of Quest's Information and Systems Management (ISM) business unit.</p>
 <b>3. Third-Party Software</b>	<p>Bundled third-party software is checked for vulnerabilities in a standard process before application release.</p>
 <b>4. Vulnerability Scanning</b>	<p>All software is scanned for vulnerabilities with an industry-standard SAST/DAST product.</p>
 <b>5. Penetration Testing (Third-Party)</b>	<p>Products undergo third-party penetration testing annually.</p>
 <b>6. Malware Scanning</b>	<p>All products are scanned for malware before release with two independent, industry-standard anti-malware scanners.</p>
 <b>7. Code Signing</b>	<p>Software distributed to customers is cryptologically signed using Quest's official signing key to validate authenticity.</p>
 <b>8. Software Integrity</b>	<p>Checksums for software installers are published so customers can ensure integrity of distributed software.</p>
 <b>9. FIPS Compliance</b>	<p>Using cryptographic algorithms approved by FIPS, sensitive data is protected at rest and in transit.</p>



# Prior Issues Found in Toad

## Toad for Oracle 13.1

- Vulnerability in Microsoft Visual C++ library could enable privilege escalation, allowing attackers to take control of your computer
- Microsoft identified the issue and promptly released a patch in Toad to address the vulnerability

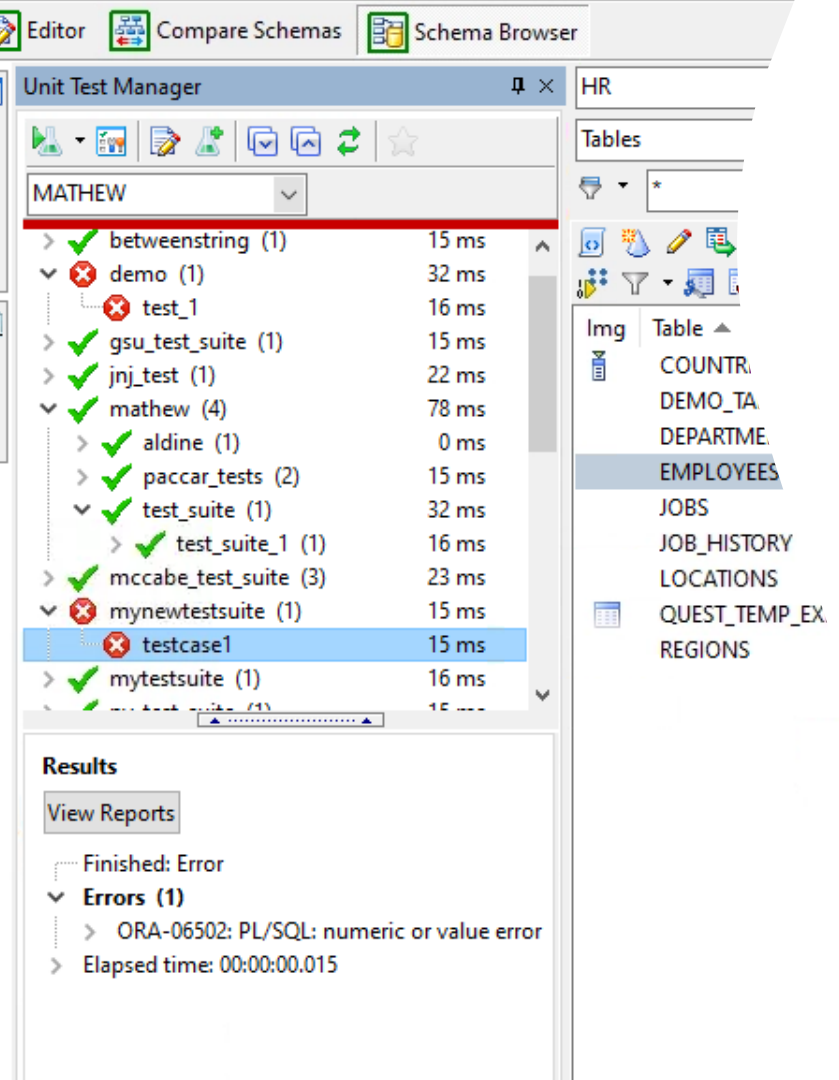
## Toad for Oracle 13.3

- During a penetration test, a vulnerability was identified where users were not notified when connecting to a database insecurely
- Unencrypted connections could allow attackers to capture user credentials and sensitive data in transit
- Quest has successfully remediated this security weakness



# New Features Spotlight





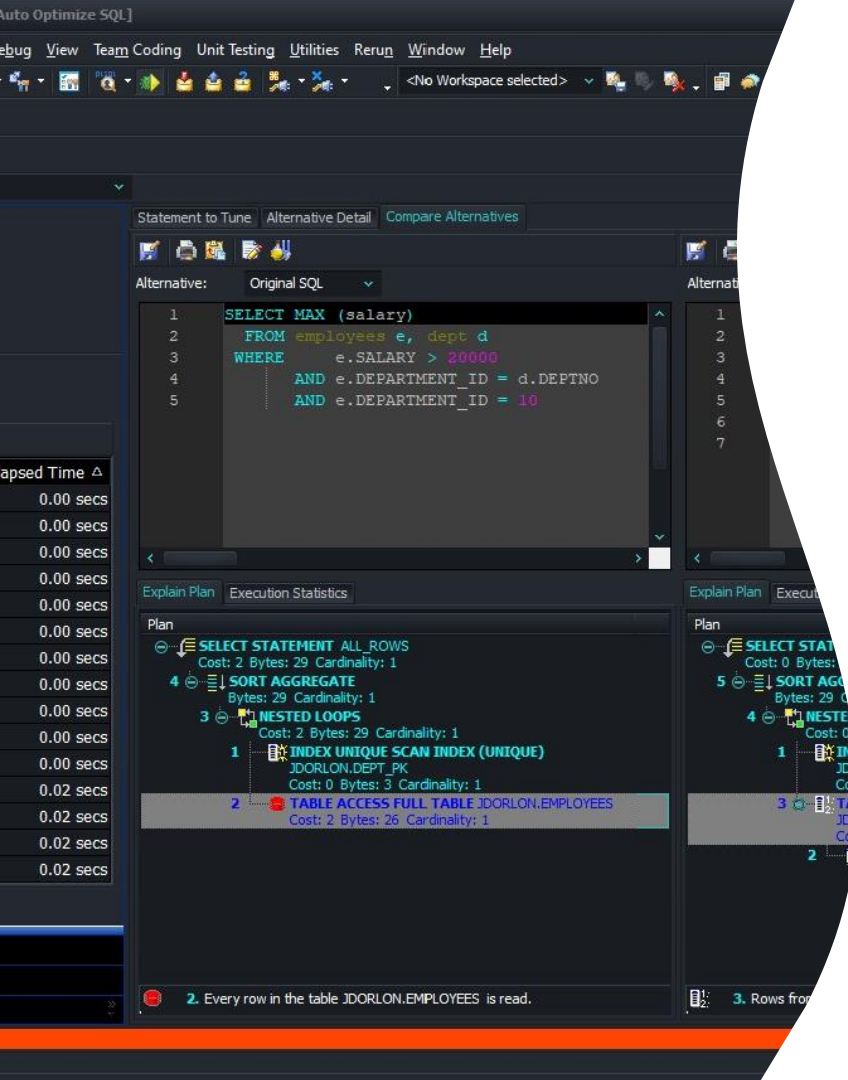
# utPLSQL Unit Testing

- Adopts a popular methodology for testing PLSQL code
- Ensures code is well tested and documented
- Simplifies and speeds up regression testing
- Improves the overall quality of your code

Constraints		Triggers	Data	Script	Parti
NAME	LAST_NAME	EMAIL	PHONE_NUM		
s	Grant	DGRANT	650.507.9844		
r	Whalen	JWHALEN	515.123.4444		
l	Hartstein	MHARTSTE	515.123.5555		
	Fay	PFAY	603.123.6666		
	Mavris	SMAVRIS	515.123.7777		
nn	Baer	HBAER	515.123.8888		
	Higgins	SHIGGINS	515.123.8080		
	Gietz	WGIETZ	515.123.8181		
	Kochhar	NKOCHHAR	515.123.4568		
	De Haan	LDEHAAN	515.123.4569		
	Ernst	BERNST	590.423.4568		
	Austin	DAUSTIN	590.423.4569		
	Pataballa	VPATABAL	590.423.4560		
	Lorentz	DLORENTZ	590.423.5567		

# Sensitive Data Awareness

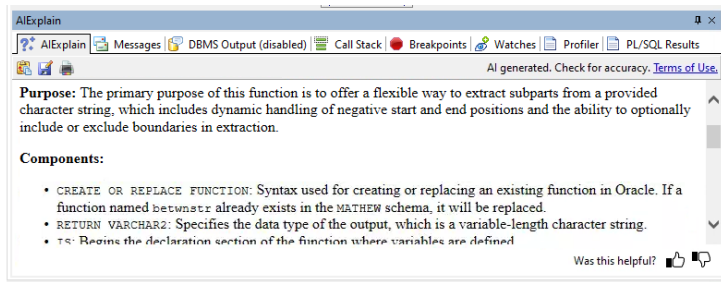
- Highlights areas of your code and data for PII
- Ensures proper handling of data by developers, analysts and DBAs
- Additional modules to encrypt, redact, and obfuscate data



# Themes and Dark Mode

- **Tailor Toad's appearance to your needs:**  
Further customize the look and feel of your Toad UI.
- **Reduce eye strain with a dark theme:**  
Many users prefer a darker screen.

# AI Explain



```
f() betwstr: VARCHAR2
12 • CASE
13 •   WHEN string_in IS NULL
14 •     OR (start_in < 0 AND end_in > 0)
15 •     OR (start_in > 0 AND end_in < 0)
16 •     OR (start_in < 0 AND end_in > start_in)
17 •     OR (start_in > 0 AND end_in < start_in) THEN
18 •     v_result := NULL;
19 •   WHEN start_in < 0 THEN
20 •     v_numchars := ABS (end_in) - ABS (start_in) + 1;
21 •     v_start := GREATEST (end_in, -1 * LENGTH (string_in));
22 •   WHEN start_in = 0 THEN
23 •     v_start := 1;
24 •     v_numchars := ABS (end_in) - ABS (v_start) + 1;
25 •   ELSE
26 •     v_start := start_in;
27 •     v_numchars := ABS (end_in) - ABS (v_start) + 1;
28 •   END CASE;
```

- Introducing the first of many integrated GenAI features
- Provides plain-English descriptions of PL/SQL objects and SQL code
- Available as a separate module with Toad subscription licenses

# Myths and Misconceptions

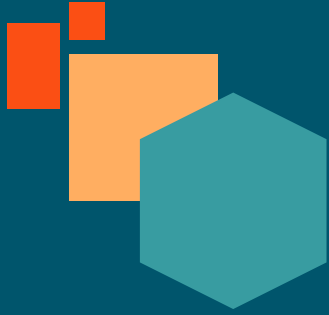
- **“It still works fine”**
  - Forward compatibility is great, but capability does not equal security
- **“Updates are hard”**
  - Toad is a desktop solution that requires little to no down time
  - It’s easy but you may need someone from your help desk with privileges
  - Toad subscription licenses auto-updates
- **“Security is someone else’s job”**
  - Any one person or device can become the attack vector and we all must be vigilante





# Upgrade Best Practices

- Download from a trusted source <https://support.quest.com> or your software center
- By default, Toad installs new versions into new directories
  - This gives you the opportunity to run both toads side by side so you can test and adjust to any changes
  - Uninstall the old version as soon as you're ready
- You can migrate your old settings from the old Toad to the new Toad
  - It's also a good idea to backup your user settings



# Let's upgrade my Toad!

# Questions?

A woman with blonde hair tied back, wearing a light-colored, textured sweater, is sitting at a desk and working on a laptop. The scene is dimly lit, with a desk lamp providing light. In the background, there are shelves with books and a window with a plant. The overall tone is professional and focused.

**Quest**  
Where Next Meets Now.



# Looking Forward to Seeing You There!

## Skills 101 – Toad

Episode 4

### Mastering Your Oracle Database Connection

August 20<sup>th</sup>, 2025

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Solutions Consultant



[www.quest.com/data-management-skills-training](https://www.quest.com/data-management-skills-training)

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