



A Hidden Gem: The PL/SQL Web Toolkit



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Learning Objectives



- As a result of this presentation, you will be able to:
 - Create a Web Toolkit application
 - Deploy a Web Toolkit application

Speaker's Qualifications

- John Jeunnette is a Principal Consultant at Prairie Systems Group, Limited.
- Active in multiple user groups.
Conference Chair and Board of Directors member for the Oracle Development Tools User Group.
- Occasional speaker on PL/SQL programming and the Web Toolkit.

Agenda



- Why use the PL/SQL Web Toolkit
- How to use the PL/SQL Web Toolkit
 - Technology Overview
 - Data Access Descriptor
 - Application Demonstration
 - Application Details
 - Observation/Conclusions
- Questions

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- Web-based application options
 - Fat Client options
 - Oracle Developer
 - Java applets
 - Thin Client/Fat Middle Tier options
 - Microsoft Active Server Pages / .net
 - Java Server Pages / J2EE stack
 - PL/SQL Server Pages
 - Thin Client/Thin Middle Tier options
 - HTMLDB / Portal
 - PL/SQL Web Toolkit

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- Web Server = Oracle HTTP Server (Apache)
- Web Server Form = Dynamic HTML generated by a PL/SQL package in the database displayed in a browser.
- Webform = Oracle Developer form operating in a Java plugin (Jinitiator) and a browser.

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- **Selection Criteria** (your mileage may vary)
 - Webforms: Controlled environment, rich UI feature set, “traditional application” (small, intensive user population), intensive data entry
 - Web Server Forms: uncontrolled access, query, large user population, integration with other web-based applications, large, occasional user population

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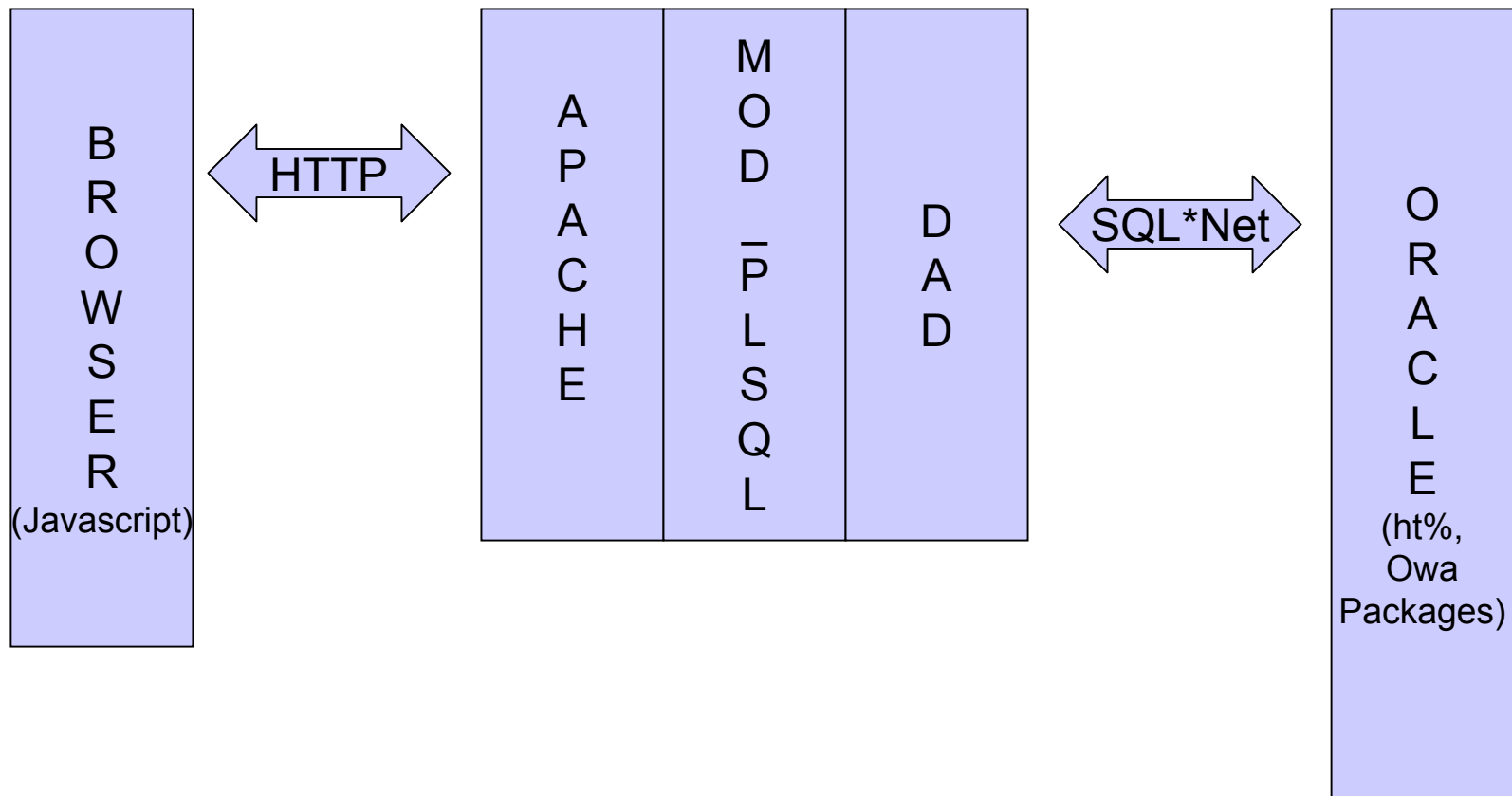
- Application Demonstration:
 - Project Issue Tracking System

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- **Some History** (from Tom Kyte)
 - Web Oracle Web (WOW Gateway) by Magnus Lonnroth of Sweden.
 - Oracle Web Agent (OWA) in version 1 of the Oracle Internet Server.
 - Cartridge in the Oracle Web Server (version 2)
 - OWAREPL by Tom Kyte in the Oracle Web Application Server (OWAS version 3).
 - Webdb listener
 - Oracle Application Server (version 4) includes PL/SQL cartridge
 - mod_plsql for Apache (Oracle HTTP Server).

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- Application Module Logic
 - Block mode
 - Implicit database commits
 - Procedure independence
 - Optimistic locking
 - No “returns”
 - The browser controls appearance
 - Lots of code

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- Application Module Flow
 - Parameter entry or record selection criteria
 - Record collection screen with add, modify, and delete links
 - One record data entry form
 - Submit to a validation routine
 - If validation errors, redisplay the data entry form for correction.
 - If no errors, insert or update the record.

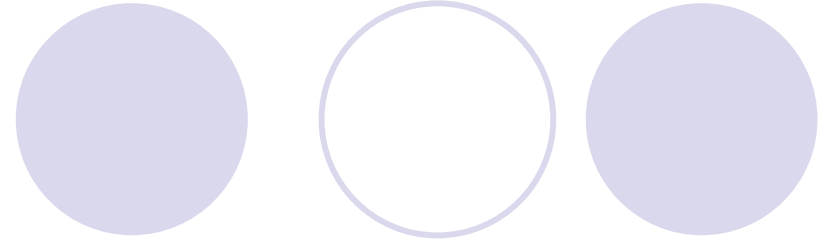
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- Observations/Conclusions

- Webserver forms behave like block mode terminals.
- “Stateless” operation can be confusing: the application (or the user) can navigate horizontally within the application to unexpected places.
- Let the browser format the pages
- Implicit commits are good and bad.

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- Thank you

- Contact:

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A Hidden Gem: Data Access Descriptor

C:\oracle\ora92\Apache\modplsql\cfg\wdbsvr.app

- ;
- [PLSQL_GATEWAY]
- administrators = all
- adminPath = /admin_ /
- ;admindad =
- ;debugModules =
- defaultDAD = simpledad
- ;upload_as_long_raw =
- ;upload_as_blob =
- ;enablesso =
- ;stateful =
- ;custom_auth =
- ;error_style =
- ;

Data Access Descriptor, continued

- [DAD_simplifiedad]
- connect_string = sample-tcp
- password = !c2FtcGxl
- username = sample
- default_page = sample.home
- document_table = sample.wwdoc_document
- document_path = docs
- document_proc = sample.wwdoc_process.process_download
- ;upload_as_long_raw =
- upload_as_blob = *
- ;name_prefix =
- ;always_describe =
- ;after_proc =
- ;before_proc =
- reuse = Yes
- connmax = 10
- ;pathalias =
- ;pathaliasproc =
- enable_sso = No
- ;sncookie_name =
- ;stateful =
- ;custom_auth =
- ;response_array_size =
- ;exclusion_list =
- ;cgi_env_list =