Welcome to NY PHP, Oct 24, 2006

Wireless Network is: SDS-ANDRO Demos are on http://192.168.1.37/~dd2 Ask Sean for user id for time tracking program

Andromeda Software Development

By Kenneth Downs, President Secure Data Software, Inc.

presented to

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What is Andromeda?

Business Tool for Business Goal: Quality Software

- 1. For customer: profitable investment
- 2. For programmer: no calls on day off

All business rules resolve to database specifications.

A correct database specification can become a good application, but a bad spec cannot produce quality software.

People Understand Tables Just Fine

The relational model is ideally abstract and concrete, neither more nor less abstraction or generalization is required.

Non-technical staff can intelligently discuss table design.

A framework must address the entire life cycle.

- Development: brainstorm, analyze, code
- Collaboration: source control, QA promotion
- Install, Upgrade

Minimize Code, Maximize Data

DEMO 1 OF 2: Time Billing

Username and password: time/time

http://192.168.1.37/~dd2/demo_time (laptop)

http://dhost2.secdat.com/demo_time (live)

DEMO 2 OF 2: Medical Office

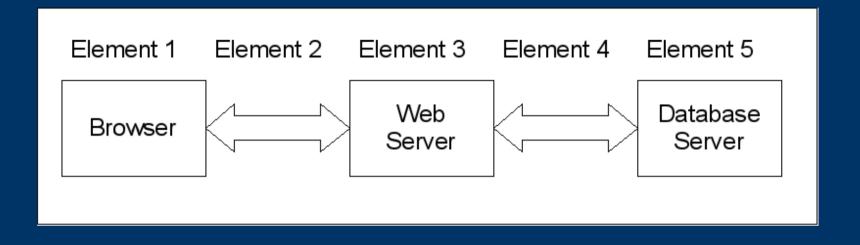
Username and password: guest/guest:

http://192.168.1.37/~dd2/demo_peds (laptop)

http://dhost2.secdat.com/demo_peds (live)

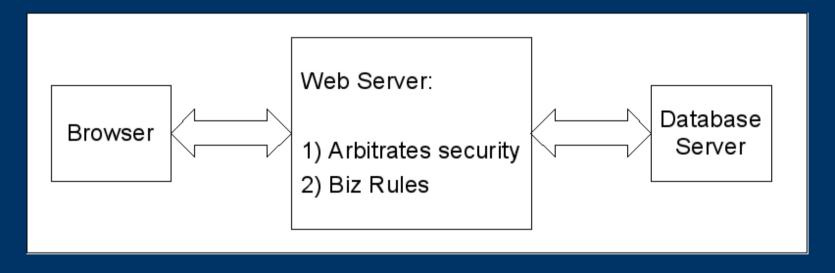
Review of Web Architecture

There are five elements to consider:



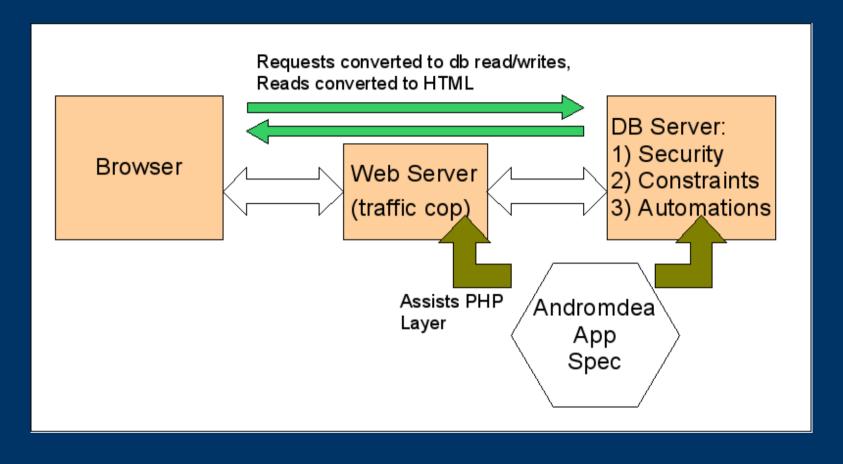
A Fat-in-the-middle Implementation

- PHP Layer is given primacy
- Not safe to access database by other means
- Maintaining code will become problematic



Andromeda's Implementation

Same spec used for each tier



Platform Independence

Different programs can occupy the various tiers

Browser

- Firefox
- IE
- Safari
- Opera

Web Server

IIS vs. Apache

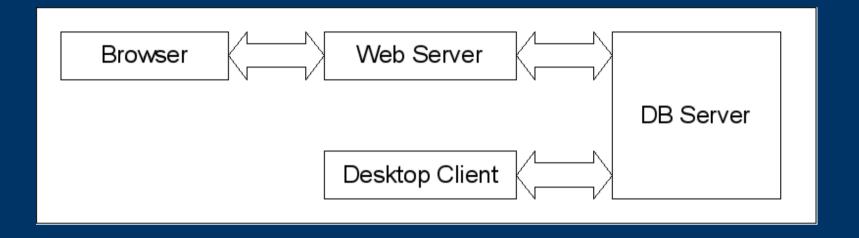
PHP, Java

DB Server

- Postgres
- Oracle
- MS SQL
- DB/2

Architecture Independence

Tiers themselves may be added or changed.



Relationship to Postgres and PHP

Project goals came first

- 1. PostgreSQL chosen for server-side coding abilities
- 2. PHP chosen because it is flexible and powerful
 - compare java: cumbersome, thought police
 - compare C#: generated files are half-orc

A Commercial For Relational Data

- Perfect for representing atomic facts
- Ken's Law: People understand tables just fine
- Notice no contenders to replace SQL

Future Directions: Immediate

- Column Security in progress now
- Row/Identity security in progress now
- Significant Reporting Engine in progress now

Future Directions: Later

- Source Control
- Node-to-node publishing and updating
- Modularity (DB, not code)
- More smart-phone features
- A lot more AJAX

Future Directions: Open Source

- Source Forge
- Mailing Lists
- Forums
- More presentations!

Business Model

Secure Data Software is a for-profit software development corporation. We use Andromeda to gain enormous organic advantage.

GPL Andromeda is:

- marketing
- payback for Linux, Apache, PHP, Postgres...

Andromeda Links

Secure Data Software: http://www.secdat.com

Project Home Page: http://docs.secdat.com

Demo Time: http://dhost2.secdat.com/demo_time

Demo Medical: http://dhost2.secdat.com/demo_peds