Progress Report : March 31st, 2011

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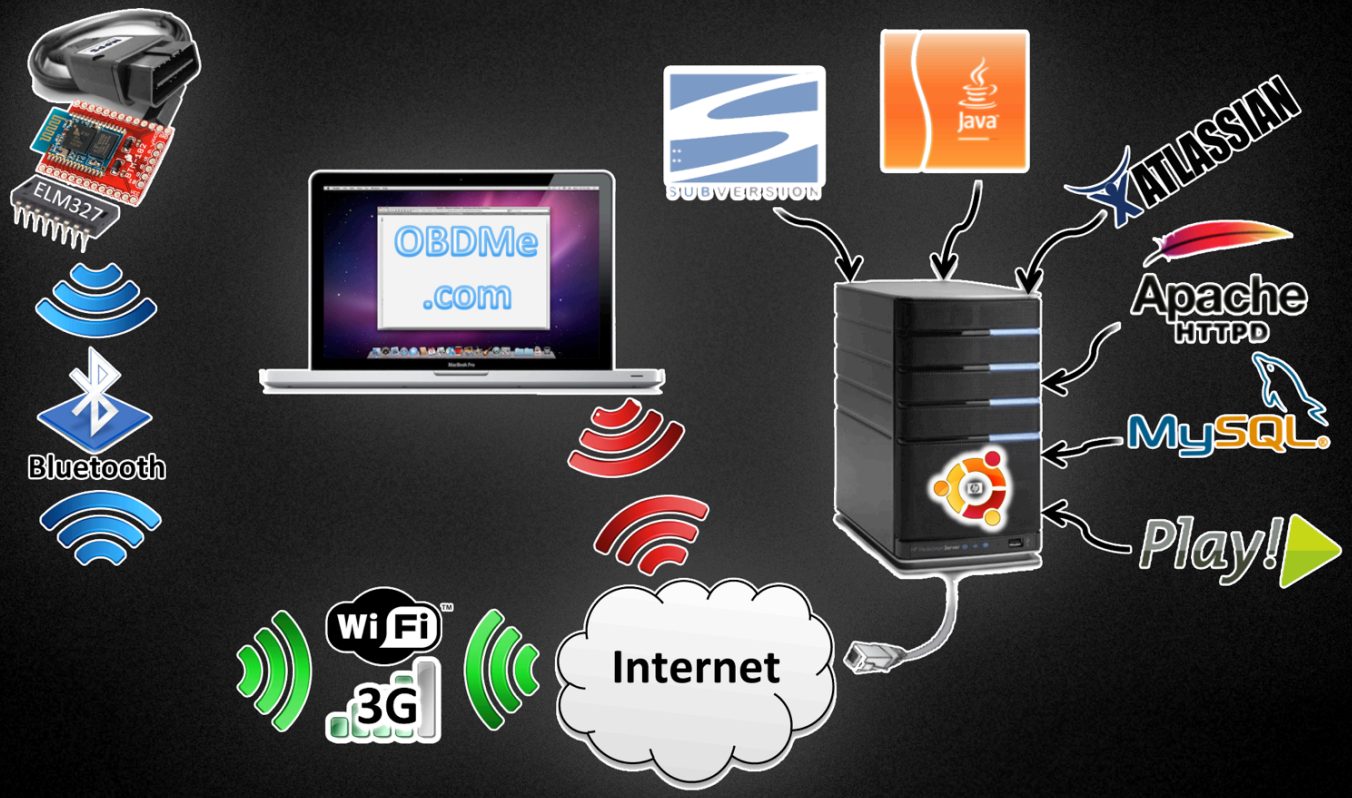
Overview

- Previous Work
- Project Progress
- **OBD**me Demo
- What's to come

OBDme Architecture



OBDme

Project Progress

```
    //Failed... Print of the error.
    if(context.getResources().getBoolean(R.bool.debug)) {
        Log.e(context.getResources().getString(R.string.debug_tag_datauploaderthread),
                "Could not get writable database: " + e.getMessage());
    }

    // TODO ok by inserting this return statement? should probably exit this thread if we cannot open the database.
    return;
}

//If logging is enabled, print a nice message that we are starting a graph push
if(context.getResources().getBoolean(R.bool.debug)) {
    Log.d(context.getResources().getString(R.string.debug_tag_datacollector),
    "Starting a vehicle data push");
}

//Get a VIN to upload by selecting the top-most entry
Cursor queryVinToUpload = this.sqldb.query(OBDMeDatabaseHelper.TABLE_NAME,
                        null, null, null, null, null, null, Integer.toString(1));
Cursor queryVehicleDataToUpload = null;
String vinToUpload = null;

if (queryVinToUpload.getCount() > 0 && queryVinToUpload.moveToFirst()) {
    //Get the top-most VIN
    vinToUpload = queryVinToUpload.getString(queryVinToUpload.getColumnIndex("vin"));
    //Close the query
    queryVinToUpload.close();
    //run a new query for entries matching the VIN
    queryVehicleDataToUpload = this.sqldb.query(OBDMeDatabaseHelper.TABLE_NAME,
            null, String.format("vin='%s'", vinToUpload), null,null, null, null, Integer.toString(context.getResources().get
} else {
    queryVinToUpload.close();
    this.sqldb.close();
    return;
}

StringBuffer sb = new StringBuffer();
// TODO - do we really want to check to ensure there are the minimum number of rows here?
// Otherwise, we may end up with rows that never make it to the server.
if (queryVehicleDataToUpload.getCount() > 0) {

    VehicleStatPush statPush = new VehicleStatPush(vinToUpload);
    queryVehicleDataToUpload.moveToFirst();
```

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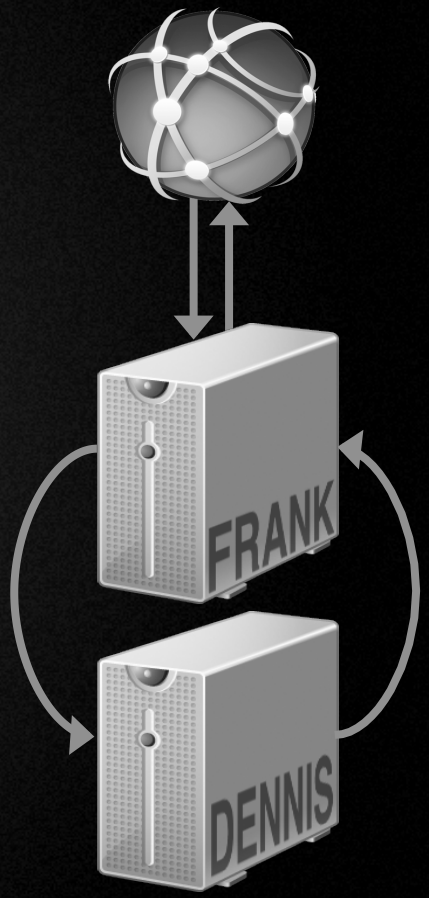
Service Architecture

Frontend Services	
Apache Server	Mail Server
JIRA Server	Fe/Cru Server
SVN Server	Auth Server

Backend Services	
MySQL Server	Apache Server
App Server (Play!)	API Server (Play!)



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Android Application

- **UI Enhancements**
  - Fully functional preferences
  - Error Handling
- **Data Upload / Data Push**
  - Low Priority Scheduled Thread Pool
  - Fully Functional
- **Application Backend**
  - Significant Performance Improvements
  - Increased Device and Protocol Support

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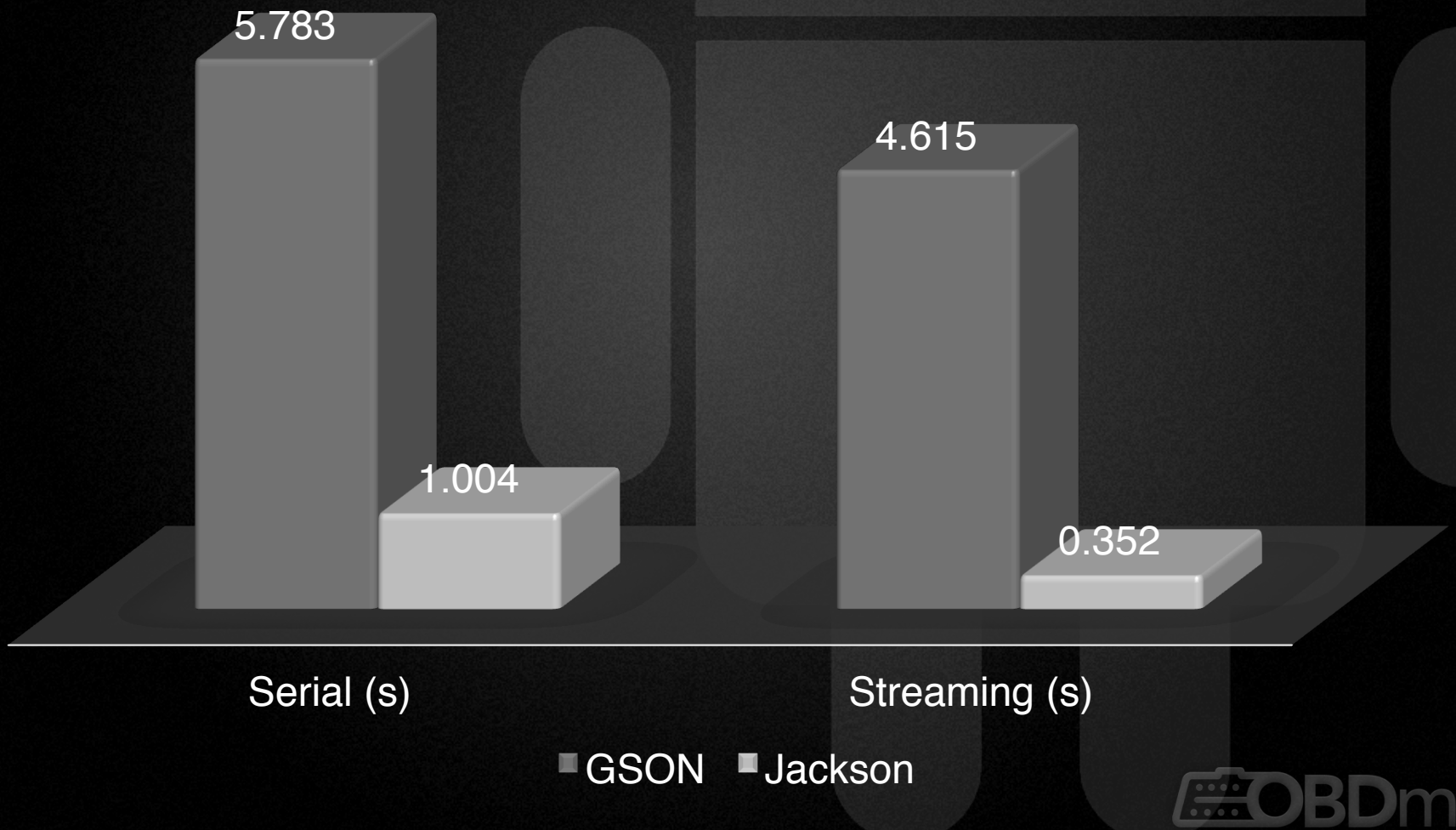
Android Application

JSON Performance on Android



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API Framework

- New Functionality
  - User/Vehicle Association
- Efficiency
  - Smart Database Structures
  - Rapid Batch Jobs
- Unit Tests!

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Web Application

- Security
  - Access Control Implemented
- UI Technologies
  - JQuery
  - HTML5 and CSS3
  - D3 (Data Driven Documents)
- UI Design
  - Non-invasive Navigation
  - Full Data Presentation

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Demo

What's to Come: Android

- Immediate Goals
  - Trip Feature (categorize sets of data)
  - Geo-location (geo-tag sets of data)
    - Develop application GPS Service
    - Database models
- Long Term Goals
  - Password recovery on the mobile application
  - Data graphs on the UI (mobile charts)

What's to Come: Web and API

- Immediate Goals
  - Charts and Statistics
  - Vehicle Management
  - Trips
    - Manage and View trips
- Long Term Goals
  - Notifications
    - Threshold Triggers
    - News Feed

Schedule

March 31, 2011	• Android App Nearing Completion • E-Week Preparation
April 30, 2011	• Web Application Complete • Finalize Testing of Applications (Android and Web)

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Something Cool

A Letter From Atlassian:

This week, we announced that you helped Atlassian raise $1 million for Room to Read through our $10 Starter License program. We quite literally couldn't have done it without you, and we want to give a big thanks. (If emails could fist-bump, here's where you'd get one.)

Questions?

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