iTRACT
Improving Transport and Accessibility through new Communication Technologies
Agenda

- Introduction
- Status
- Building Blocks
- Live demo
- Future

(36 slides in 20 minutes + demo of 10 minutes)
Introduction
Introduction

- I₁ + I₂ + I₃ = Iterations
- A + B + C = Ongoing activities
Architecture & platform

Iteration 1
High level architecture
Product selection
Detailed architecture
Performance indicators

DTAP environment specification
Pilot environment specification
Test specification

Iteration 2
DTAP environment implementation
Example pilot environment implementation
Test
Pilot environment implementation guide

Iteration 3
DTAP environment implementation
Example pilot environment implementation
Test
Pilot environment implementation guide
Iterations

1  2  3
Specify & build

Run pilot

Evaluate
Status

- **Iteration 2: suspended**
  Chosen a few platform alternatives, analyzed them and then discovered One Bus Away

- **Iteration 3: first version of platform ready**
  Based upon a number of off-the-shelf software suites

- **Ongoing WP4 activities**
  Amongst others: documentation

- **WP5: apps for pilots being built**
  First ones didn’t need platform
  Platform interfaces now available, including documentation
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Building blocks

- **BB1 = Ride sharing**
  - define trip, match traveller-driver, orchestrate trip incl pickup & payment

- **BB2 = Interactive map**
  - choose stop on map, give stop info, bus info, incl schedule & disruptions

- **BB3 = (Multi-modal) planning**
  - plan trip using relevant info, incl central data and external services

- **BB4 = Financial**
  - arrange payment structure, perform payments, logging, aggregation

- **BB5 = User profiles**
  - incl reputation management

- **BB6 = Dashboard**
  - for user, for staff, combining several sources, incl push

- **BB7 = Information**
  - FAQ, training, incl management of central storage
Building Blocks

- **BB1 = Ride sharing**
  Enter trip, orchestrate the ride, inform each other, generate route, inform pickup info, actions during pickup, actions during drop off

- **BB2 = Interactive map**
  Store routes and stops, live updates, service ‘bus on demand’, show interactive map on frontend

- **BB3 = Planning**
  Store trips, calculate routes, match traveller-driver, let driver initiate ‘start driving’, calculate route time and distance

- **BB4 = Financial**
  Make payments possible, initiate payment from ride, perform payment
Building Blocks

- **BB5 = User profiles**
  Normal user info, extended user info, trustworthiness, reputation

- **BB6 = Dashboard**
  Provide info for dashboard, events upon disruptions

- **BB7 = Information**
  Provide web-based content management

- **BB8 = Traffic management**
  (added) (cancelled)

- **BB9 = Generic functions**
  (added) Security functions
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Off-the-shelf software suites

- **One Bus Away**
  Providing info at a bus stop

- **Open Trip Planner**
  Planning a ride with public transport

- **Open Ride**
  Facilitating car sharing

- **Open Street Map**
  Open alternative to Google Maps

- **WordPress**
  Content management system
Flexible implementation

- **Main entrance = ‘proxy’**
  Forwards to the right ‘virtual machines’ and does orchestration

- **Multiple software suites**
  Open Trip Planner, Open Ride, WordPress

- **Multiple instances**
  For performance reasons, e.g. for each country-group

- **Open Stack**
  Combining all available hardware, sharing identity management
Application
(Public or Commercial)

OpenTripPlanner

Users

Web service API
(JSON/XML)

ITRACT Proxy

ITRACT Backend (Cloud-based Services)

API

Static data
- Schedules
- Timetables

API

Dynamic data
- Alerts
- Trip Updates
- Vehicle Positions

API

GTFS
GTFSRT

API

SIRI to GTFSRT Proxy

SIRI

GTFS
GTFSRT
• Modular
• Very flexible
• Callable routines
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Demo

- Demo? WP5, not WP4!
  WP4 only delivers the central platform

- WP4 has ‘webservices’
  Deliver results, provide trip orchestration, provide payment services,...

- WP4 does deliver part of the visual results
  E.g. maps with routes
Demo

Robayet Nasim (KAU)
Future

Already discussed:
Future

...is being made today!

Dr. Bunsen Honeydew and assistant Beaker
The Muppets Lab

Copyright The Jim Henson Company
Next: WP6
After lunch: WP5

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iTRACT

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Backup slides
(instead of the live demo)
Where Is Your Bus?

Use this tool to find real-time arrival information for public transit stops from all the transit agencies supported by OneBusAway.

You can quickly search for stops by address, route, or stop number. You can also zoom into the map to see stops for a specific location.
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<tr>
<td>1</td>
<td>De Wijert via Grote Markt</td>
<td>-3</td>
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One Bus Away smartphone
Begin bij Van Brakelplein

Lopen naar Groningen Spoor 2b
Over 19 minuten - 1.22 km
Toon details

Trein Intercity naar Rotterdam Centraal
15:16 Vertrek Groningen Spoor 2b
115 minuten
17:11 Aankomst Utrecht Centraal Spoor 8
Uitgevoerd door NS.

Lopen naar Utrecht Centraal Spoor 7
Toon details

Trein Intercity naar Schagen
17:25 Vertrek Utrecht Centraal Spoor 7
27 minuten
17:52 Aankomst Amsterdam Centraal Spoor 8a
Uitgevoerd door NS.

Lopen naar Centraal Station
Open Ride smartphone
Open Ride smartphone
iTRACTION

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