

Google



Open Data

A Hi-Fi Approach



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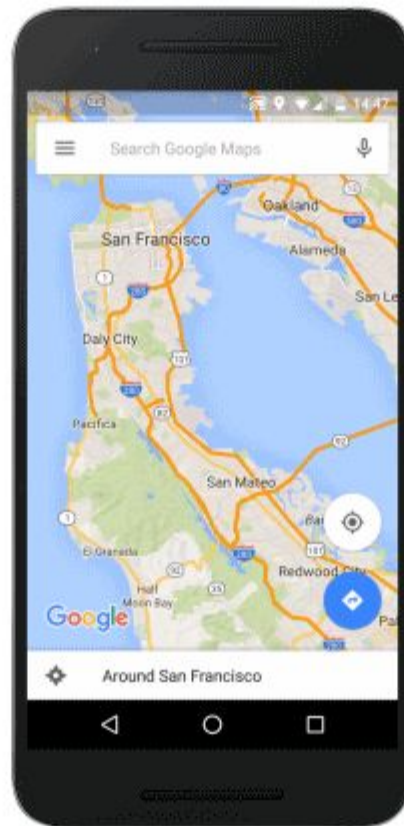
About me...

- Geographer
- Computer Scientist
- Academic
- Civil Servant
- Lapsed Aviator..





Google Maps for Mobile 1 Billion Users !



Not your Grandfather's Geospatial Industry..



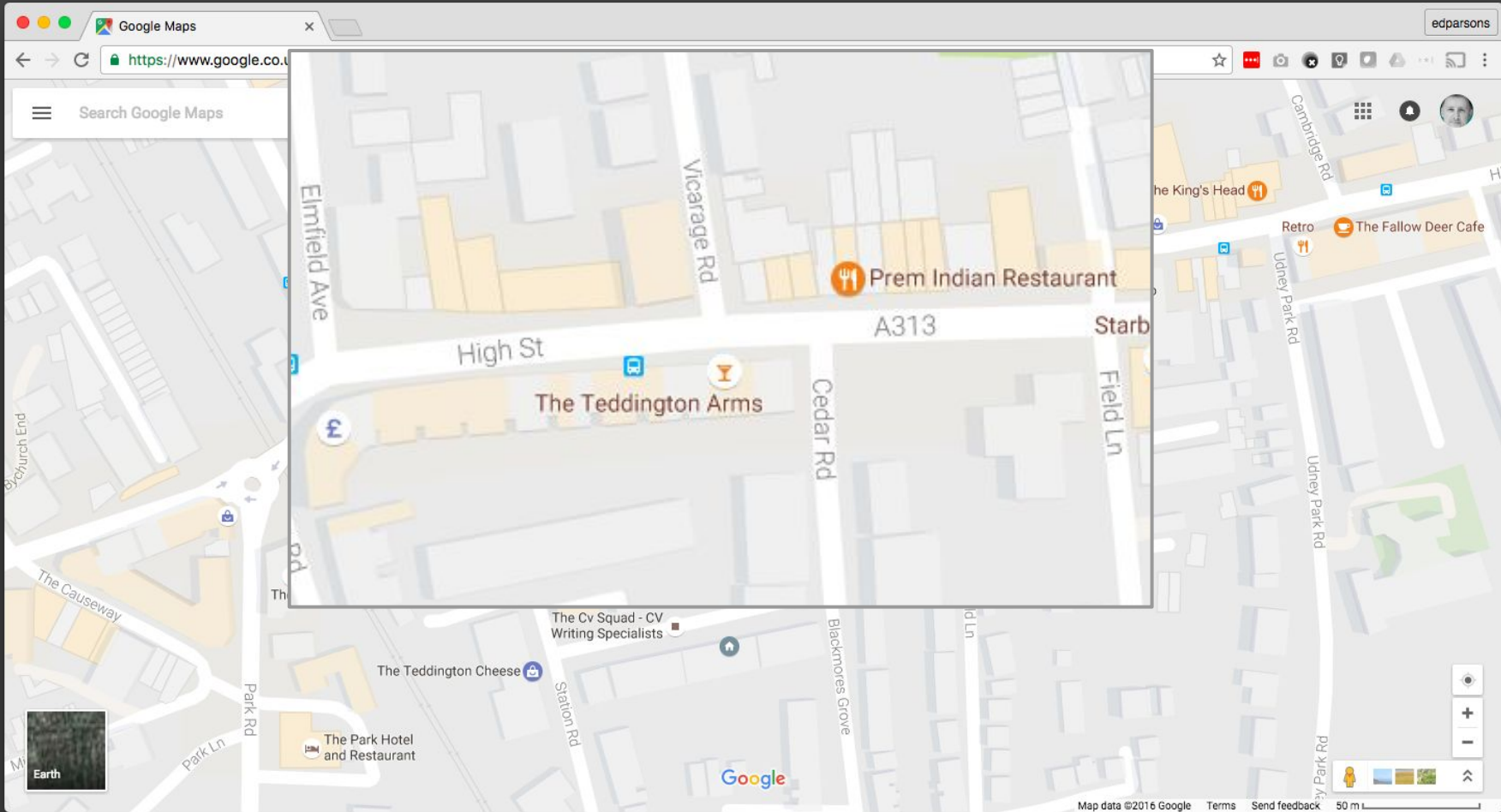
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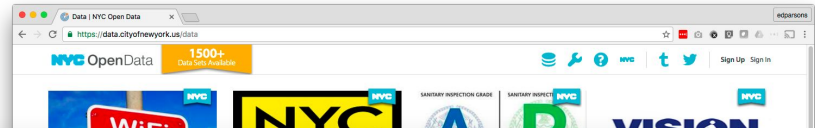
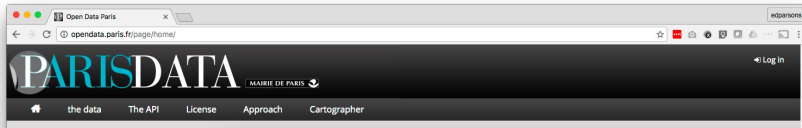


... to organise the world's information and
make it universally accessible and useful.



*My
Government
Data Portal*

If you build it, they will come.



Set Data - MAMPU

www.data.gov.my/data/ms_MY/dataset

Bahasa Melayu - Tema Helvetica Saiz Teks

data.gov.my
Data Untuk Kesejahteraan Rakyat

Data Permohonan Set Data Terma Penggunaan Pembekal Utama Data Log Masuk

MALAYSIA

Set Data

Carian Terperinci **CARIAN**

Pembekal Set Data

Jabatan Perangkaan Malaysia	(303)
Kementerian Kemajuan Luar Ban...	(157)
Kementerian Perusahaan Pelada...	(129)
Kementerian Pertanian dan Indus...	(112)
Kementerian Sumber Manusia	(102)
Kementerian Sumber Asli dan Al...	(76)
Jabatan Perdana Menteri	(69)

Carian Set Data... **CARIAN**

1,324 set data dijumpai Susunan: Data Terkini

Data Projek RUMAWIP Yang Telah Dilancarkan
Oktober 14, 2016 Kementerian Wilayah Persekutuan **XLSX CSV RDP**
Pemakluman Berkaitan Projek Projek RUMAWIP Yang Telah Dilancarkan Dan Dibuka Kepada Permohonan

Senarai Filem Yang Diluluskan
Oktober 14, 2016 Kementerian Dalam Negeri **CSV XLSX VISI VISI RDP**

Census of Land Use and Employment

Browse through our country's challenges for 2016

If you build it, ^{he} ~~they~~ will come.



Remember me?

Technics STEREO SYNTHESIZER TUNER ST-X302L

POWER []

STANDBY/ON

CLOCK SET SLEEP TIMER OPERATION CANCEL STANDSBY READ

TIMER SET SELECT

SENSOR

0:01

STEREO FM 102.60 MHz QUARTZ LOCK AUTO

28 CHANNEL RANDOM PRESET TUNING

FM LW MW

-LW -FREQ SHIFT -MW -ALLOCATION

DOWN UP

TUNING

MANUAL AUTO

MEMORY FM MODE

PRESET

TUNING MODE

Technics STEREO INTEGRATED AMPLIFIER SU-X120 PXS cap

POWER []

SL OFF ON

SUPER BASS SURROUND

MUTING

VOLUME LEVEL -64 dB

VOLUME

VOLUME PRESET

BALANCE BASS TREBLE

LEFT RIGHT MIN MAX MIN

PHONES

ACT BI-BASS BY ACTIVE CURRENT SENSOR

AUX 1 CD TUNER PHONO

new class 4

Technics COMPACT DISC PLAYER SL-PJ28

POWER []

STANDBY/ON

EDIT NORMAL SIDE A/B RANDOM

TAPE LENGTH

10 40:23

REPEAT PROGRAM

SEARCH SKIP

OPEN/CLOSE STOP PAUSE PLAY

Technics STEREO DOUBLE CASSETTE DECK RS-X120

DECK 1

DECK 2

000-

NAD ELECTRONICS INTERNATIONAL
633 GRANITE COURT, PICKERING, ON CANADA L1W 3K1
MODEL C 326BEE STEREO INTEGRATED AMPLIFIER
POWER RATING 120V ~ 60Hz 1.5A
DESIGNED & ENGINEERED IN CANADA, CUSTOM
MANUFACTURED TO NAD SPECIFICATIONS IN CHINA

CSA
C US
252203

RoHS
Compliant



Universal ?

	MP	CD	TUNER	DISC	AUX	VIDEO	TAPE IN	TAPE OUT	SUBW 1	PRE OUT	MAIN IN	
L	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	L
R	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	[Jack]	R

SPEAKERS

R

+ - -

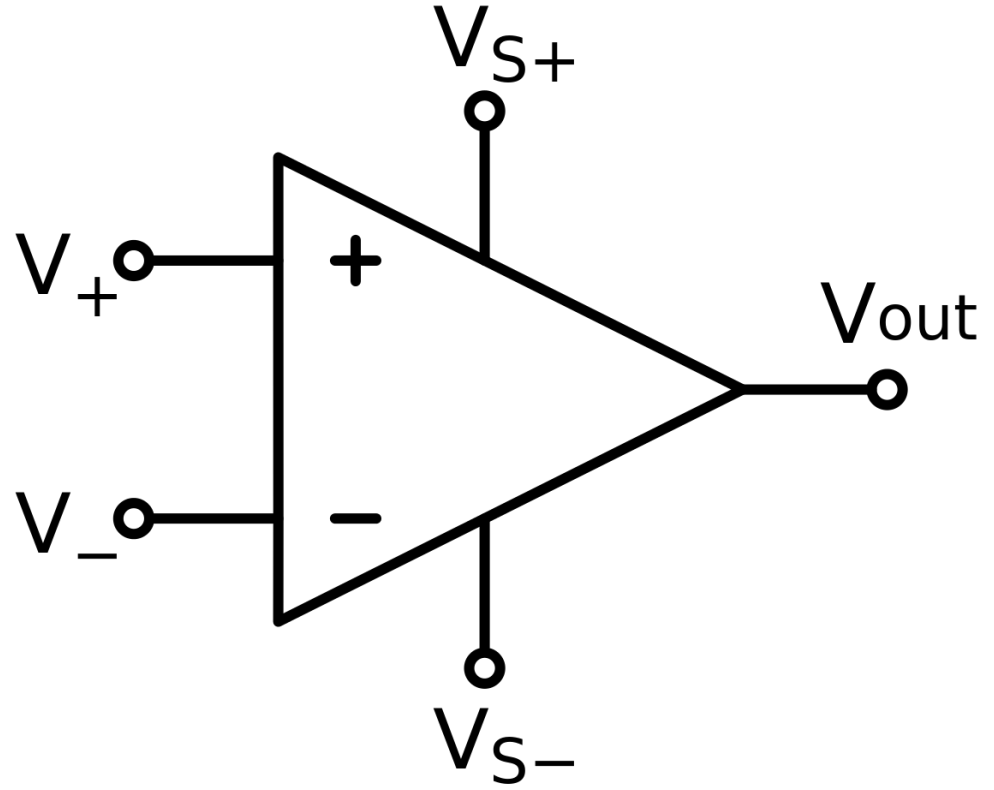
CAUTION - ATTENTION
MINIMUM SPEAKER IMPEDANCE 4 Ω
MINIMUM IMPEDANCE DES HAUTES PARLEURS 4 Ω

SOFT CLIPPING
OFF ON

+12V TRIGGER OUT

Open Data Amplifier ?

- Increase audience for Open Data
- Offer multiple channels of distribution
- Allow integration of different systems..



Beyond data portals

Web & Mobile Platforms

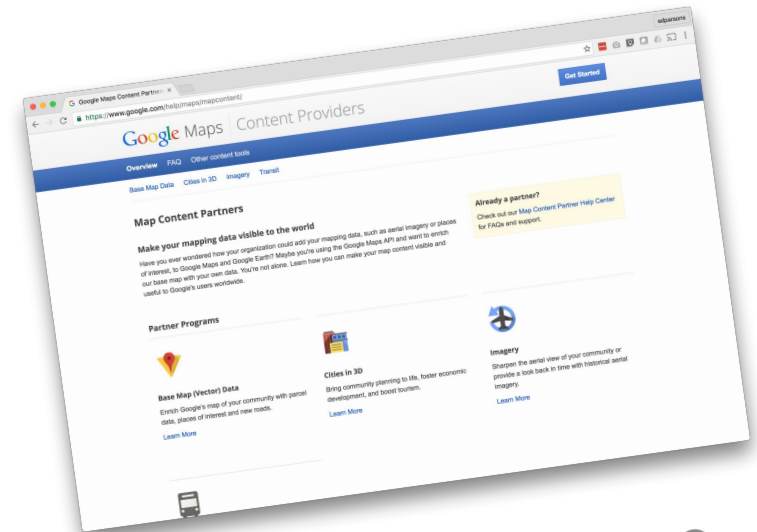


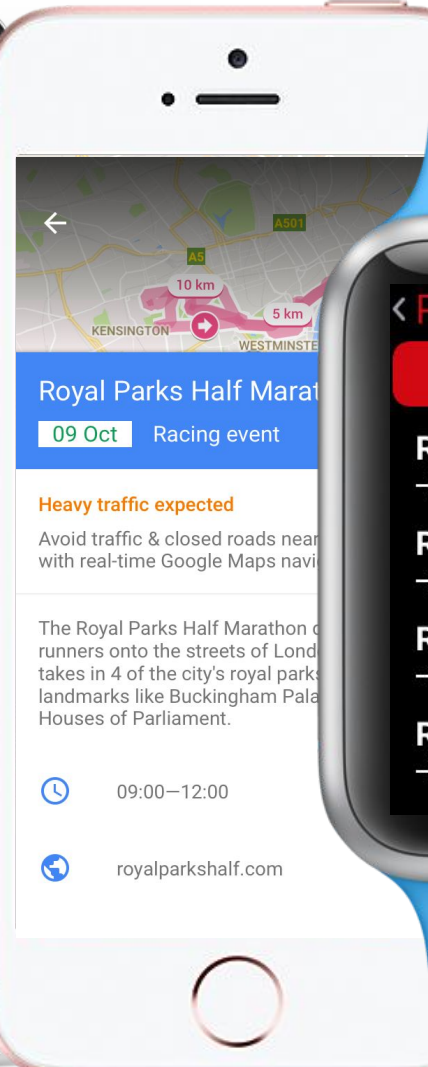
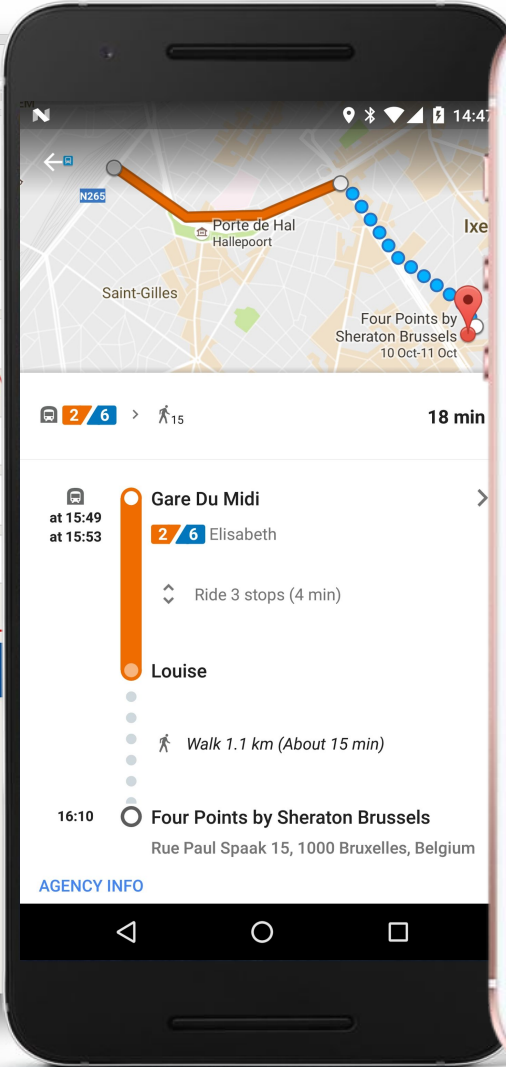
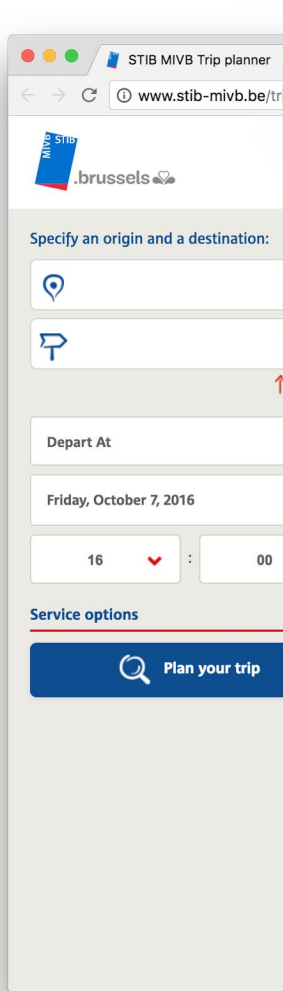
Linked Data

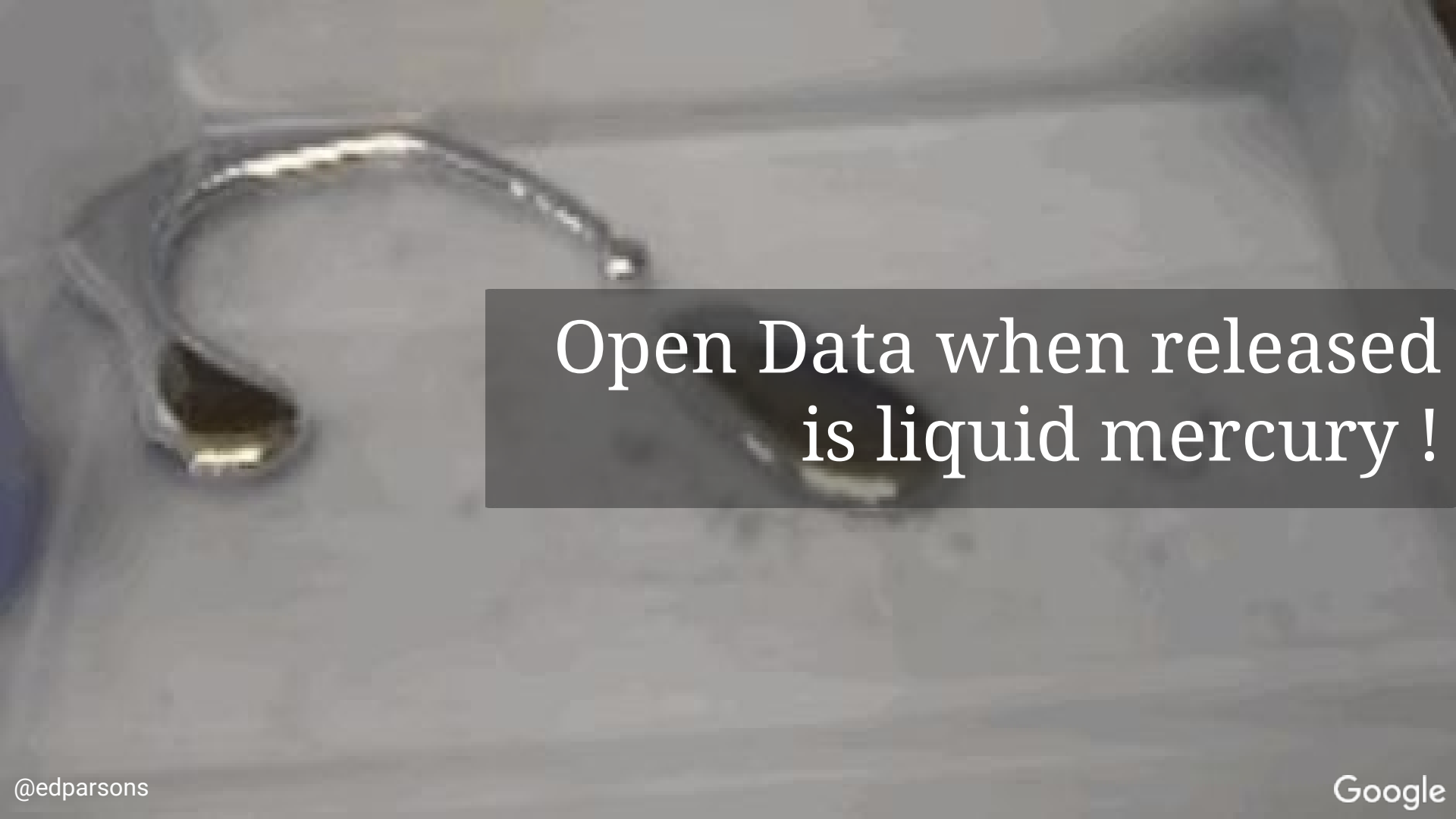


Working with platforms

- Driven by User focus (often global e.g. services that are universal)
- Interfaces need to be scalable & robust
- Complex licensing always an issue
 - HT to UK Open Government Licence
- May use intermediary data brokers







Open Data when released
is liquid mercury !

The promise of linked data...



W3C and OGC to Collaborate to Integrate Spatial Data on the Web

[Translations](#) | [W3C Press Release Archive](#)

6 January 2015 — The W3C and the [Open Geospatial Consortium \(OGC\)](#) announced today a new collaboration to improve interoperability and integration of spatial data on the Web. Spatial data —describing geographic locations on the earth and natural and constructed features— enriches location-based consumer services, online maps, journalism, scientific research, government administration, the Internet of Things, and many other applications. In the United States alone, geospatial data and services are [estimated](#) to generate \$1.6 trillion annually.

"Location, as well as providing context to much of today's online information, is vital to the emerging field of connected devices," said Ed Parsons, Geospatial Technologist

Best Practise

<http://w3c.github.io/sdw/bp/index.html>

W3C Editor's Draft

W3C OGC

Spatial Data on the Web Best Practices

W3C Editor's Draft 26 September 2016

This version:
<http://w3c.github.io/sdw/bp/>

Latest published version:
<https://www.w3.org/TR/sdw-bp/>

Latest editor's draft:
<http://w3c.github.io/sdw/bp/>

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Abstract

This document advises on best practices related to the publication and usage of spatial data on the Web; the use of Web technologies *as they may be applied to location*. The best practices are intended for practitioners, including Web developers and geospatial experts, and are compiled based on evidence of real-world application. These best practices suggest a significant change of emphasis from traditional Spatial Data Infrastructures by adopting a Linked Data approach. As location is often the common factor across multiple datasets, spatial data is an especially useful addition to the Linked Data cloud; the [5 Stars of Linked Data](#) paradigm is promoted where

The Audience...



11. Best Practices Summary

[Best Practice 1](#): Include spatial metadata in dataset metadata

[Best Practice 2](#): Provide context required to interpret data values

[Best Practice 3](#): Specify Coordinate Reference System for high-precision applications

[Best Practice 4](#): Make your data indexable by search engines

[Best Practice 5](#): Describe the positional accuracy of spatial data

[Best Practice 6](#): How to describe properties that change over time

[Best Practice 7](#): Use globally unique HTTP identifiers for spatial things

[Best Practice 8](#): Provide geometries on the Web in a usable way

[Best Practice 9](#): How to describe relative positions

[Best Practice 10](#): Use spatial semantics for Spatial Things

[Best Practice 11](#): Expose spatial data through 'convenience APIs'

[Best Practice 12](#): Include search capability in your data access API

[Best Practice 13](#): Provide subsets for large spatial datasets

[Best Practice 14](#): Publish links to related resources

[Best Practice 15](#): Use links to find related data

[Best Practice 16](#): Provide a minimum set of information for your intended application

[Best Practice 17](#): How to work with crowd-sourced observations



Useful ?

A man with short hair, wearing a bright green hoodie and large over-ear headphones, is leaning over a wooden desk. He is looking intently at a black turntable with a clear dust cover that is open. His right hand is near the turntable's tonearm. On the desk next to the turntable is a stack of vinyl records with various covers, including one with a pink cover. To the right of the turntable is a black speaker. In the background, there is a white door with a window and a potted plant. The overall scene is a well-lit room, likely a living area.

The audiophile

Thank you !



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Google



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