What's **HOT** @ OGC & W3C

Linda van den Brink, Geonovum
2 oktober 2019, Amersfoort
@brinkwoman
#DataToBuildOn

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GEONOVUM

Het laatste nieuws
Uw reporter... Linda van den Brink

Spatial Data on the Web Triggers New Generation of OGC Standards
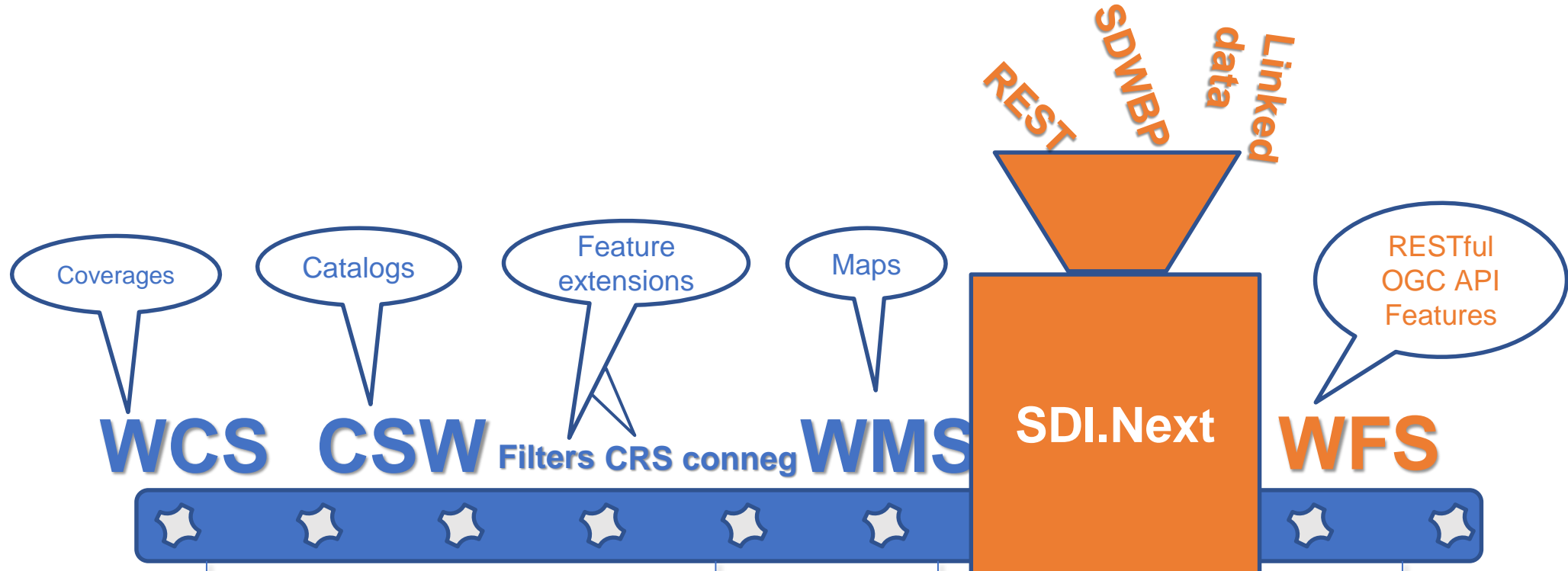
OGC and STAC invite developers to Sprint to advance OGC APIs for Features and Catalogues

Contact:

info@opengeospatial.org

Release Date:

Tuesday, 1 October 2019 UTC

Developers at the '2019 OGC API - Features and Catalogues Sprint' will work on Query and Filter reusable components to standardize geospatial data access across 'OGC API - Features', 'OGC API - Catalogue', and other geospatial API's.
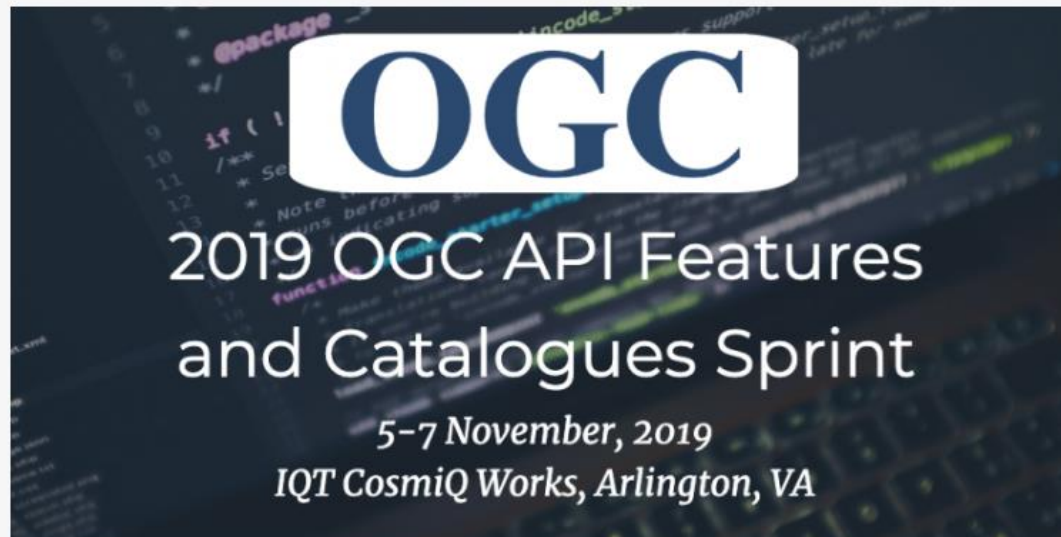
The Open Geospatial Consortium (OGC) and the SpatioTemporal Asset Catalog (STAC) community together invite developers to participate in the follow-up to the successful OGC API Hackathon. The '2019 OGC API - Features and Catalogues Sprint' will occur at IQT CosmiQ Works, Arlington, VA, USA on 5-7 November, 2019.

OGC has been developing a new generation of web API standards leveraging OpenAPI to document requirements for implementation. In parallel, but in close coordination, the STAC community has been advancing a specification focused on imagery catalogs, which is based on *OGC API - Features,*

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Dataset Description Standard Nears Completion

- ~~Metadata~~ Dataset description
- DCAT 2.0 bijna gereed
- Met meer geo
- Toekomstvisie: ISO19115/119 vervangen door Geo extensie van DCAT2.0

Data Catalog Vocabulary (DCAT) - Version 2

W3C Working Draft 28 May 2019

This version:
https://www.w3.org/TR/2019/WD-vocab-dcat-2-20190528/

Latest published version:
https://www.w3.org/TR/vocab-dcat-2/

Latest editor's draft:
https://w3c.github.io/dxwg/dcat/

Previous version:
https://www.w3.org/TR/2018/WD-vocab-dcat-2-20181016/

Latest Recommendation:
https://www.w3.org/TR/vocab-dcat/

Editors:
Riccardo Albertoni (CNR - Consiglio Nazionale delle Ricerche, Italy)
Dave Browning (Refinitiv)
Simon Cox (CSIRO)
Alejandra Gonzalez Beltran (Oxford eResearch Centre, Engineering Science, University of Oxford)
Andrea Perego (European Commission, Joint Research Centre)
Peter Winstanley (Scottish Government)

Former editors:
Fadi Maali (DERI)
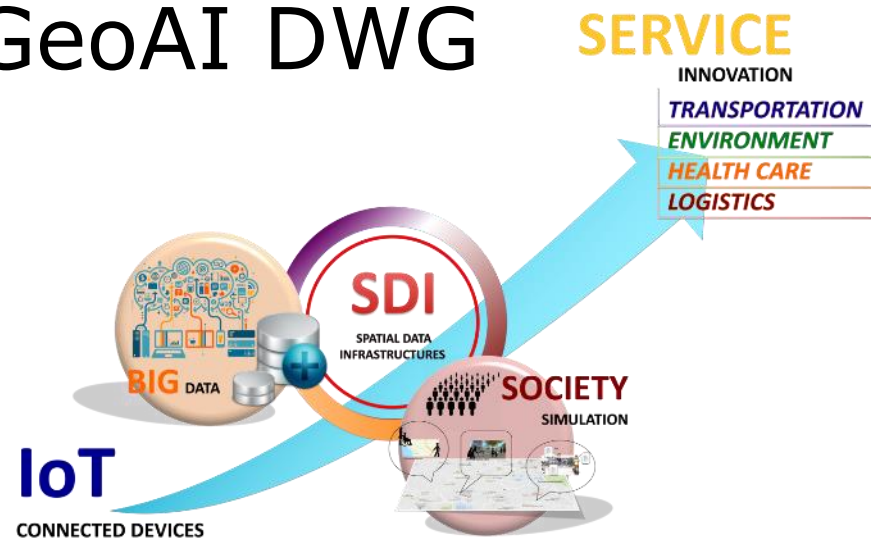John Erickson (Tetherless World Constellation (RPI))

Participate:

W3C

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Geo Artificial Intelligence Even Smarter
OGC GeoAI DWG

SERVICE
INNOVATION
TRANSPORTATION
ENVIRONMENT
HEALTH CARE
LOGISTICS

SDI
SPATIAL DATA INFRASTRUCTURES

BIG DATA

SOCIETY
SIMULATION

IoT
CONNECTED DEVICES

Build up disaster training dataset

- streaming data retrieve from traffic purpose CCTV

1 Annotation

- Event time stamp and annotation
- CCTV image retrieval
  - ✓ Regularly get CCTV image –
  - ✓ Event based CCTV image detection -> Automatic trigger after an earthquake

2 Training and Recognition

- CCTV streaming recognition based on annotation knowledge base
- Email, SMS, instant massager notification

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TB15 D104: Lake-river differentiation model

- One of the deliverables of ML thread of Testbed-15, sponsored by NRCan
- Objective: Train model to recommend waterbody splits into lake and river features
  - If no split, determine if lake or river
    - **Detect lakes!**
  - If split, determine division between the features
    - **Hydro - lakes = rivers!**
- Data
  - Hydrography network
  - High Resolution DEM
  - Imagery, if possible/necessary
- Study area
  - north of Gatineau/Ottawa
  - near from Petawawa experimental forest

OGC®

CRIM
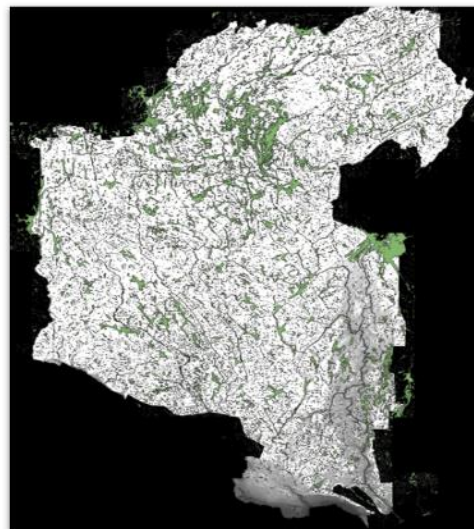
How to **extract** and **integrate** knowledge within **3D point clouds** for **autonomous** decision-making systems

DI Dr. Ing. Florent Poux

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Event type – Urban flash flood

- via traffic CCTV
- Road mark detection –puddles detection
- Flood depth recognition – detect the driveway splashing

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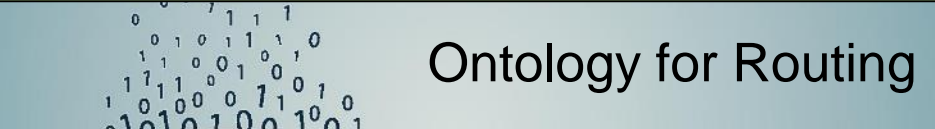
Sensor Standards On The Rise

Thing Description

SOSA SSN

WoT

Architecture

O&M

SOS

Sensor Things API

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"What? Data Models Are Still Important?"

Ontologies for AI
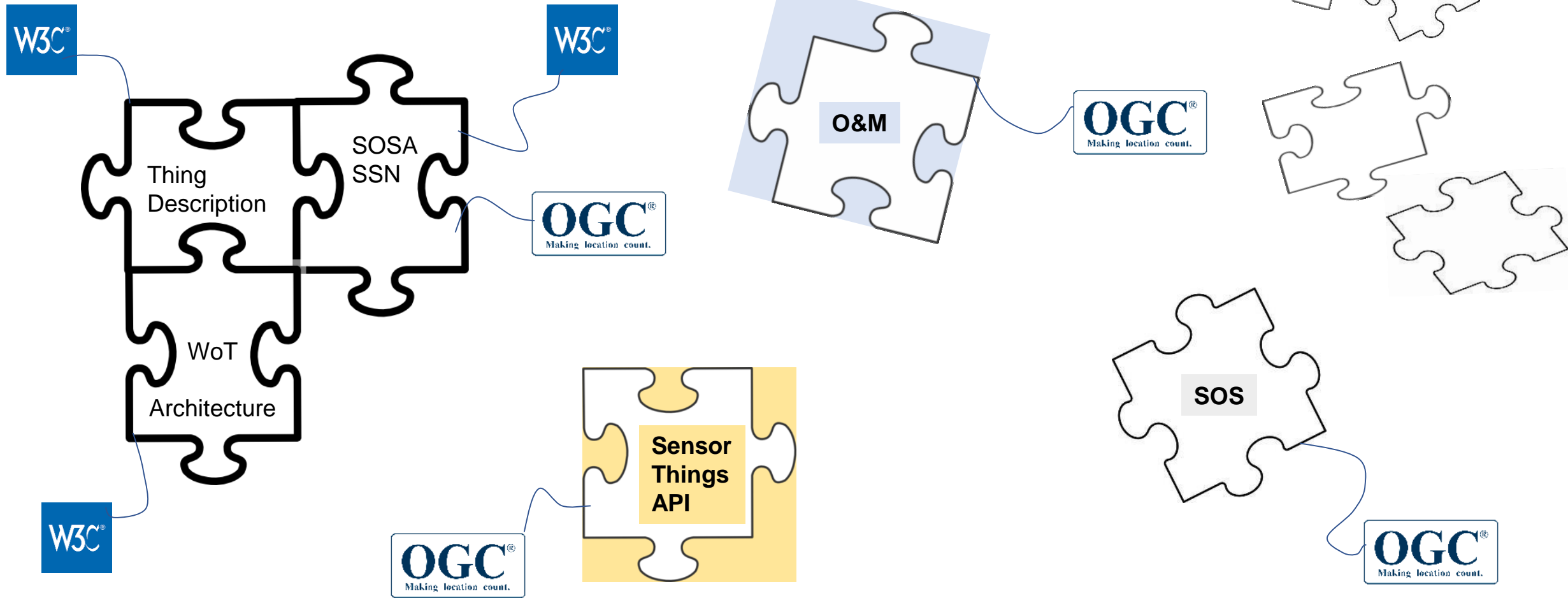
Ontology for Routing
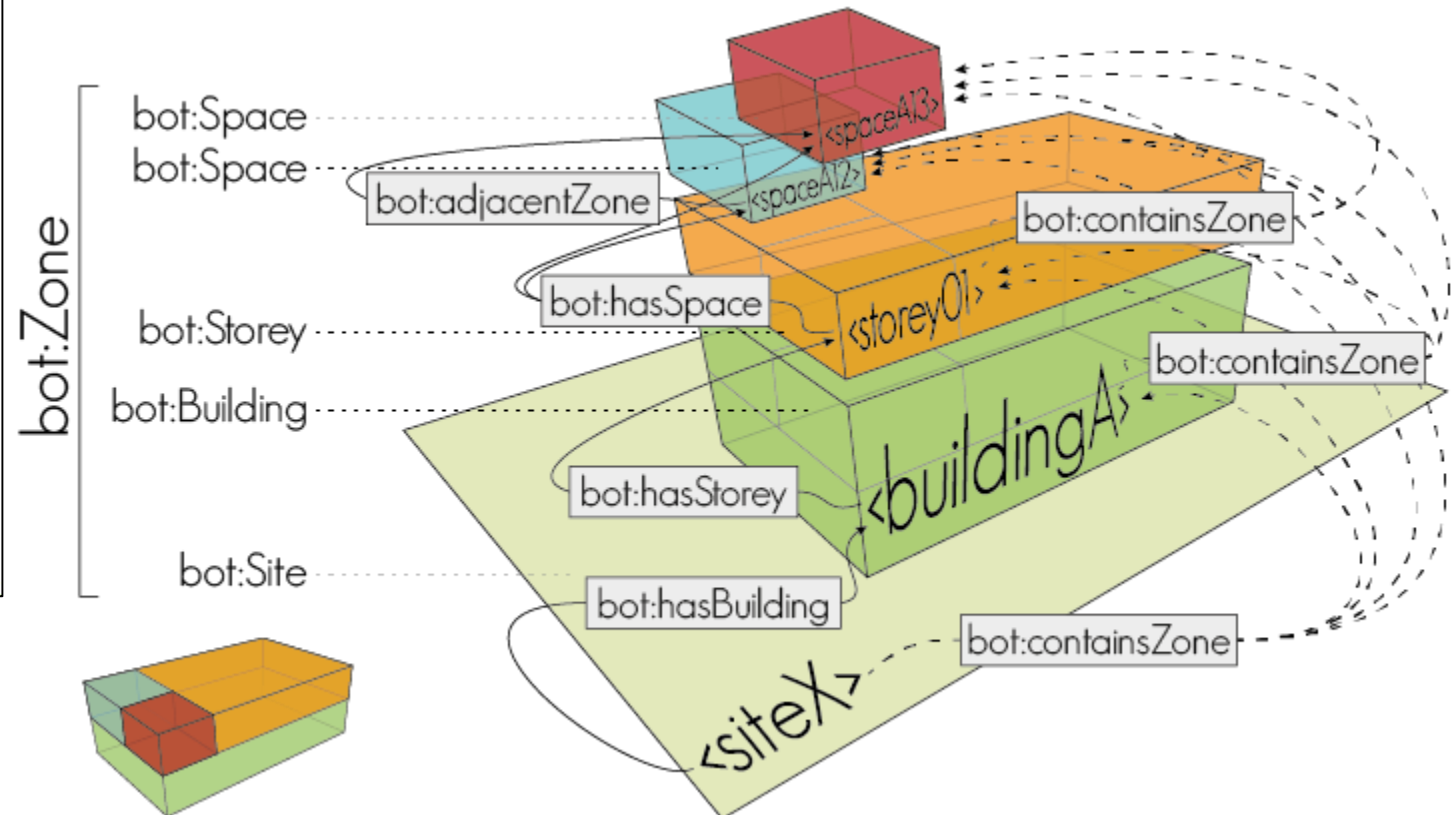
Linked Building Ontology

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Geo, JSON & Linked Data Finally Meet

More Web!

THE STRUCTURE OF IDENTITY SYSTEMS

1 The user presents a set of attributes to a third party

2 The third party verifies the attributes and attaches its attestation to the attributes, becoming an identity provider for the user

3 The user then uses the credential from the identity provider in transactions with RPs
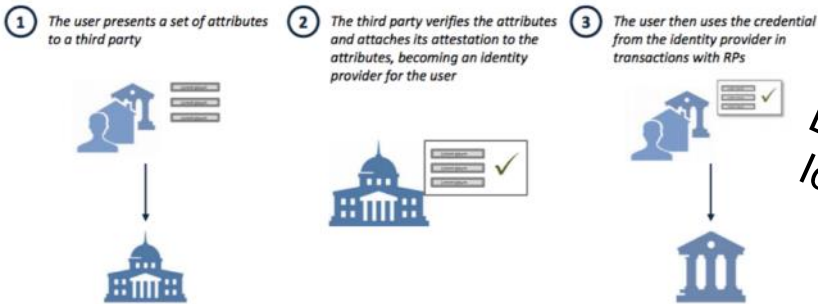
WORLD ECONOMIC FORUM | 2016

Identity on the

Verifiable Claims
Decentralized
Identifiers

Immersive **Web** Assembly

VR & AR

Maps - MapML

Video Map Tracks

Web Browser

WebXR Input Profiles OpenSource JavaScript Library

Output

Profiles

XRInputSource

Gamepad
(Not included in navigator.getGamepads)

3D Models in GLTF Format

Input Profiles in JSON Format

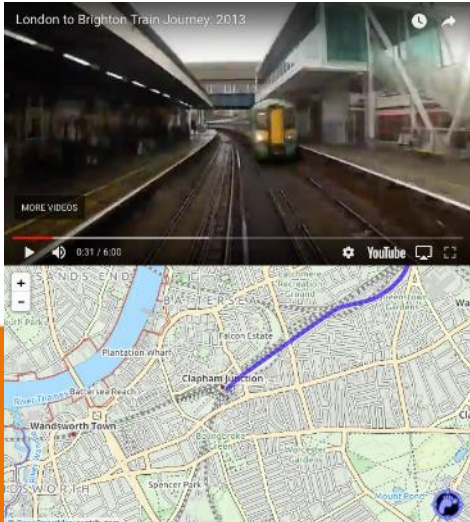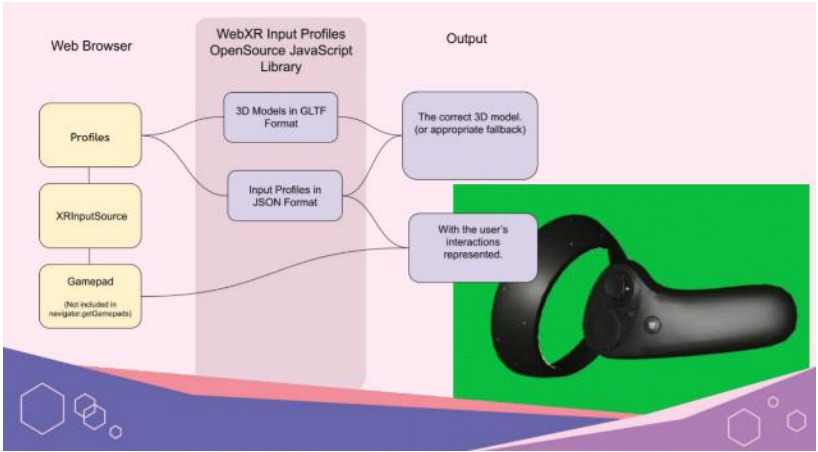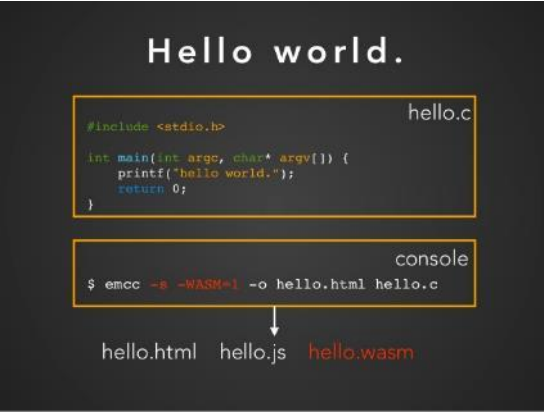The correct 3D model. (or appropriate fallback)

With the user's interactions represented.

Hello world.

```
#include <stdio.h>

int main(int argc, char* argv[]) {
    printf("hello world.");
    return 0;
}
```
hello.c

console

$ emcc -s -WASM=1 -o hello.html hello.c

hello.html   hello.js   hello.wasm

Canada

Natural Resources Canada

You are here

NASA Blue Marble MapML Service preview

Le emeetups des developpeurs W3C à l'université de Lyon

London to Brighton Train Journey: 2013

MORE VIDEOS

0:31 / 6:00   YouTube

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The story continues…

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