

T2TRG Summary

IETF 96, Berlin, Germany, 2016

<http://w3c.github.io/wot/charters/wot-ig-2016.html>

INTEREST GROUP RE-CHARTER

WoT Interest Group

- AC Review finished 15 July 2016
 - 34 supports this Charter as is
 - 1 suggests changes, but supports the proposal
- IG Scope
 - Support proposed WG
 - Execute PlugFests
 - Collaborate with other SDOs, organizations, etc.
 - Investigate ideas for long-term goals

<http://w3c.github.io/wot/charters/wot-wg-2016.html>

WORKING GROUP CHARTER

Proposed WoT Working Group

- Roadmap
 - Integrate feedback from bilateral outreach
 - Resolution to submit on 27 July 2016
 - Start W3M Review period on 3 August 2016
 - Start AC Review period on 24 August 2016
 - Be able to start WG around October 2016
- Please have a look and send feedback
 - <http://w3c.github.io/wot/charters/wot-wg-2016.html>
 - Mailing list or GitHub Issues

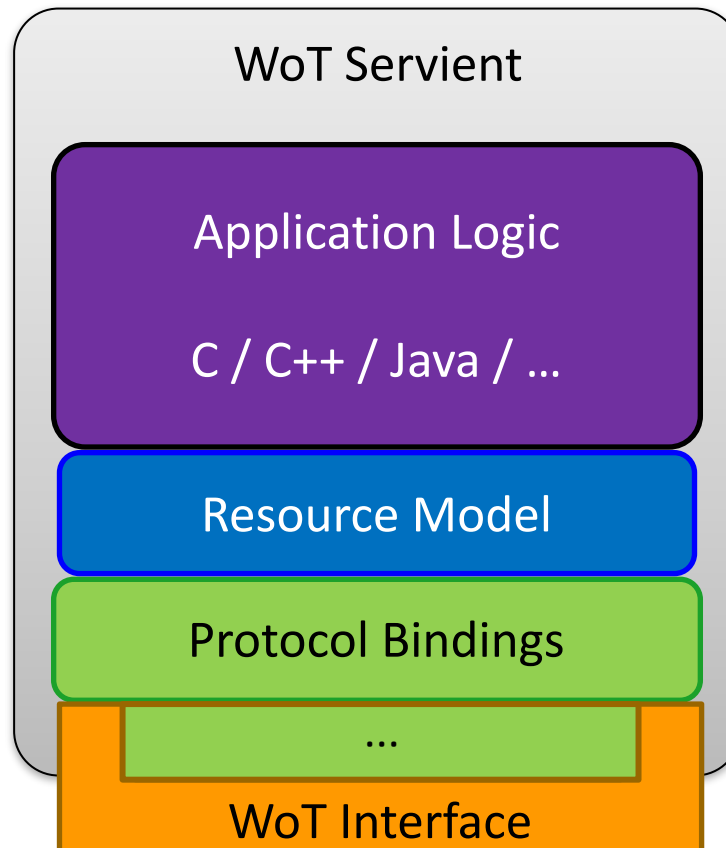
MAIN PROGRESS TOPICS

Thing Description (TD) Type System

- TD allows to plug in different systems
- Evaluation of popular type systems in Web apps
 - Schema.org system has some limitations
 - XML-based schemas are too implementation specific
 - JSON Schema for now used to in PlugFest to explore further
- Open issues
 - Semantic annotations alongside data structure definitions
 - Existing tool support for automatic validation

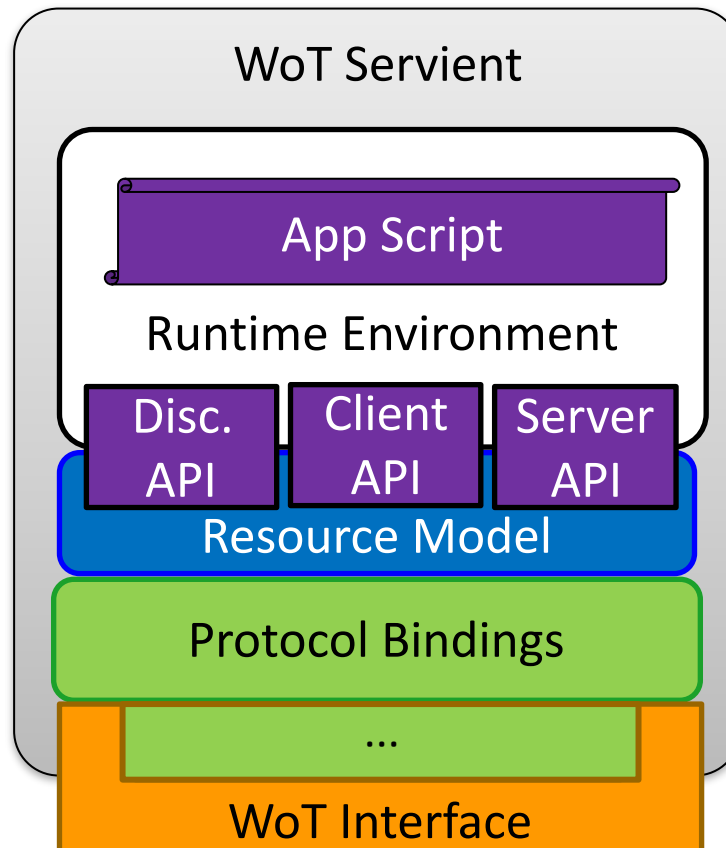
Without Scripting API

- Application logic often implemented natively



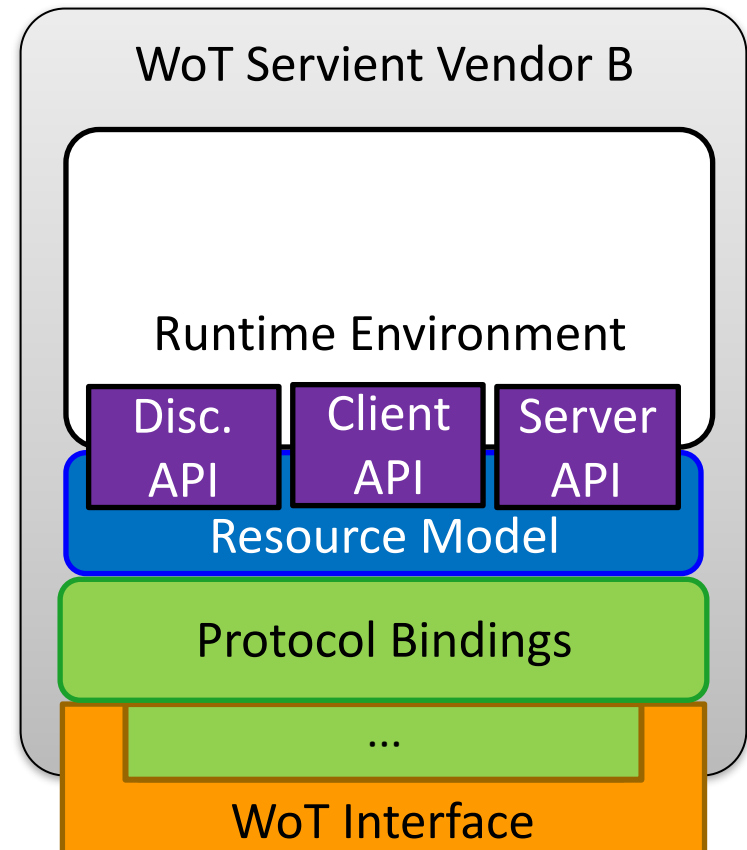
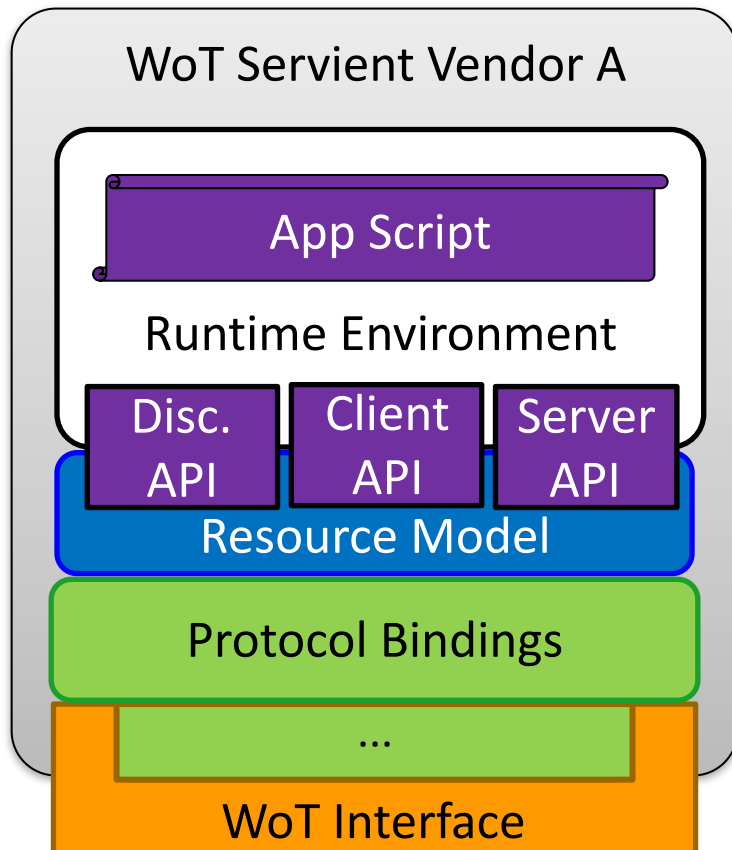
Scripting API

- Web-like development and deployment



Scripting API

- Common runtime enables portable apps



Script Example (Expose Thing)

```
// create software object to represent local Thing
WoT.newThing("counter")
  .then(function(thing) {
    thing
      // programmatically add interactions
      .addProperty("count", {"type": "integer"})
      .addAction("increment")
      .onInvokeAction("increment", function() {
        console.log("incrementing counter");
        // persistent state is managed by runtime environment
        var value = thing.getProperty("count") + 1;
        thing.setProperty("count", value);
        return value;
      })
      // initialize state (no builder pattern anymore)
      thing.setProperty("count", 0);
  })
  ._catch(console.err);
```

Script Example (Consume Thing)

```
// create software object to represent remote Thing based on TD URI
WoT.consumeDescriptionUri("http://servient.example.com/things/counter")
// use promise to handle asynchronous creation
.then(function(counter) {
    counter
    // invoke an Action without arguments
    .invokeAction("increment", {})
    // which is an asynchronous call -> promise
    .then(function() {
        console.log("incremented");
        counter
        // read Property (async.) to confirm increment
        .getProperty("count").then(function(count) {
            console.log("new count state is " + count);
        });
    })._catch(console.error);
})
._catch(console.error);
```

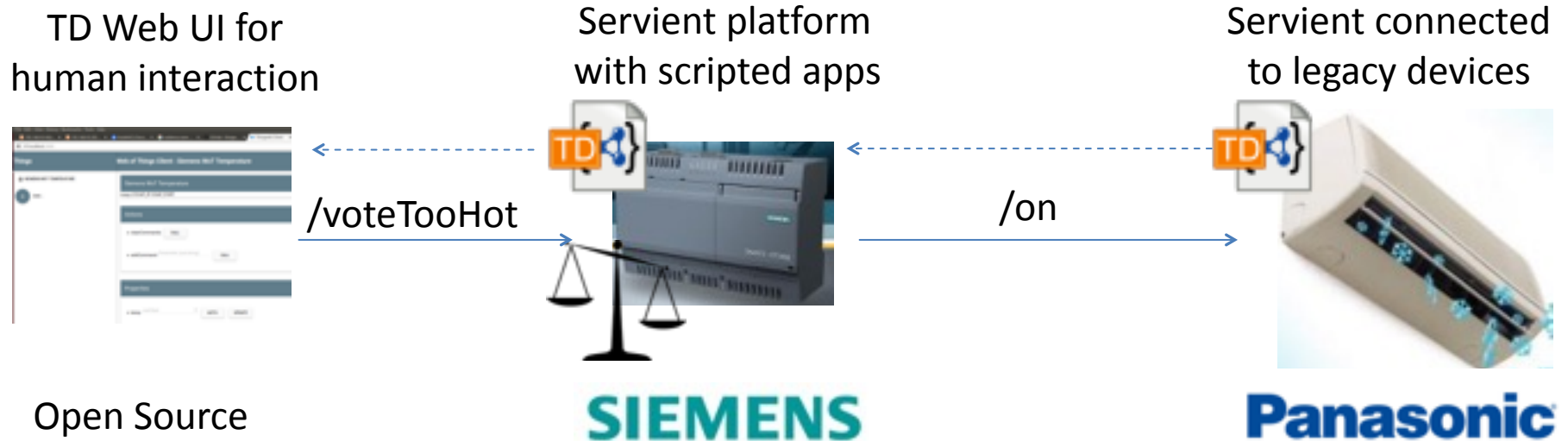
W3C WoT F2F Beijing 2016

F2F MEETING AND PLUGFEST

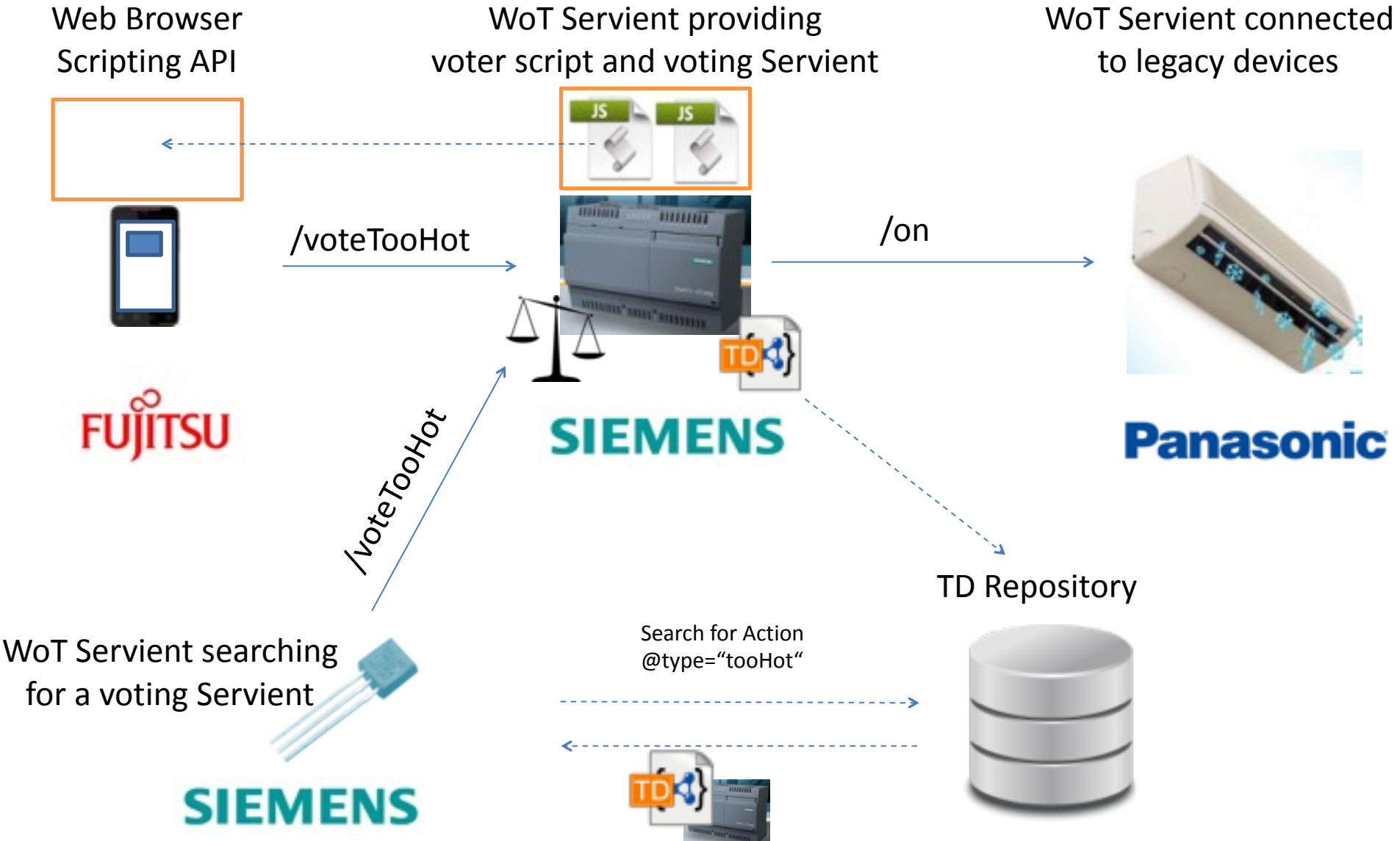
F2F Meeting

- 11 – 14 July 2016
- Hosted by CETC in Beijing
 - Colocated with local IoT event
 - Exchange with CETC
- PlugFest and technical demos
- Planary and breakout discussions

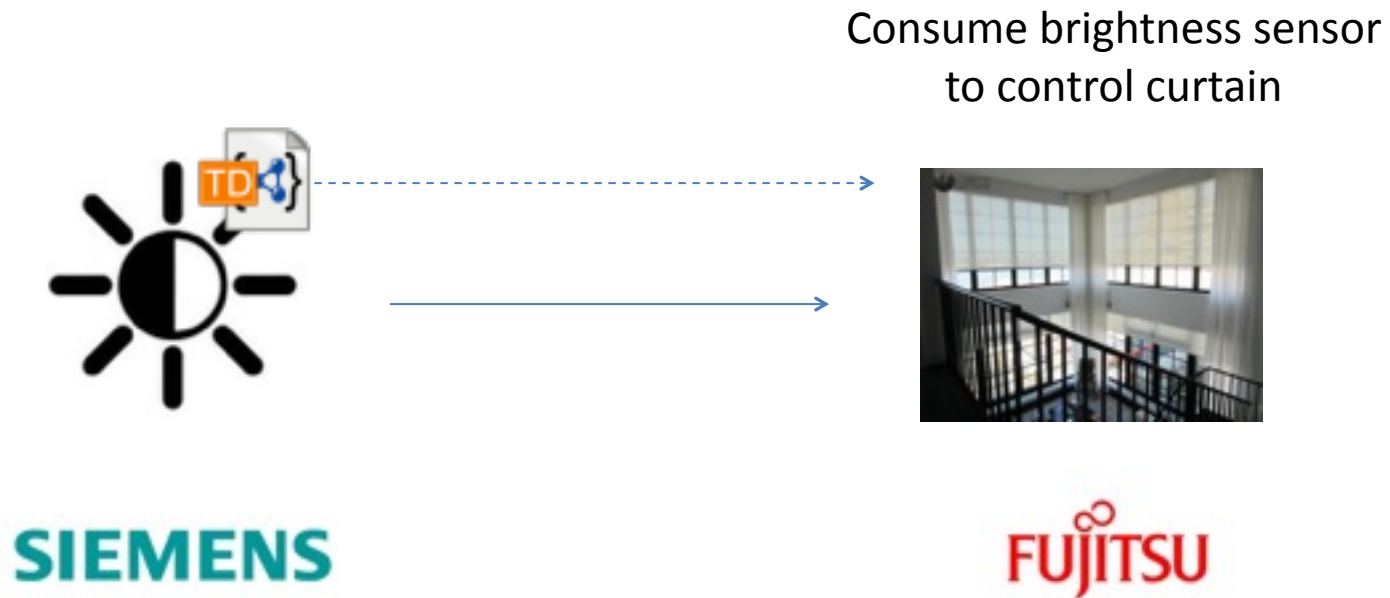
Scenario 1: Hello WoT



Scenario 2: Full WoT



Scenario 3: Rule-based Automation



PlugFest Online Resources

- Current Practices (Beijing Release)
 - <http://w3c.github.io/wot/current-practices/wot-practices-beijing-2016.html>
- Organization Wiki
 - https://www.w3.org/WoT/IG/wiki/F2F_meeting,_July_2016,_China,_Beijing#PlugFest
- Test Cases
 - <https://github.com/w3c/wot/blob/master/plugfest/2016-beijing/plugfest-test-cases-beijing-2016.md>
- Report Template
 - <https://github.com/w3c/wot/blob/master/plugfest/2016-beijing/TestCaseCoverage.xlsx>
(t.b.d.)