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Converging on WoT Archtiecture

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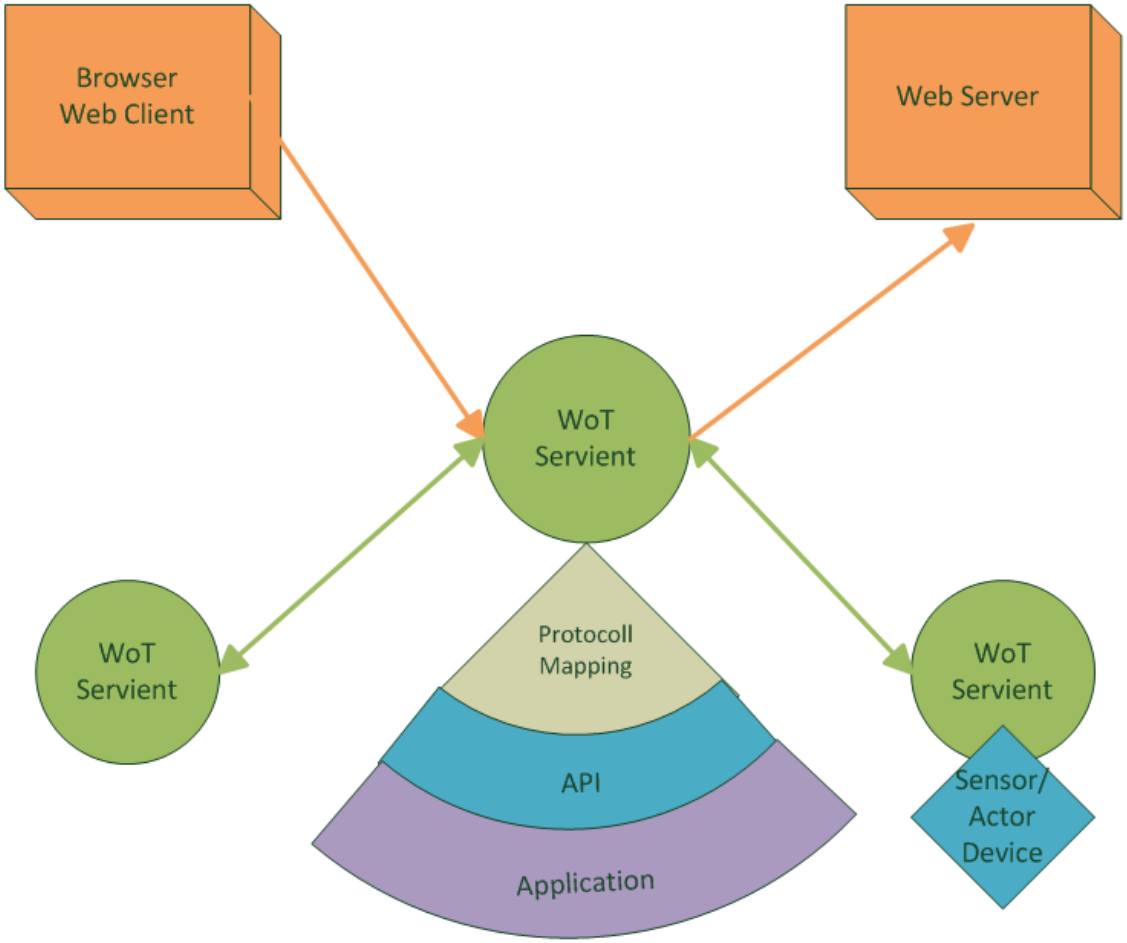
Architecture sketch



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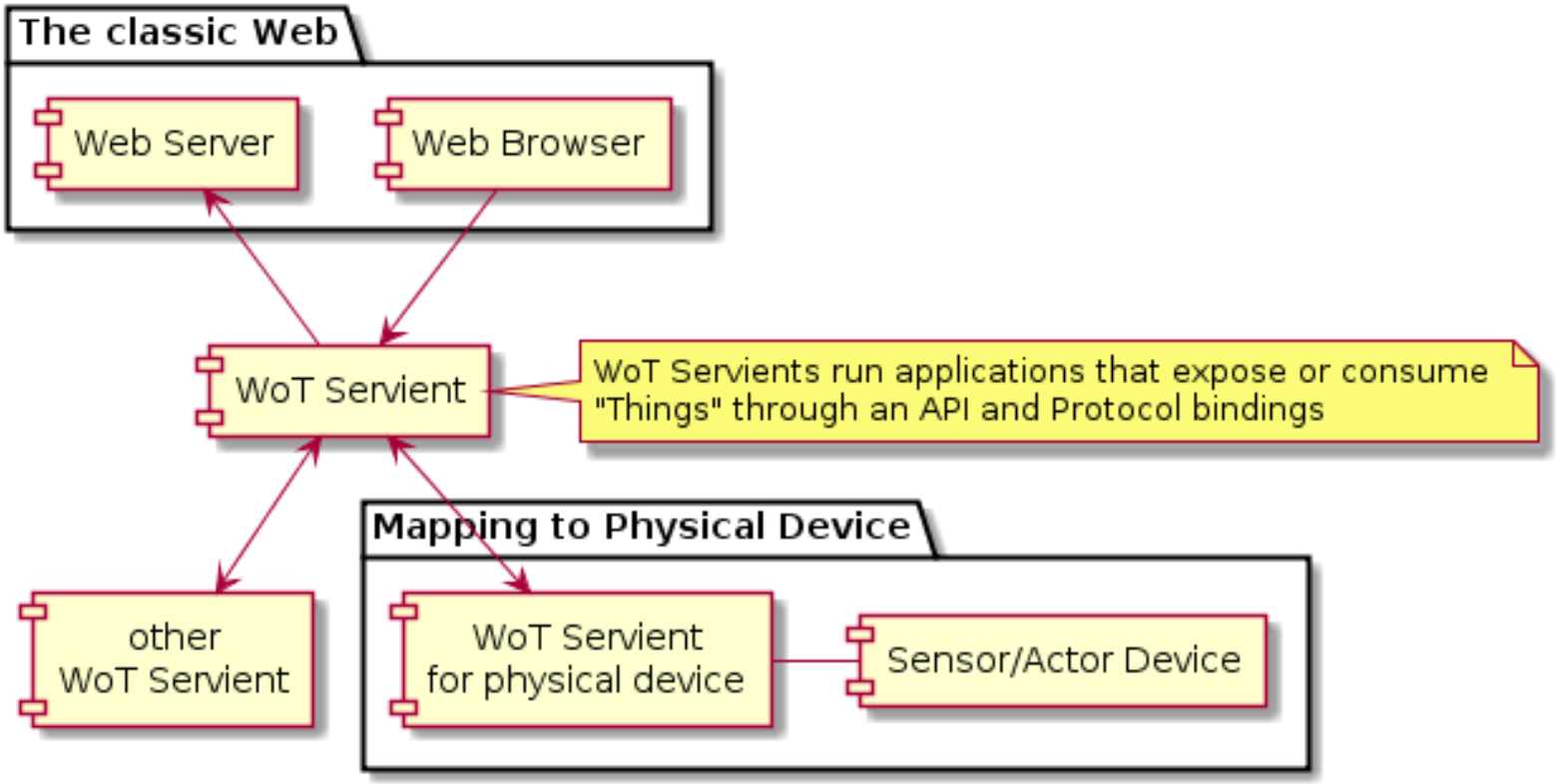
Architecture sketch in plantUML



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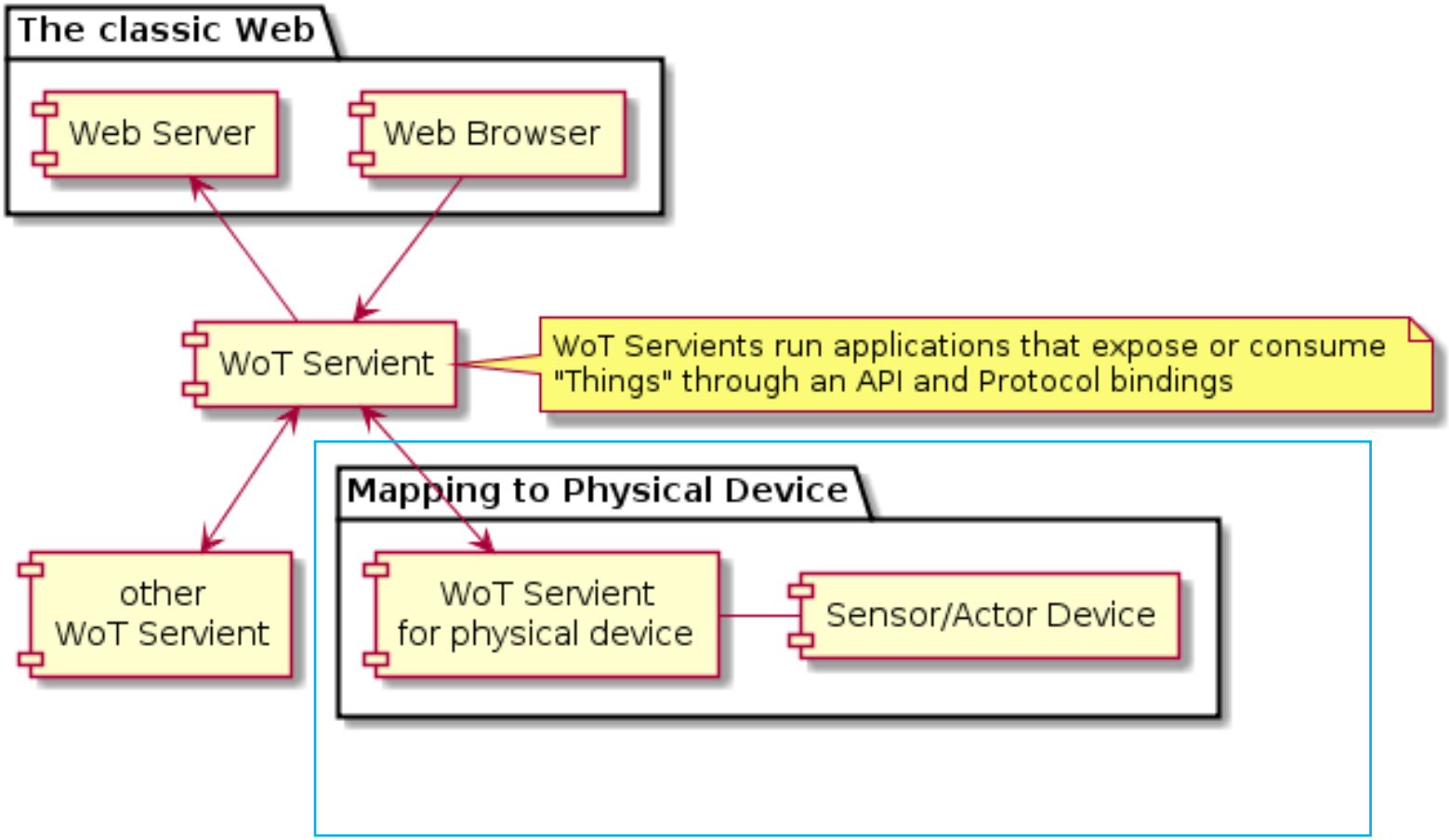
How does this map to real world things …



How do WoT Servients map to real things?

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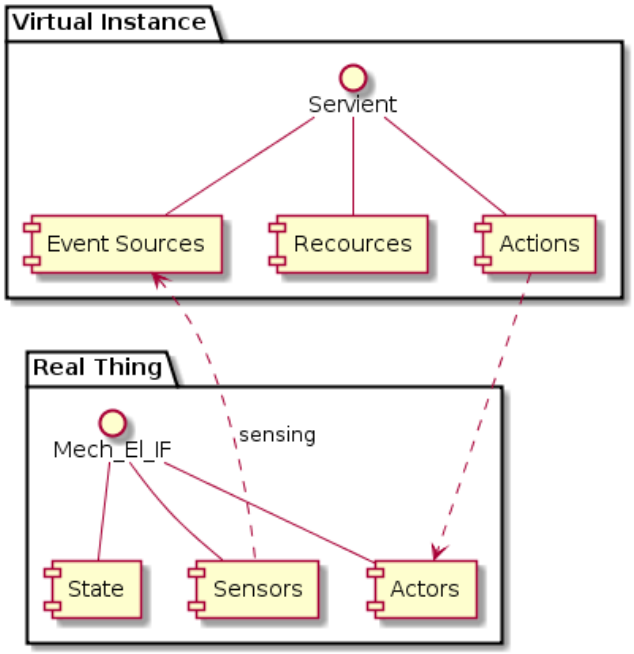
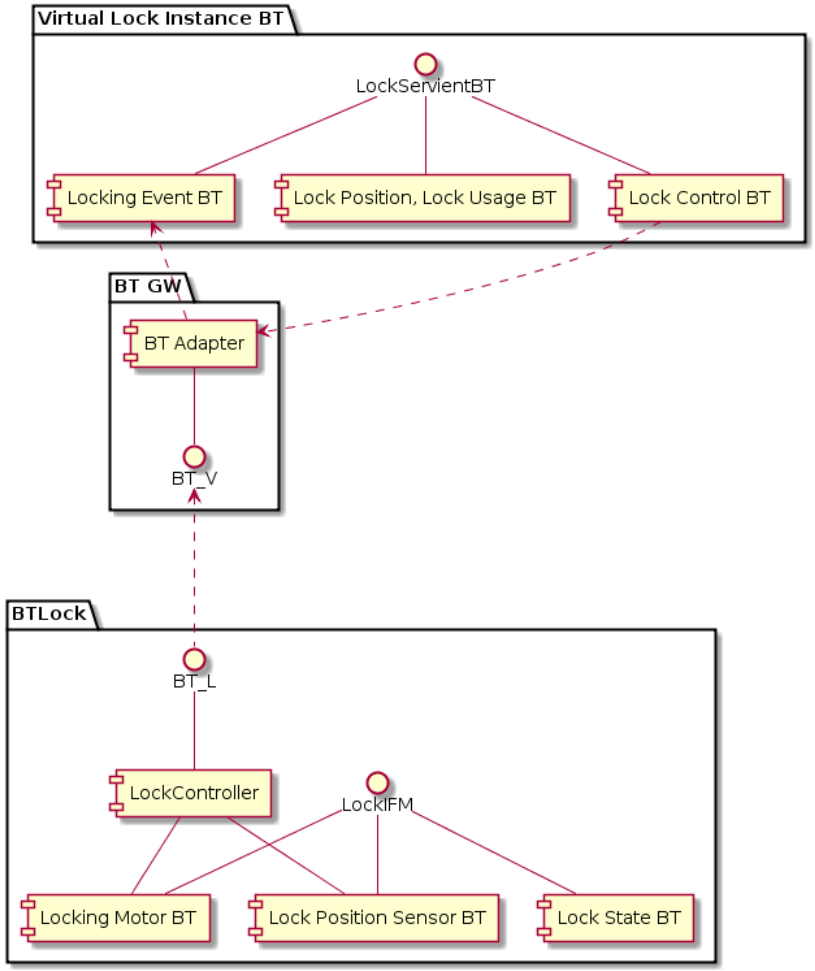
Real Things accessible via Servients in the Web …

Principle Model



Real Implementations for legacy devices
(e.g. a bluetooth lock)



Mech_El_IF: mechanical and/or
electrical interface
BT: Bluetooth

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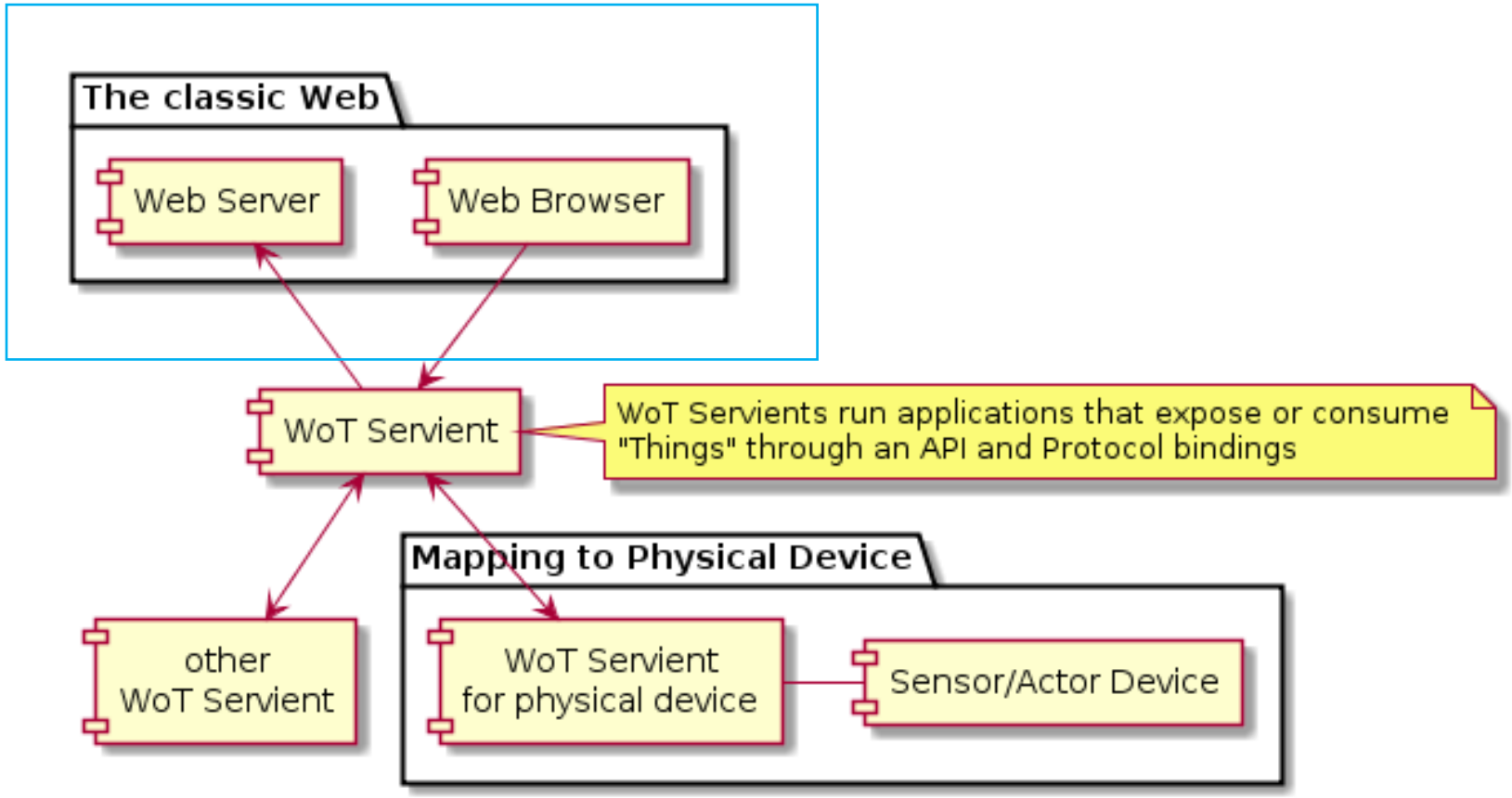
Real Things interacting via the Web …

How are things accessible from todays web?



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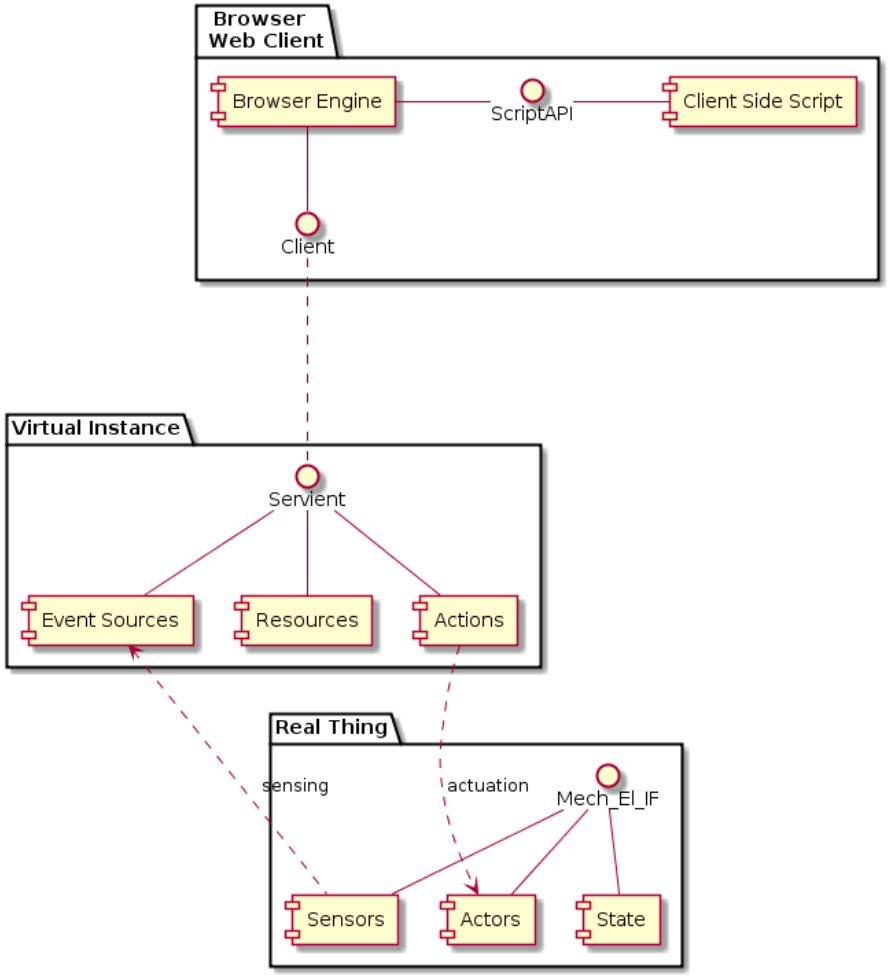
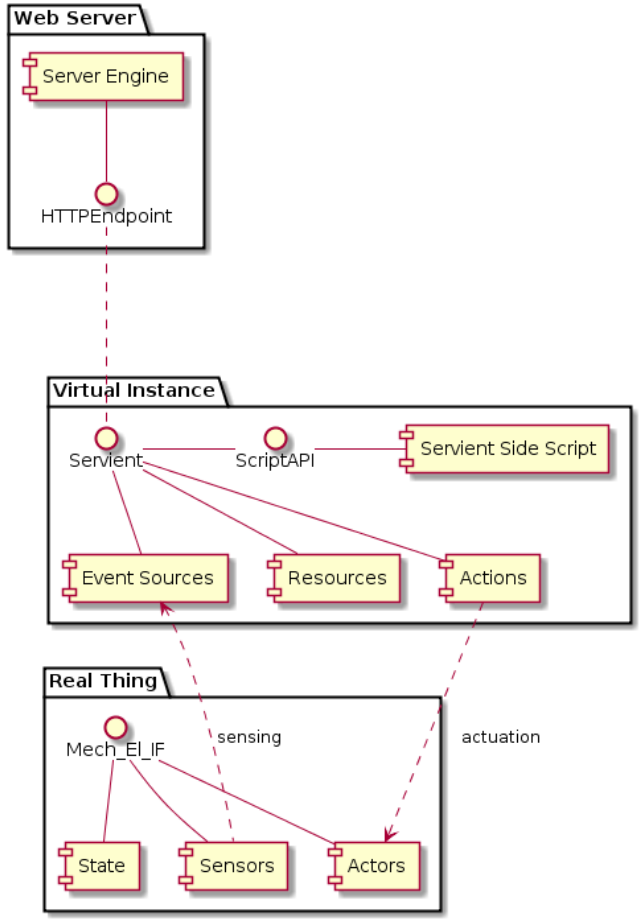
How are things accessible from todays web …

Client Side Scripting



Servient Side Scripting
(related to Device Driver Approach?)



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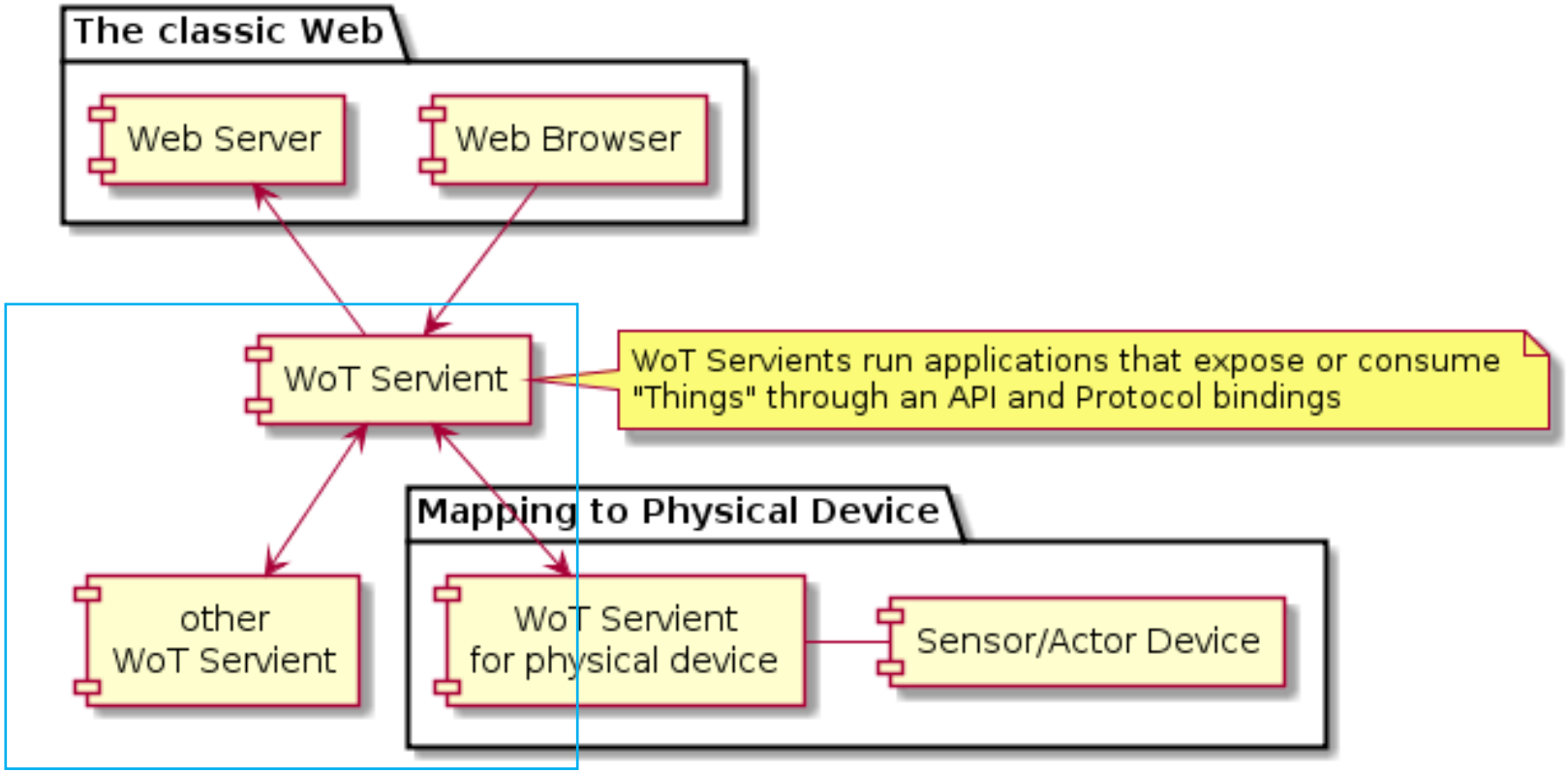
Real Things interacting via the Web …



How do they interact via the web?

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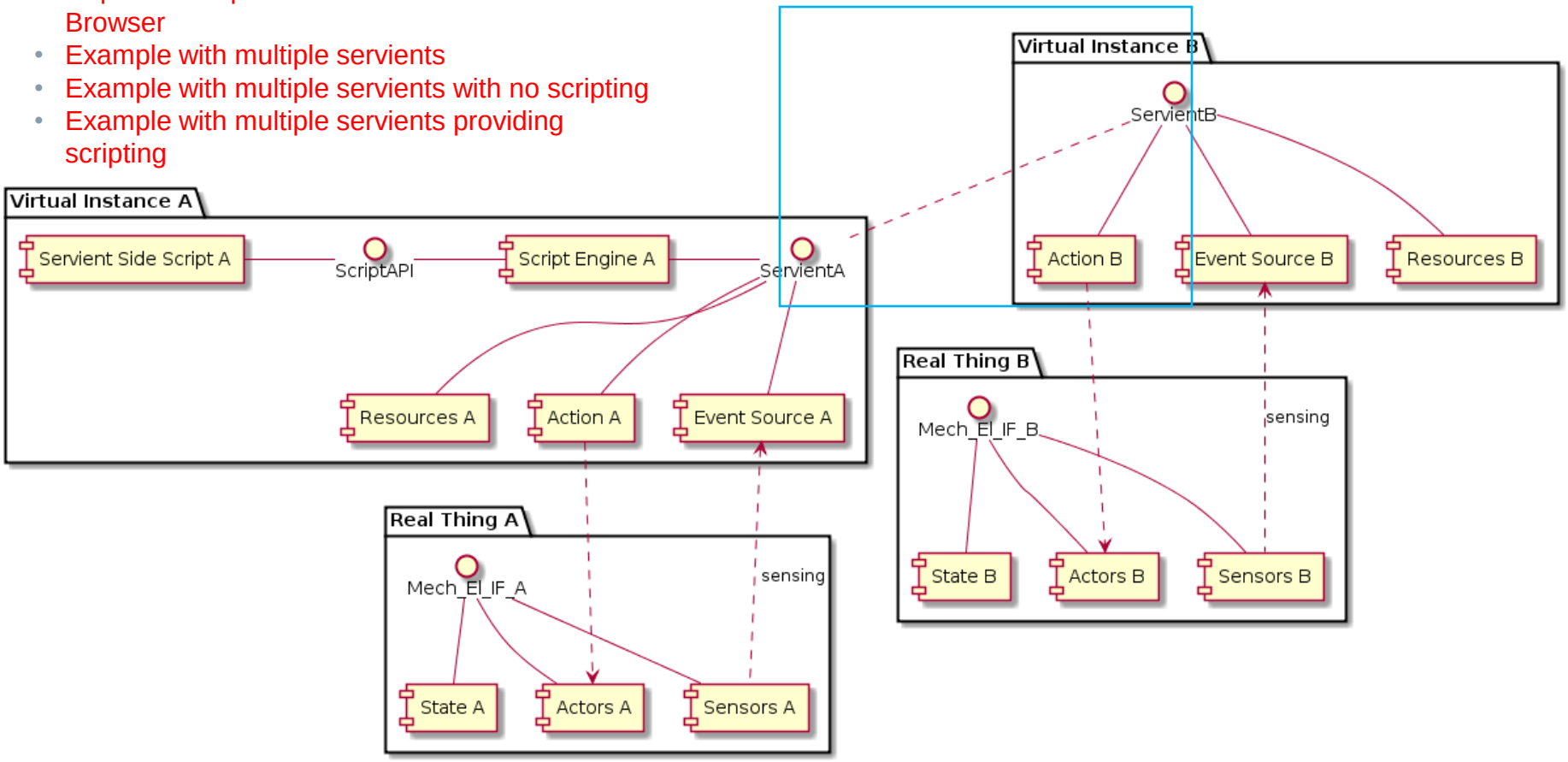
Real Things interacting via the Web …

Needs further work, e.g.:

- Start simpler with servients not providing scripting
- Depict subscrption of servient B with A via Browser
- Example with multiple servients
- Example with multiple servients with no scripting
- Example with multiple servients providing scripting

What interaction patterns are supported?



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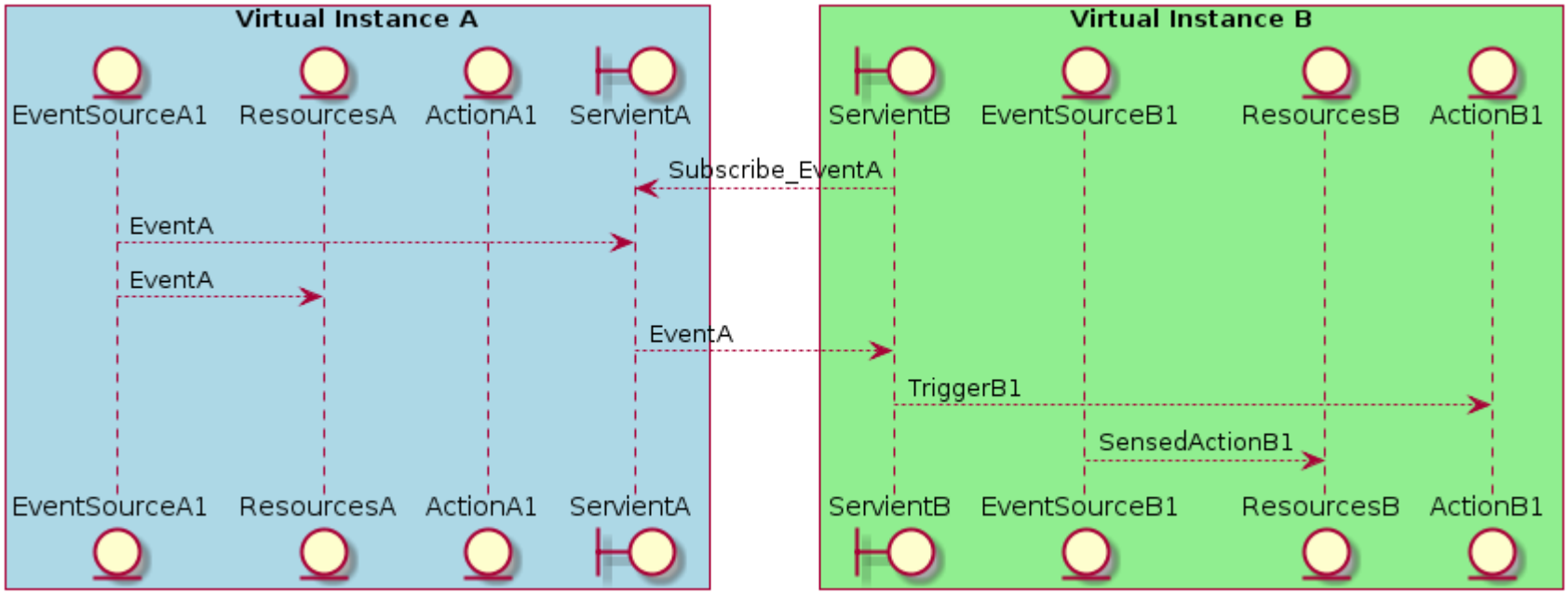
Real Things interacting via the Web …



Needs further work:

- All events, actions are mirrored as resource
- To support late binding use pub/sub
- Subscribe_EventA of B is not necessarily sent by B
- Also enables proxies due to resource constraints of servients
- Instance/logic binding events to actions

Needs further work:

- Example: Mapping to conrete protocol
- ???

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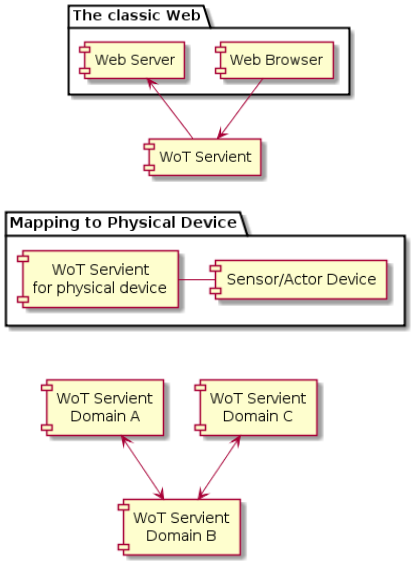
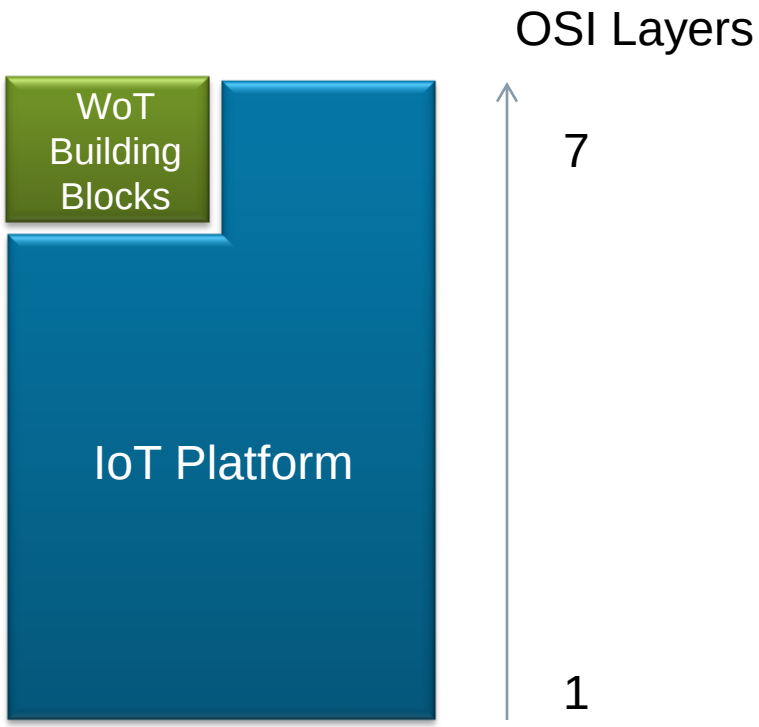
How does it relate to IOT …



WoT Framework Building Blocks are intended to map to existing IoT platforms and protocols

Adoption of WoT Technologies allows for

- Integration of things in today‘s Web
- Web applications integrating things
- Integration of application domains by means of semantic web



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Backup

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