Use of CoRE Dynlink to enable push pattern and device interaction with pub/sub and proxies

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CoRE Dynlink Examples

Structure of a CoRE Dynlink

```
<SourceURI>; rel=boundto; bind=[obs,push]; anchor=DestinationURI
```

- More than one link allowed per source or destination
- Conditional notification
- Resource Type and Interface Type may be encoded as link target attributes
- Reference

https://datatracker.ietf.org/doc/draft-ietf-core-dynlink/

Some Use cases

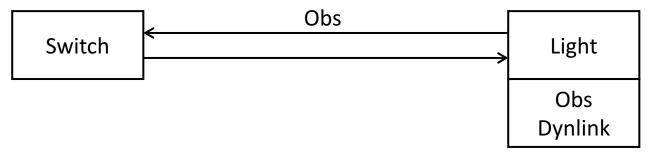
- Apply state changes from one resource to another resource
 - E.g. Rule input and Rule action linkage to external resources
- Application Orchestration
 - Control a light with a light switch directly binary switch to binary switch without an external application or controller
- Device publishes to Pub/sub broker or proxy, local or cloud
 - Use rel=obs dynlink at the broker
 - Use rel=push dynlink at the device
- Device subscribes to Pub/Sub broker or proxy, local or cloud
 - Use rel=obs dynlink at the device
 - Use rel=push dynlink at the broker
- Update from a device to a Multicast address

Example Device to Device Orchestration

```
Switch > Light

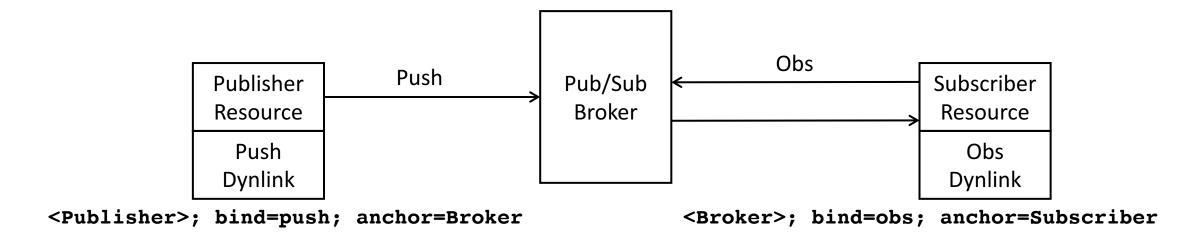
Push
Dynlink
```

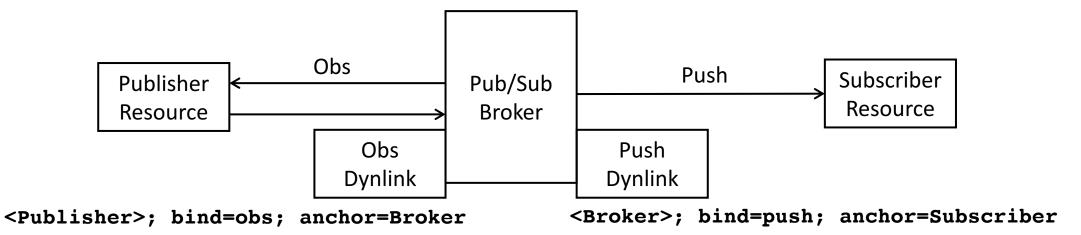
```
<Switch>; rel=boundto; bind=push; anchor=Light;
rt=oic.r.switch.binary; if=oic.if.a
```



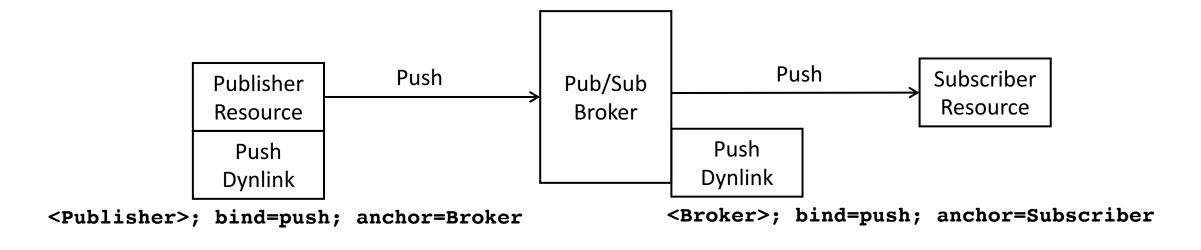
<Switch>; rel=boundto; bind=obs; anchor=Light;
rt=oic.r.switch.binary; if=oic.if.a

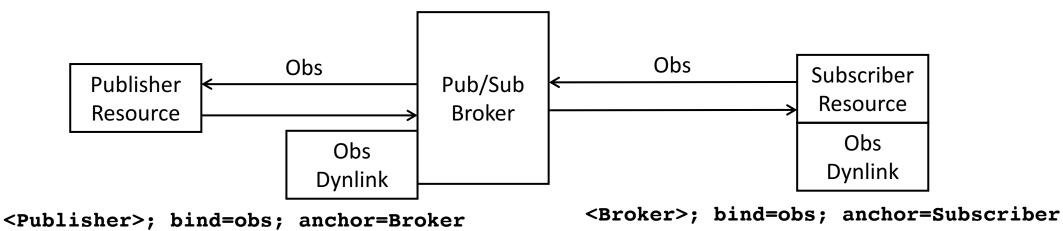
Examples with Pub/Sub broker or Proxy





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Example use with multicast

