Analysis of IoT testbeds

What's a testbed?

A testbed is a *controlled experimentation environment*.

Using a testbed you can:

* Implement specific user scenarios
* Get a testable outcome to see if results are expected
* Experiment with connecting different technologies together in a non-production environment
* Build final project requirements using test results
* Discover opportunities for products and services outside your initial scope

Different Testbeds

* IIC (Industrial Internet Consortium) offers 9 testbeds for different markets and application. These testbed use is for IIC members only.
* Fiesta-IoT stands for Federated Interoperable Semantic IoT Testbeds and Applications.(http://fiesta-iot.eu/index.php/fiesta-testbeds/)
* The Eclipse IoT Open Testbeds
* FIT/IoT-LAB testbeds(C. B. des Roziers et al., "Using SensLAB as a first class scientific tool for large scale wireless sensor network experiments", *Proc. Int. Conf. Res. Netw.*, pp. 147-159, 2011.)
* FlockLab(https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6917582)
* SmartSantander( L. Sanchez et al., "SmartSantander: IoT experimentation over a smart city testbed", *Comput. Netw.*, vol. 61, pp. 217-238, Mar. 2014.) Also one of Fiesta-IoT testbeds.
* Japan-Wide Orchestrated Smart/Sensor Environment(JOSE)( Large-Scale Open Test-Bed JOSE, Tokyo, Japan, 2017, [online] Available: https://www.nict.go.jp/en/nrh/nwgn/jose.html.)
* Small scale testbeds such as Kansei,TWIST, and WISEBE(A.-S. Tonneau, N. Mitton, J. Vandaele, "How to choose an experimentation platform for wireless sensor networks? A survey on static and mobile wireless sensor network experimentation facilities", *Ad Hoc Netw.*, vol. 30, pp. 115-127, Jul. 2015.)
* Low-cost LoRaWAN testbed(<https://ieeexplore.ieee.org/document/8355180>)