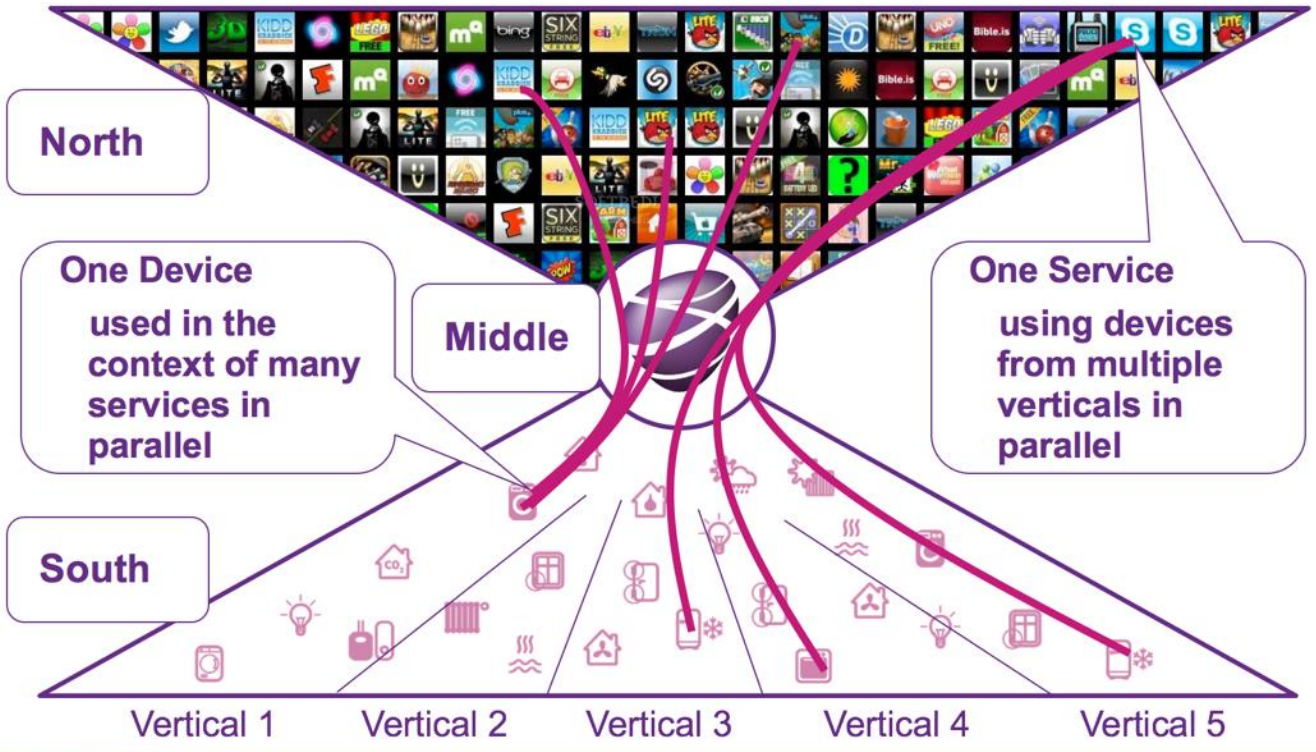
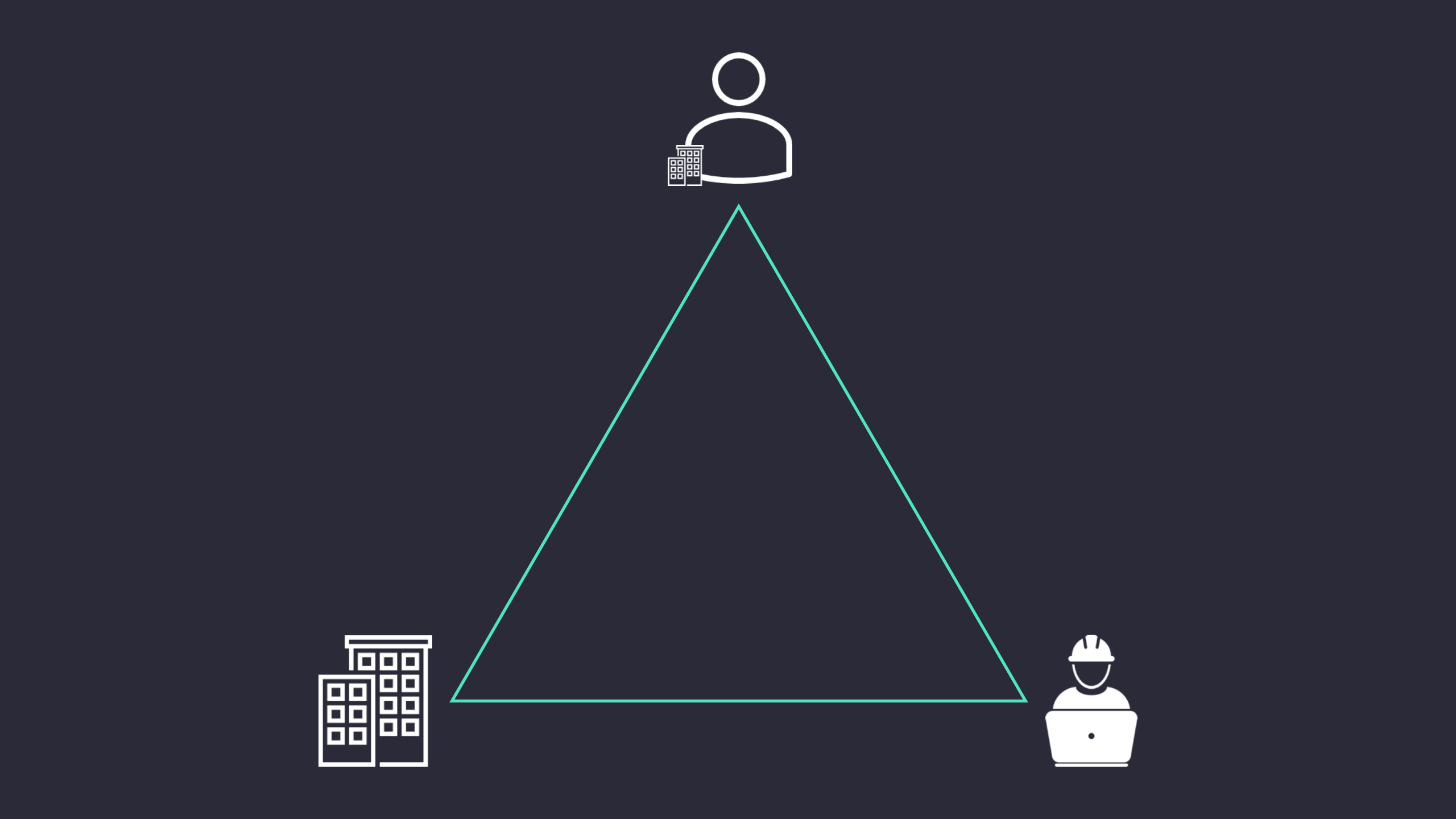
Clayster

Spring 2013

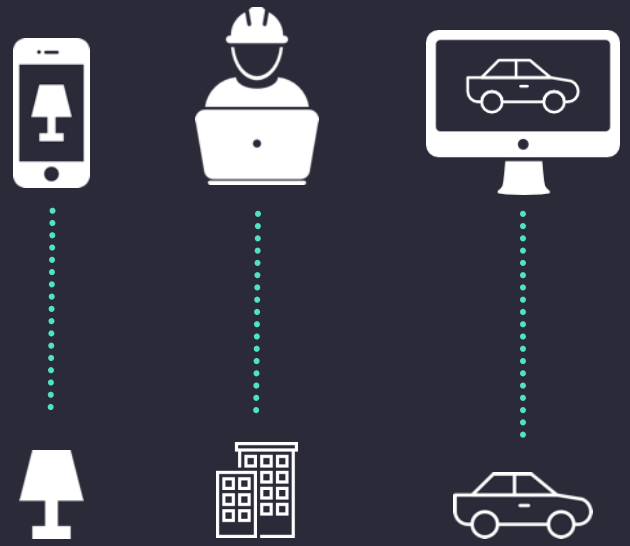
Target solution
Open, competitive and keeping integrity



TeliaSonera



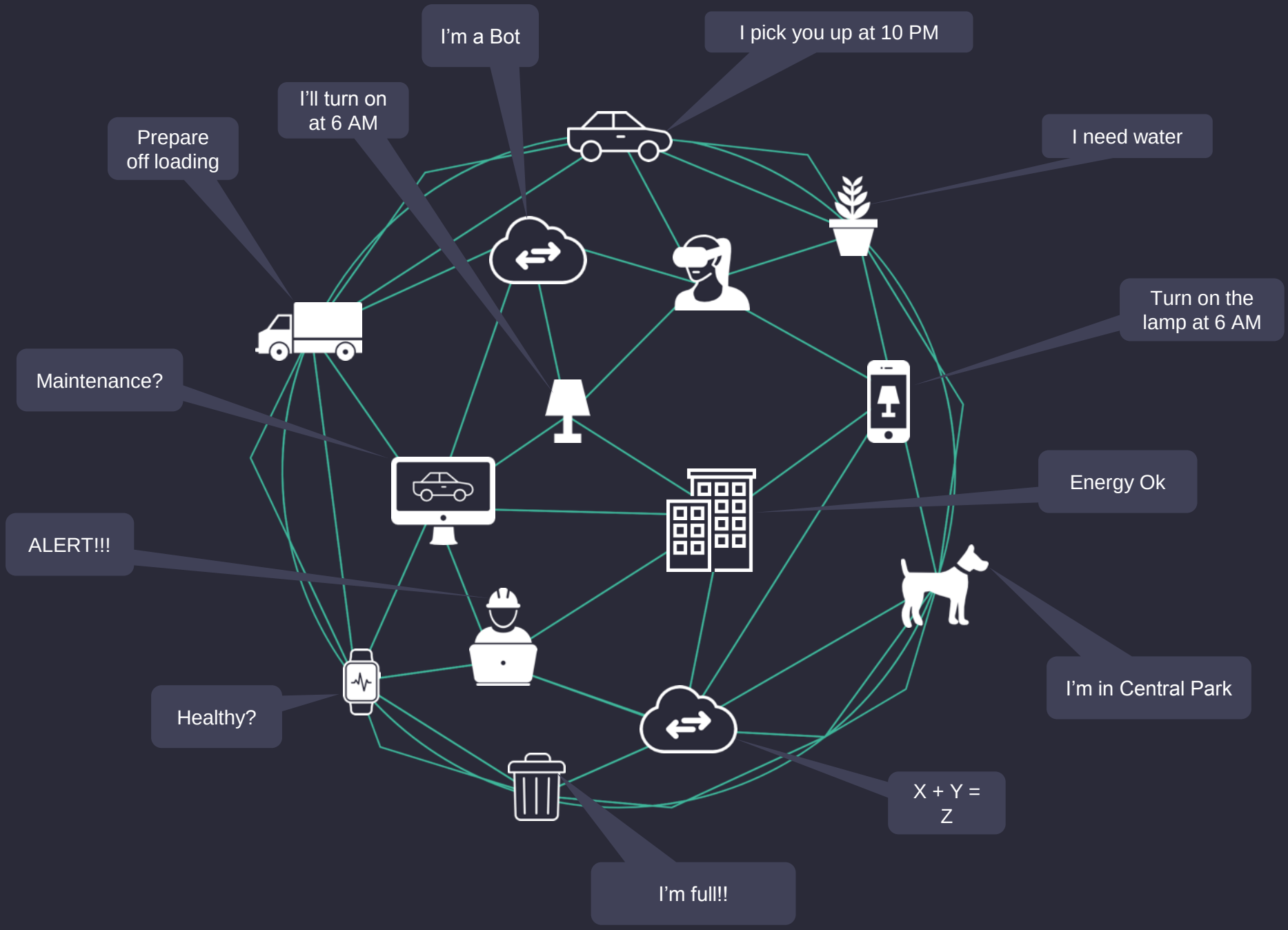
One – To – One



Yesterday

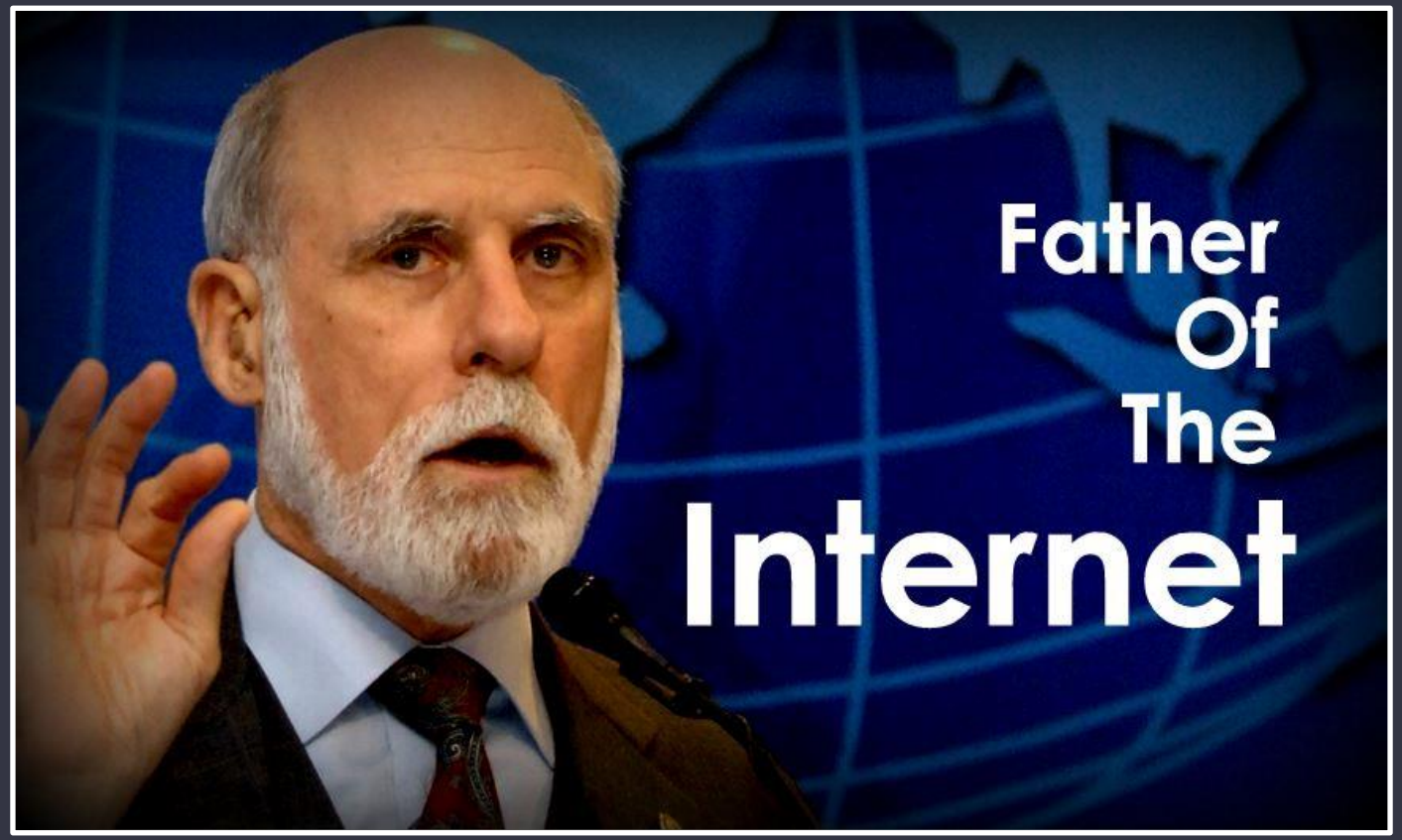
One – To – Many

Today


I'm a Bot
I pick you up at 10 PM
I'll turn on at 6 AM
Prepare off loading
I need water
Turn on the lamp at 6 AM
Maintenance?
Energy Ok
ALERT!!!
I'm in Central Park
Healthy?
X + Y = Z
I'm full!!

Handbook: Internet of Things Alliances and Consortia

CC Attribution: **Postscapes.com** - Version 1.0 *Updated March 2015*


Father
Of
The
Internet

“I would not propose HTTP for IOT interoperability either for a lot of reasons.”

– Vint Cerf (email to me)

Identitet

Ägare

eIDAS
The 8 most
important aspects

Svensk e-legitimation

Things

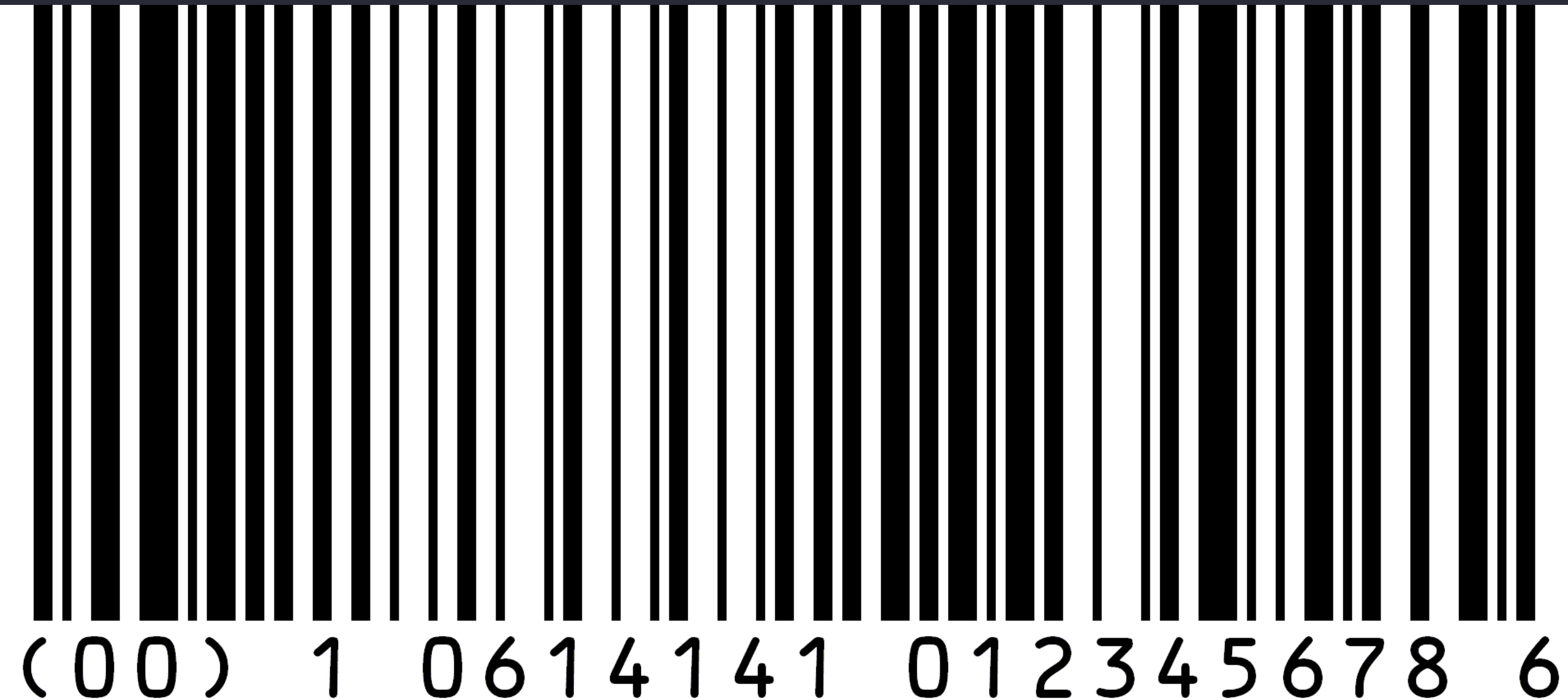
Committee of ISO/IEC JTC1/SC31

Automatic identification and data capture techniques

Committee of ISO/IEC 29161

Unique identification for the Internet of Things

GS1
40 YEARS OF
THE GLOBAL LANGUAGE OF BUSINESS
1973
2013


(00) 1 0614141 012345678 6

Interoperabilitet

Syntaktisk

Member of ISO/IEC/IEEE WD 21451-1-4

Standard for a Smart Transducer Interface for Sensors, Actuators, and Devices - eXtensible Messaging and Presence Protocol (XMPP) for Networked Device Communication.

IoT Special Interest Group

XMPP

Why XMPP

Open

The XMPP protocols are free, open, public, and easily understandable.

Standard

The Internet Engineering Task Force (IETF) has formalized the core XML streaming protocols as an approved instant messaging and presence technology.

Proven

The first Jabber/XMPP technologies were developed by Jeremie Miller in 1998.

Decentralized

The architecture of the XMPP network is similar to email. No single point of failure. No central master server.

Secure

Robust security using SASL and TLS has been built into the core XMPP specifications. The XMPP developer community is actively working on end-to-end encryption to raise the security bar even further.

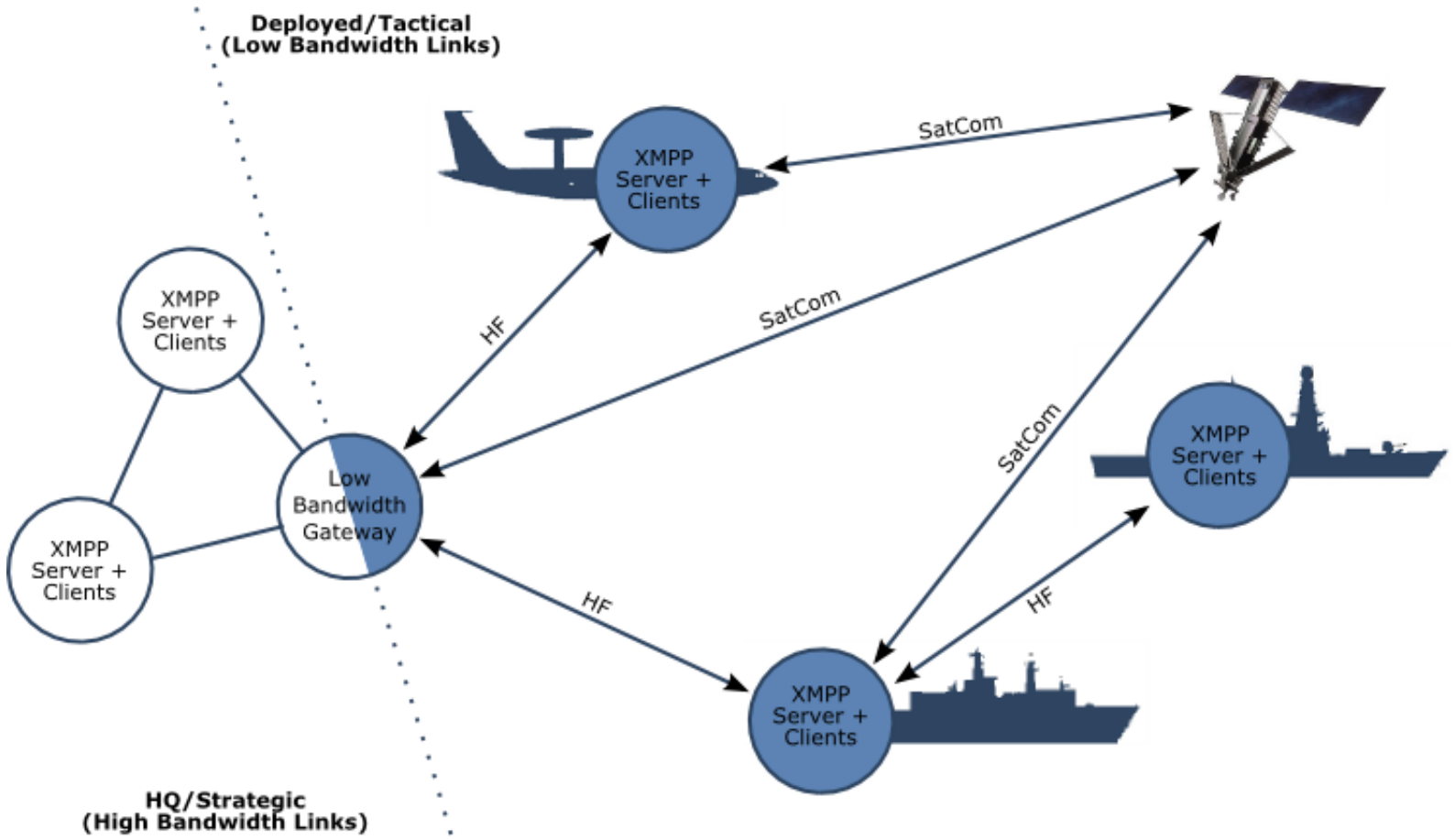
Extensible

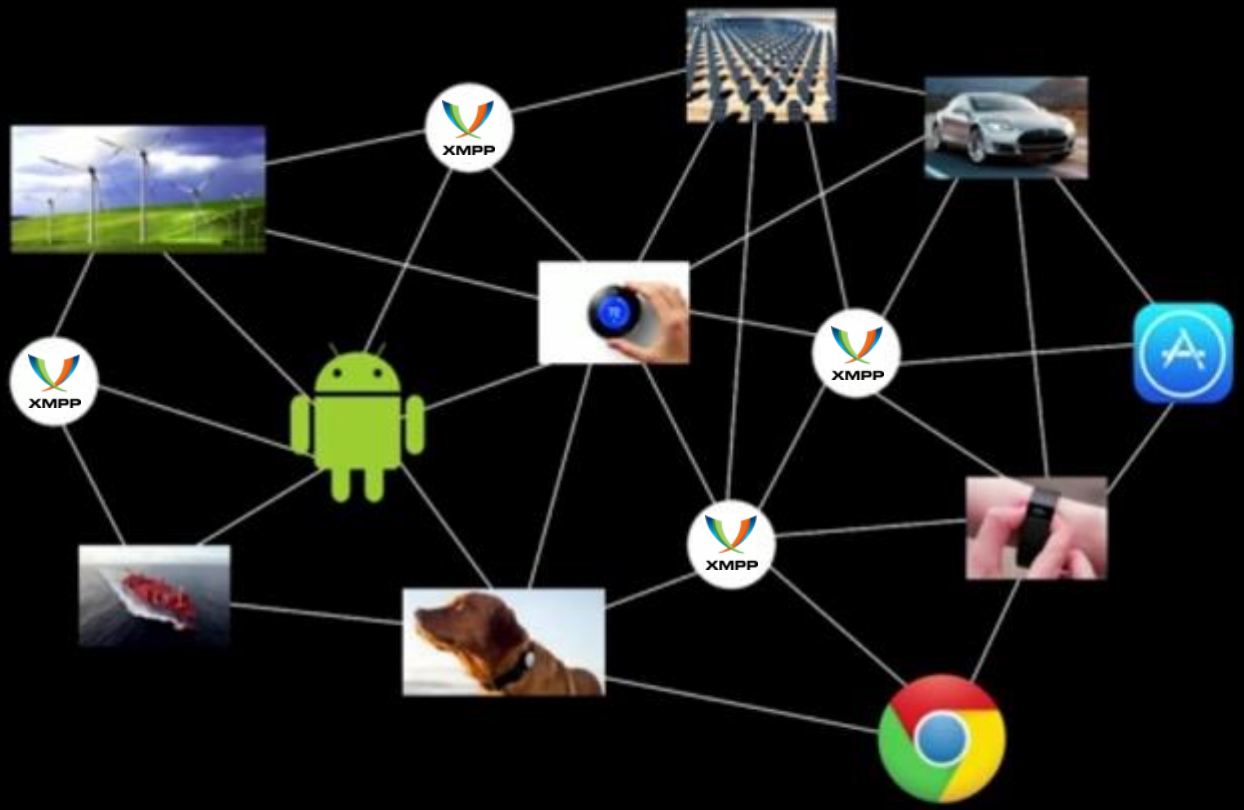
Anyone can build custom functionality on top of the core protocols; to maintain interoperability, common extensions are published in the XEP series.

“WhatsApp uses a customized version of the open standard eXtensible Messaging and Presence Protocol (XMPP)”
– Wikipedia

“It supports over 800 million active users and 30 billion messages daily and is an iconic example of a reliable and scalable messaging solution.”
– Erlang Solutions

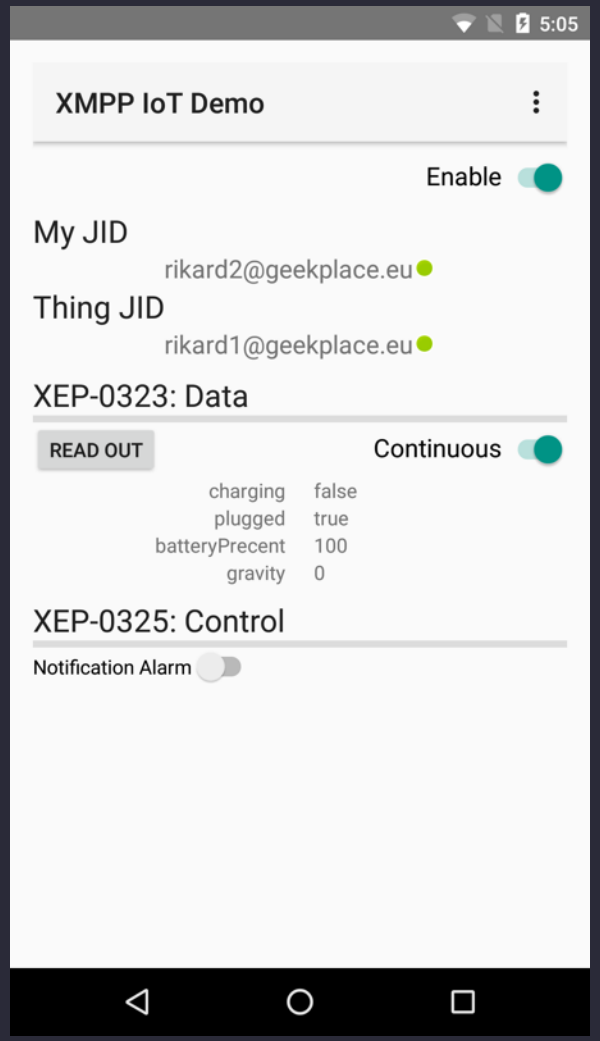
Military Grade Security




XMPP
XMPP
XMPP
XMPP

ιοτα

Open Source



Support for IoT XEPs added to Smack

Posted by Flow in Ignite Realtime Blog on Jul 23, 2016 6:52:50 AM

Starting with b91978dcc4ae partial support for the IoT XEPs was added to Smack. The XEPs consists, amongst other XEPs, of

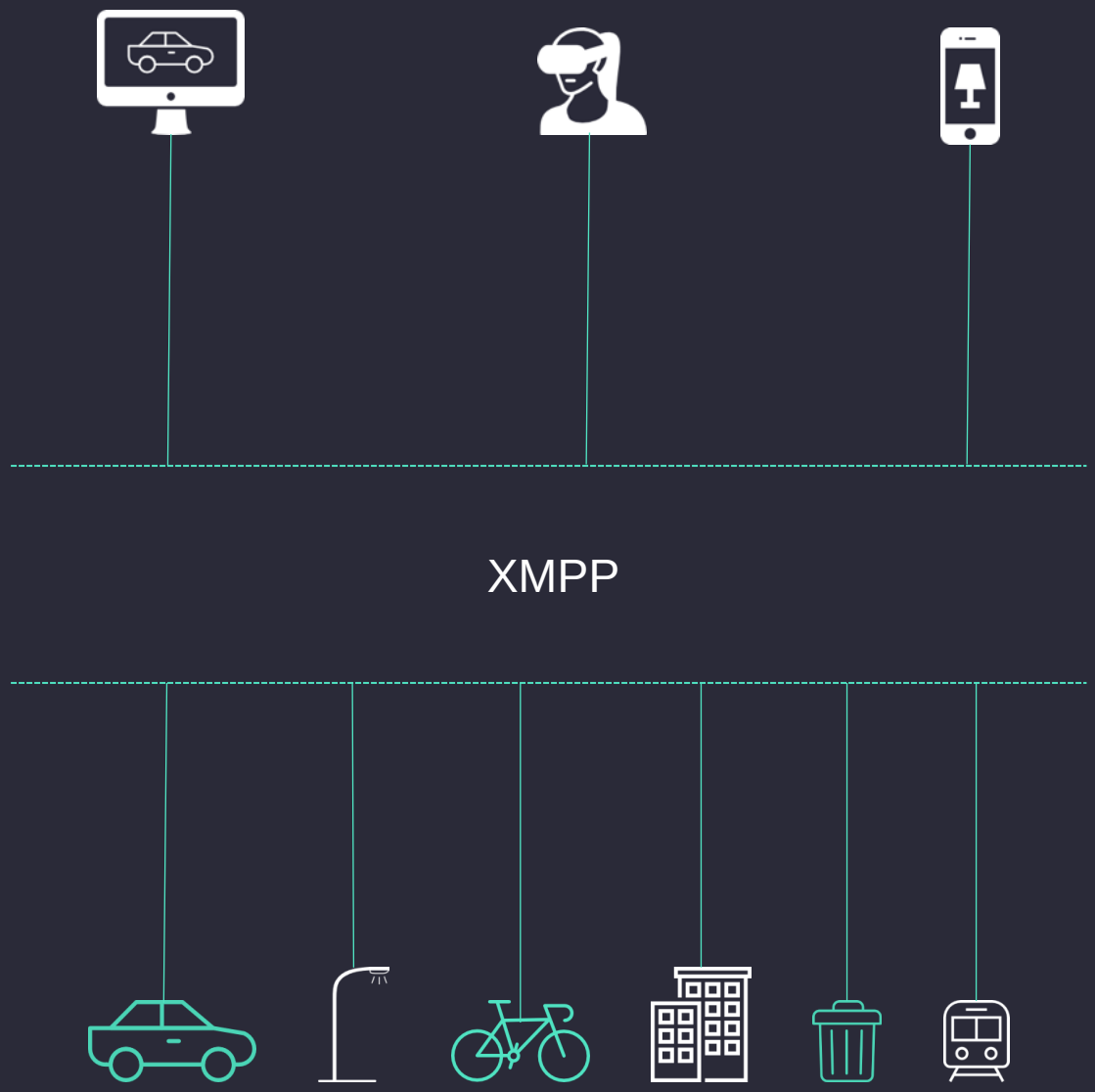
- XEP-0323: Data
- XEP-0324: Provisioning
- XEP-0325: Control
- XEP-0347: Discovery

The XEPs are in experimental state, which means changes to them are possible.
Smack does currently only support a partial set of the mechanisms specified, especially when it comes to Data and Control. For example only boolean and integer values can be read and written But support for more data types can be easily added.

The IoT API for those XEPs is available in the latest snapshot builds of Smack, which are available via Maven Central's snapshot repository. A quick start guide can be found here.

The development of the API was sponsored by Clayster.
Clayster creates technology to secure trust in the transactions between physical and digital entities, and strives to be that generic foundation for your physical assets digital life.
Clayster has an IoT discovery and provisioning platform supporting XEP-0347 and XEP-0324. The platform is available for those who are interested to explore XMPP and IoT further. If you don't want to run your own infrastructure, Clayster is able to provide an XMPP Server and the discovery/provisioning platform for you. Feel free to reach out to rikard at clayster.com if you are interested to learn more about using XMPP for your next IoT project.
www.clayster.com

1509 Views Tags: planetjabber, smack


XMPP

Semantisk

ipso
Alliance

GS1
40 YEARS OF
THE GLOBAL LANGUAGE OF BUSINESS
1973
2013

Nutrition Facts
Serving Size 1 Banana (118g)
Servings per Container 1
Amount Per Serving
Calories 240 Calories from Fat 110
% Daily Value*
Total Fat 13g 20%
Saturated Fat 8g 39%
Trans Fat 0g
Cholesterol 0g 0%
Sodium 15mg 1%
Potassium 320mg 9%
Total Carbohydrate 35g 12%
16%
Protein
0%
15%
0%
6%

Committee of ISO/IEC JCT1/WG10

This work item specifies IoT conceptual reference model, and reference architecture from different architectural views, common entities, and interfaces between IoT domains.

TS 308100:2016 (Sv)

SWEDISH STANDARDS INSTITUTE

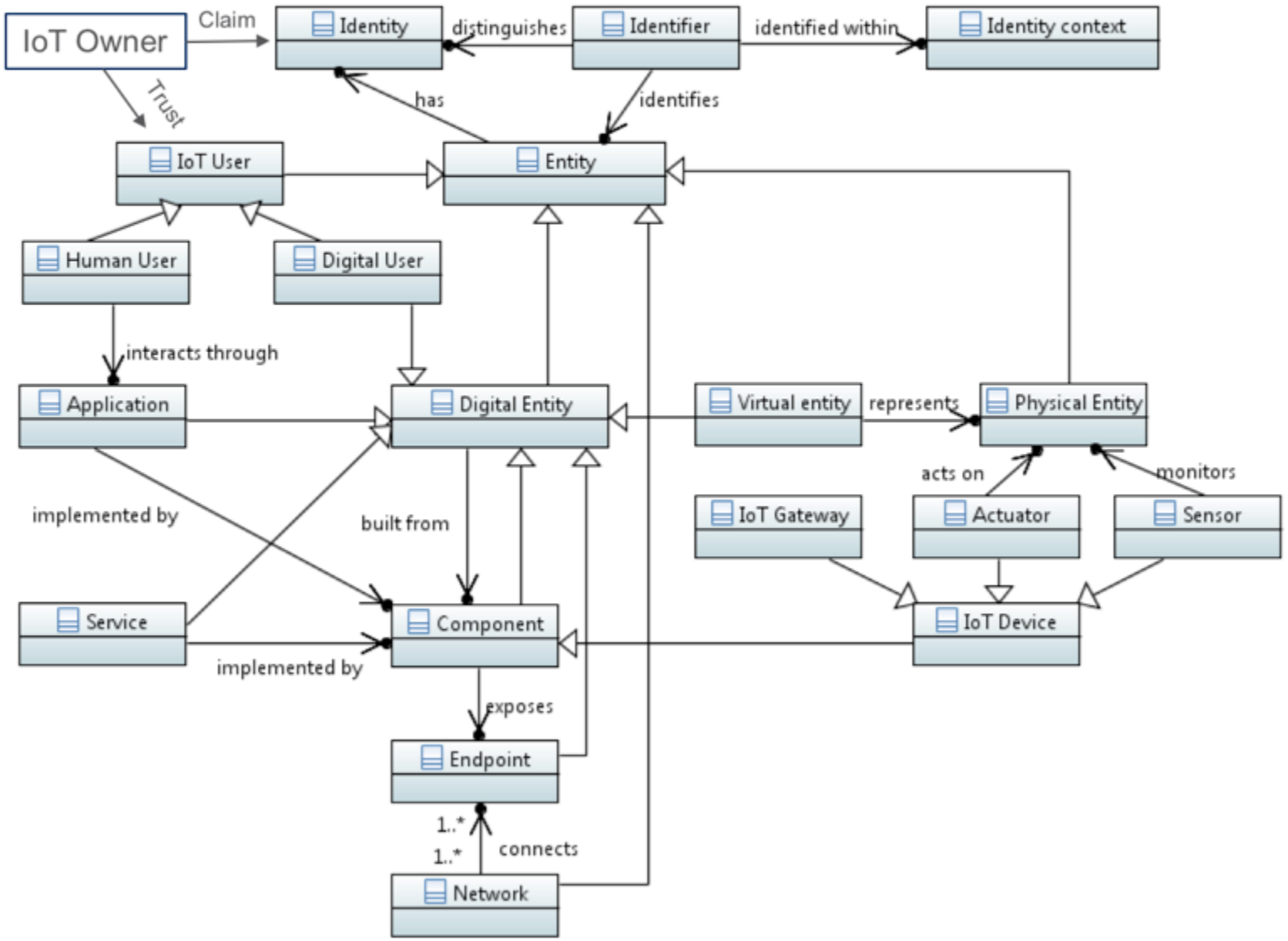
TEKNISK SPECIFIKATION
TS 308100

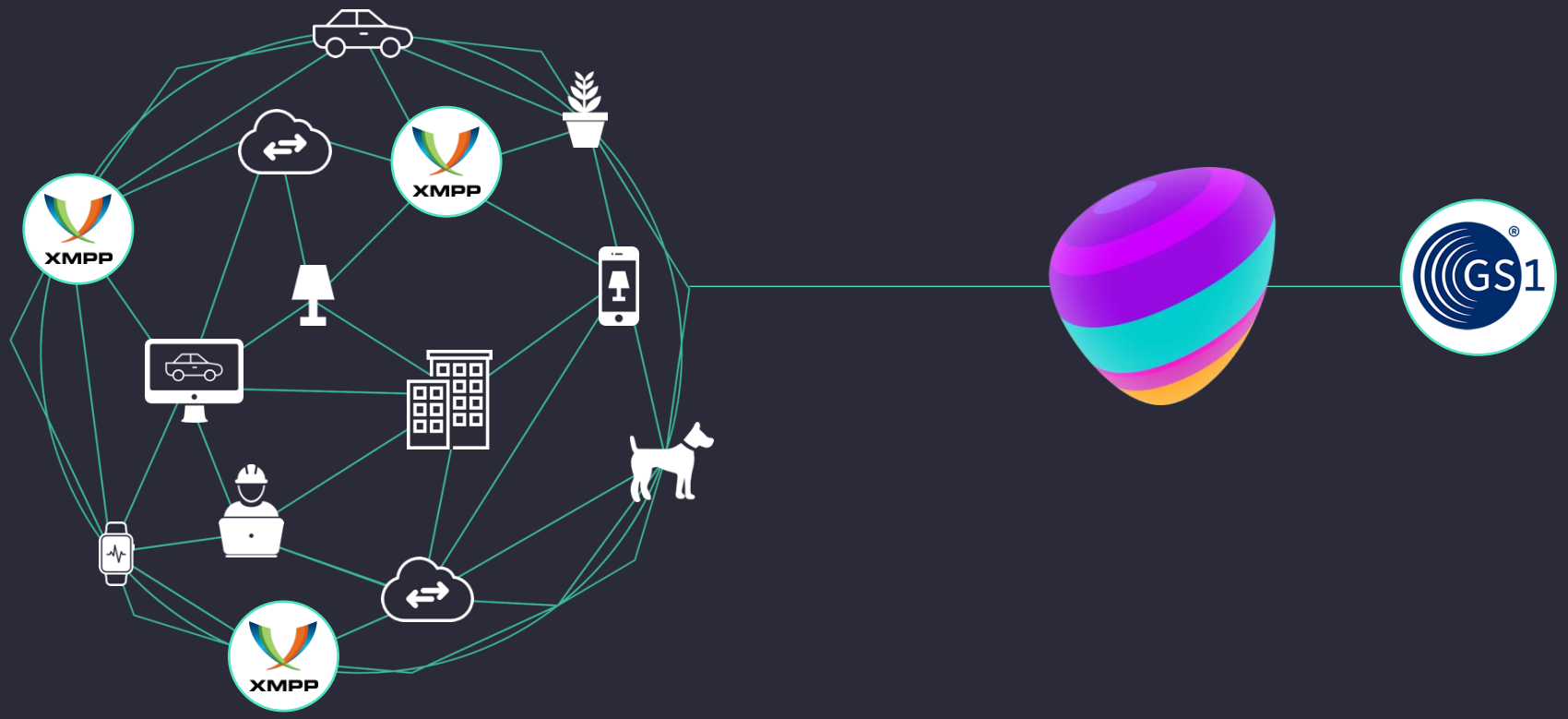
Utgåva 0.7.1

Referensarkitektur för Internet of Things

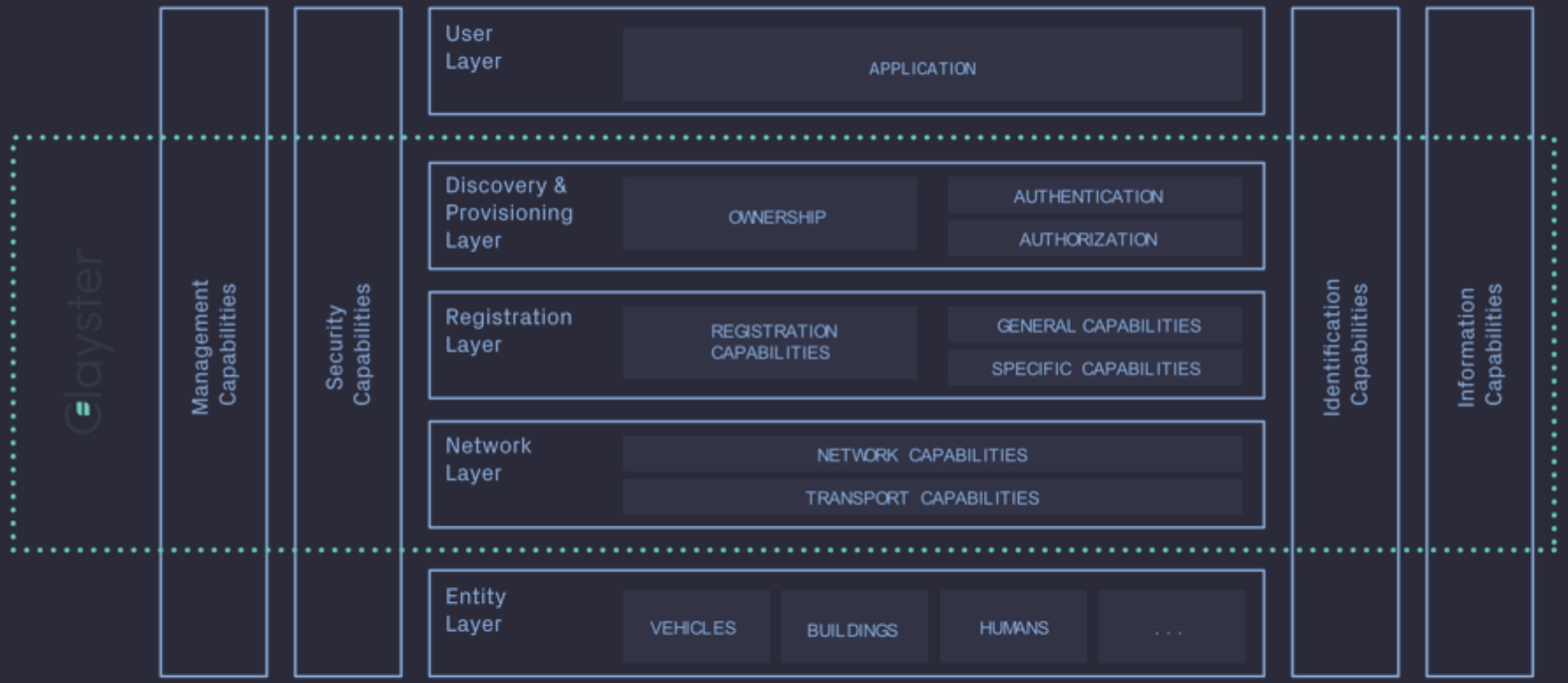
Reference architecture for Internet of Things

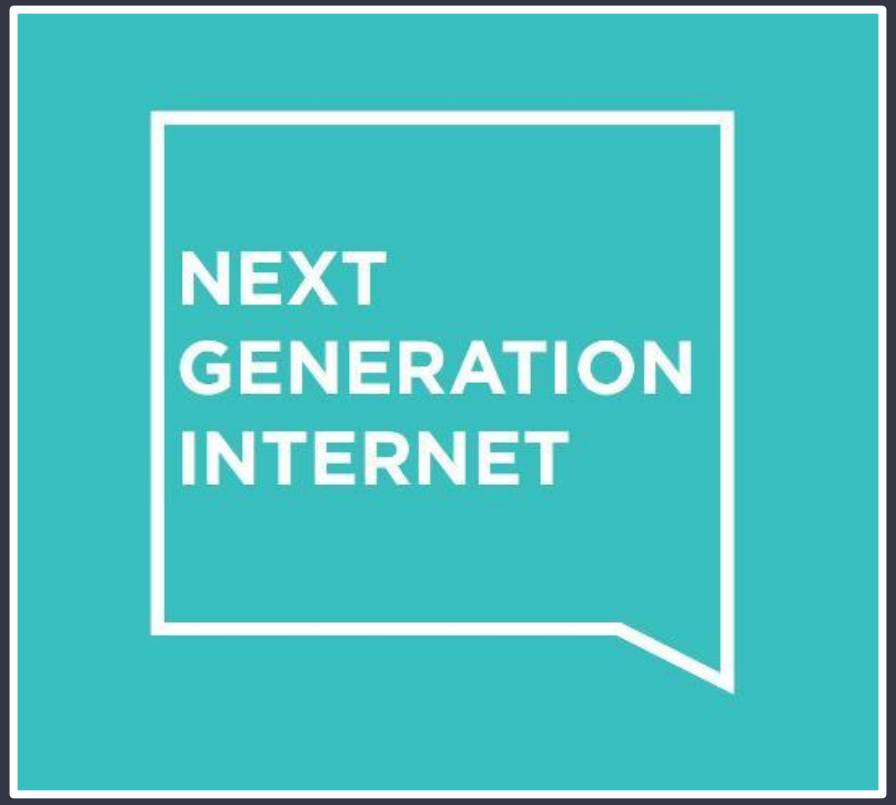
Architecture




XMPP
XMPP
XMPP
GS1

Architecture




NEXT
GENERATION
INTERNET