Smart Homes powered by Eclipse

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INTRANET OF THINGS
Solutions based on ESH

Eclipse SmartHome

OSGi Container

JVM

OS
NFC

WiFi

6LoWPAN

ZigBee, 2.4 GHz

EnOcean, 868 MHz

openHAB
empowering the smart home
Mass Market?

Tech-savvy Users

- Textual Configuration
- Docs in Wiki

Average Users

- Configuration Uis
- Auto-Discovery
- Reusable Modules

Discovery Services
- Setup
- Pairing Flows
- Discovery

New Binding Concepts

Thing Descriptions

New Binding Concepts
<!-- Standard Hue Color Bulb with E27 socket -->
<thing-type id="LCT001">
  <supported-bridge-type-refs>
    <bridge-type-ref id="bridge" />
  </supported-bridge-type-refs>

  <label>Hue Bulb</label>
  <description>This is a standard Philips Hue bulb with E27 socket</description>

  <channels>
    <channel id="color" typeId="color" />
    <channel id="color_temperature" typeId="color_temperature" />
  </channels>

  <config-description>
    <parameter name="lightId" type="text">
      <label>Light ID</label>
      <description>The light identifier identifies one certain hue bulb.</description>
      <required>true</required>
    </parameter>
  </config-description>
</thing-type>
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ARM CPU, 600 MHz
512 MB RAM
2 GB Flash
TPM, Radio 868 MHz
4 USB Slots

Linux OS
JavaSE Embedded 7
OSGi R4.2
(ProSyst mBS)
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QIVICON Cloud

- User Interfaces
- Remote Management
- Provisioning
- Remote Access (OAuth2)
- Shop/AppStore
- Backend APIs

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- Web applications
- Remote Access
- Event Subscriptions

Partner Infrastructure ➔ QIVICON Cloud

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Partner Apps/Ext. ➔ QIVICON Apps/Ext.
- Access via cloud or local
- Same APIs
**QIVICON SDK**
- Eclipse Tooling, Simulator
- Installation, Deployment, On-Device Debugging
- Client-APIs (iOS, Android, JavaScript)
- Closed partner developer community
OS: Linux

JVM: JavaSE Embedded 7

OSGi Container: OSGi R4.2 (ProSyst mBS)

QIVICON APIs

Eclipse SmartHome

Partner applications AND extensions
Deutsche Telekom / QIVICON joined Eclipse Foundation and IoT WorkingGroup

QIVICON provides
- ProjectLead
- 2 committers
- 4 contributors

OpenSource Contributions
- Thing concept, Configuration
- Discovery, UPnP support
- Philips Hue Binding
- Yahoo Weather Binding
- Documentation
CONNECT YOUR WORLD OF THINGS

Sign up for our QIVICON Developer newsletter to get the latest news – and be among the first in our community.

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developer.qivicon.com
Recommended Talks

Bringing LIFX to Eclipse SmartHome

Dennis Nobel
itemis AG

Thursday
10:30 - 11:05
Bürgersaal 2

Smart Home live: Intelligent Detection of Fire or a Break-In with MQTT and OpenHAB

Christian Götz
dc-square GmbH

Markus Mann
iic solutions GmbH

Wednesday
11:15 - 11:50
Silchersaal
Recommended Talks

New Open Source project at HGI for SmartHome Device Abstraction Templates

Andreas Kraft
Telekom Innovation Laboratories

Wednesday
17:00 - 17:35
Schubartsaal

IoT - Information Model Repository (now Project Vorto)

Olaf Weinmann
Bosch Software Innovations

Wednesday
10:30 - 11:05
Wilhelm-Kramer-Zimmer
IoT Playground
THANKS!

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