



Developing Applications for Your Smart Home with QIVICON

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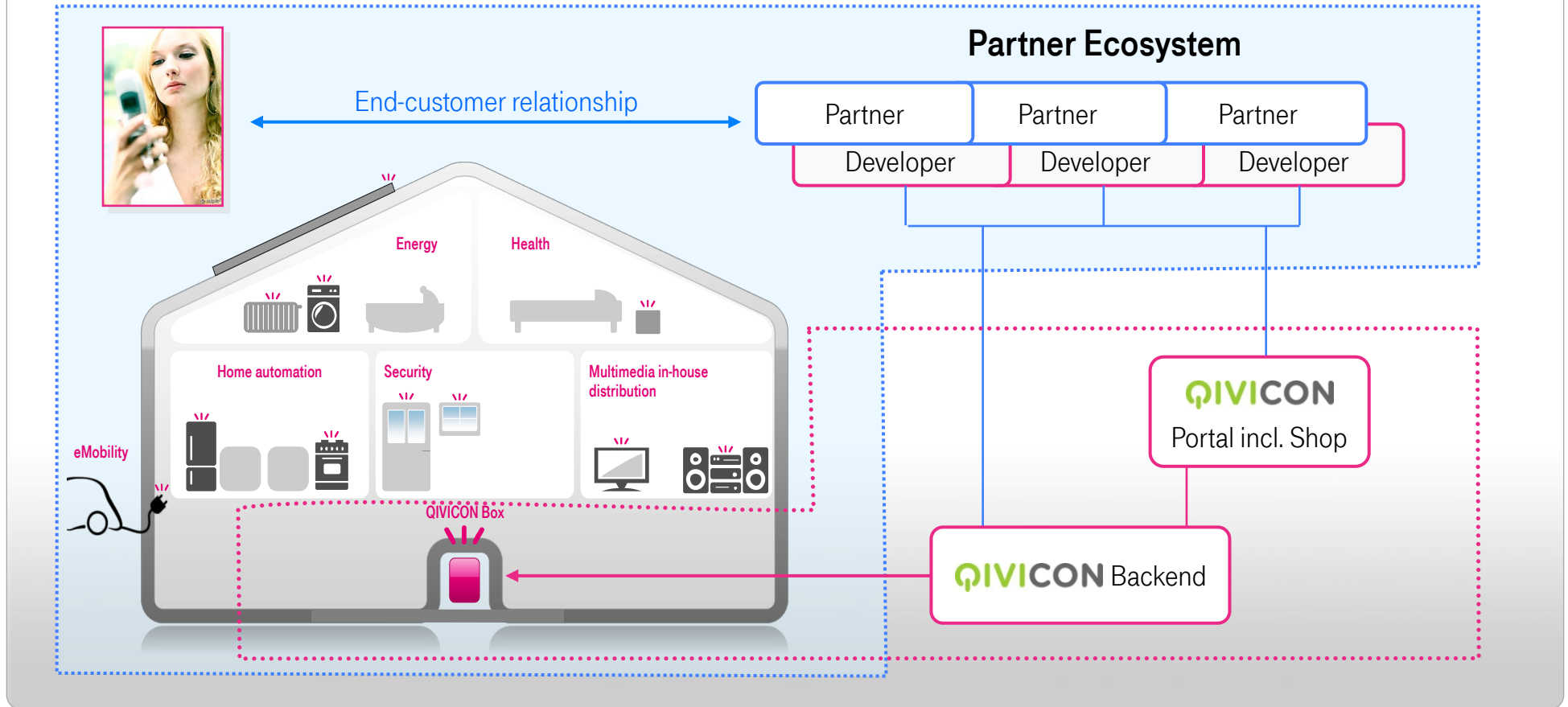
Life is for sharing.



The QIVICON Concept.

An Open Platform Built for Partners and Developers.

QIVICON – the Base for the Smart Home



QIVICON Home Base.

Hardware Specifications.



- 1-Core ARM v11, 600 MHz
- 512 MB RAM
- 2 GB Flash
- TPM Module
- 4 USB Slots
- Optional 3G Stick
- Optional Battery Pack

Wireless HA connectivity:

- Homematic (built-in)
- ZigBee (USB Stick)



QIVICON Home Base.

Software Specifications.



HGI SWEX underpinning:

- Linux OS
- Java VM (CVM, JavaSE7 planned)
- OSGi 4 Runtime (ProSyst)
- ProSyst mBS
- QIVICON APIs

Remote Access:

- OAuth2 Authentication
- Synchronous: JSON-RPC
- Server Push: Websockets



QIVICON Home Base APIs.



Tailored for Home Automation.

Devices

- Protocol-agnostic Device Access, Groups, Rooms, etc.
- Additional Device Drivers (USB, IP, etc.)

Rules

- Time and Event Triggers, Single Commands and Scenarios
- Extensible by Adding Custom Triggers and Commands

Communication

- Export Services for Remote Access, Register for Push Events
- SMTP / SMS Gateway

Misc

- Logging
- Backup / Restore



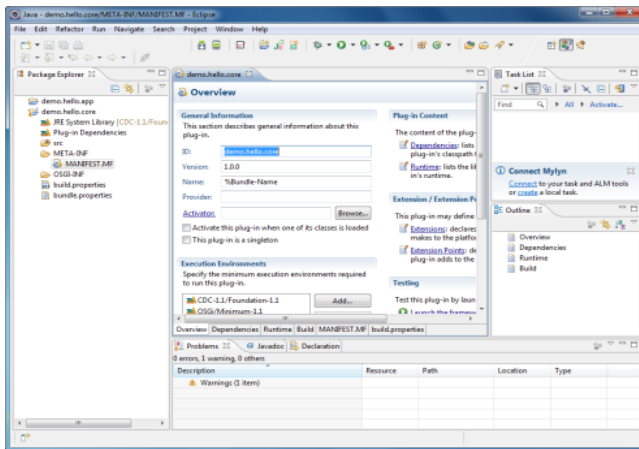
- For server, desktop, smartphone and tablet applications
- Libraries for Java, Android and iOS
- Features:
 - Discovery of QIVICON Home Bases.
 - Authentication through OAuth2.
 - Service calls to QIVICON Home Base (local or via backend)
 - Server push notifications (via websockets or long-polling)



QIVICON – Software Development Kit (SDK). Simple Development of 3rd Party Applications.



Eclipse-based Development Toolkit



Run/Debug

```
ProSyst OSGi Implementation
installed. Bundle ID is 52
INFO > .....bundles/org.apache.felix.webconsole.plugins.upnp.jar was
installed. Bundle ID is 53
INFO > .....bundles/fv.resprovider.jar was installed. Bundle ID is 5
4
INFO > .....bundles/fv.swadmin.jar was installed. Bundle ID is 55
INFO > .....bundles/fv.swadmin.ext.bundle.jar was installed. Bundle
ID is 56
INFO > .....bundles/peripheral.api.jar was installed. Bundle ID is 5
7
INFO > .....bundles/peripheral.core.jar was installed. Bundle ID is
58
INFO > .....bundles/peripheral.commands.jar was installed. Bundle ID
is 59
INFO > .....bundles/peripheral.os.support.win-x86.jar was installed.
Bundle ID is 60
INFO > .....bundles/peripheral.driver.installer.appagent.jar was ins
talled. Bundle ID is 61
INFO > .....bundles/peripheral.specific.info.jar was installed. Bund
le ID is 62
INFO > .....bundles/peripheral.loader.jar was installed. Bundle ID i
s 63
INFO > .....bundles/peripheral.remote.jar was installed. Bundle ID i
s 64
```

QIVICON Emulator



QIVICON Home Base

- Project Wizards
- Deployment Tools
- Debugging, Profiling
- Win/Linux/Mac



Live DEMO

...T...

- Development Community around QIVICON: Bugtracking, Wiki, Forums
- Access is currently only available to partners



Planned for 2013:

- Open to independent developers on DeveloperGarden of Deutsche Telekom
- Free registration
- Download SDK/Tooling/Client-APIs
- Documentation/Samples online



Q & A

Thank you for your attention.

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