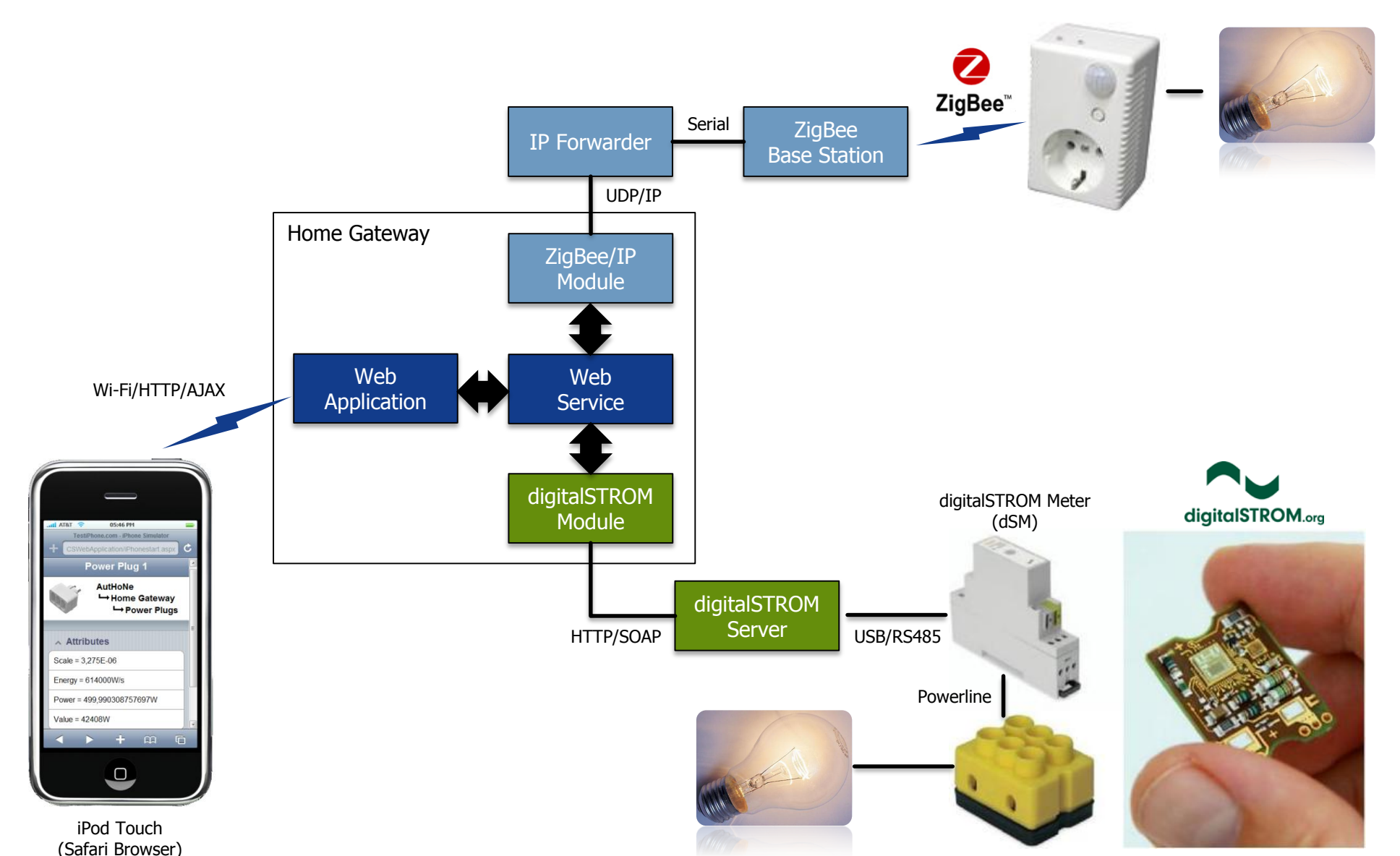


Remote Access to ZigBee and digitalSTROM

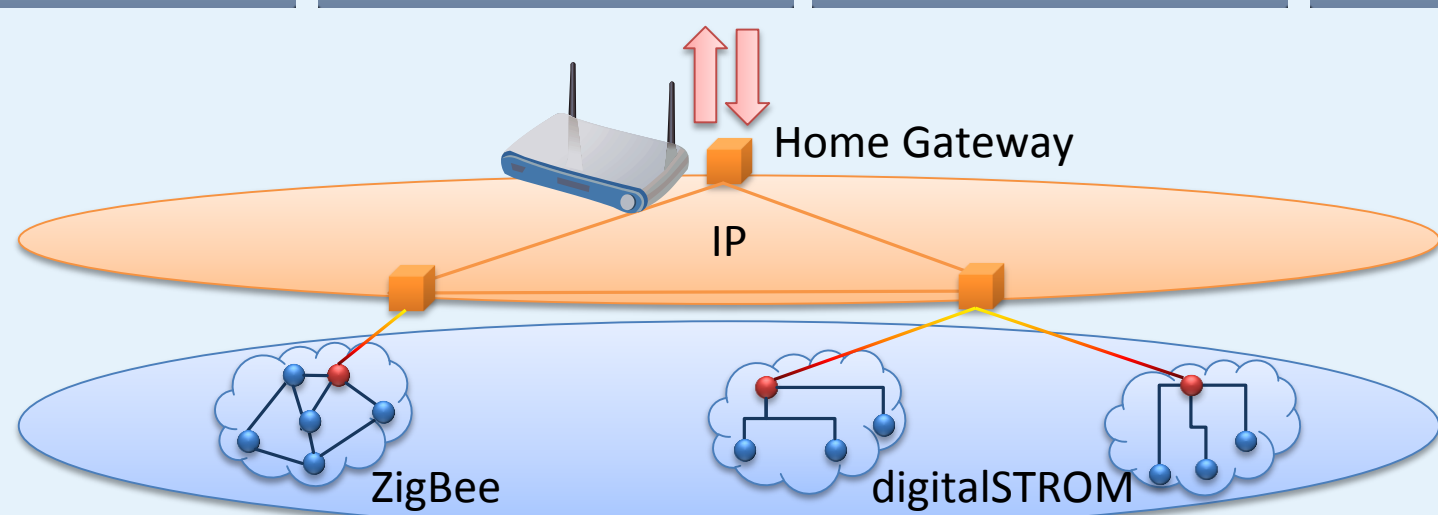
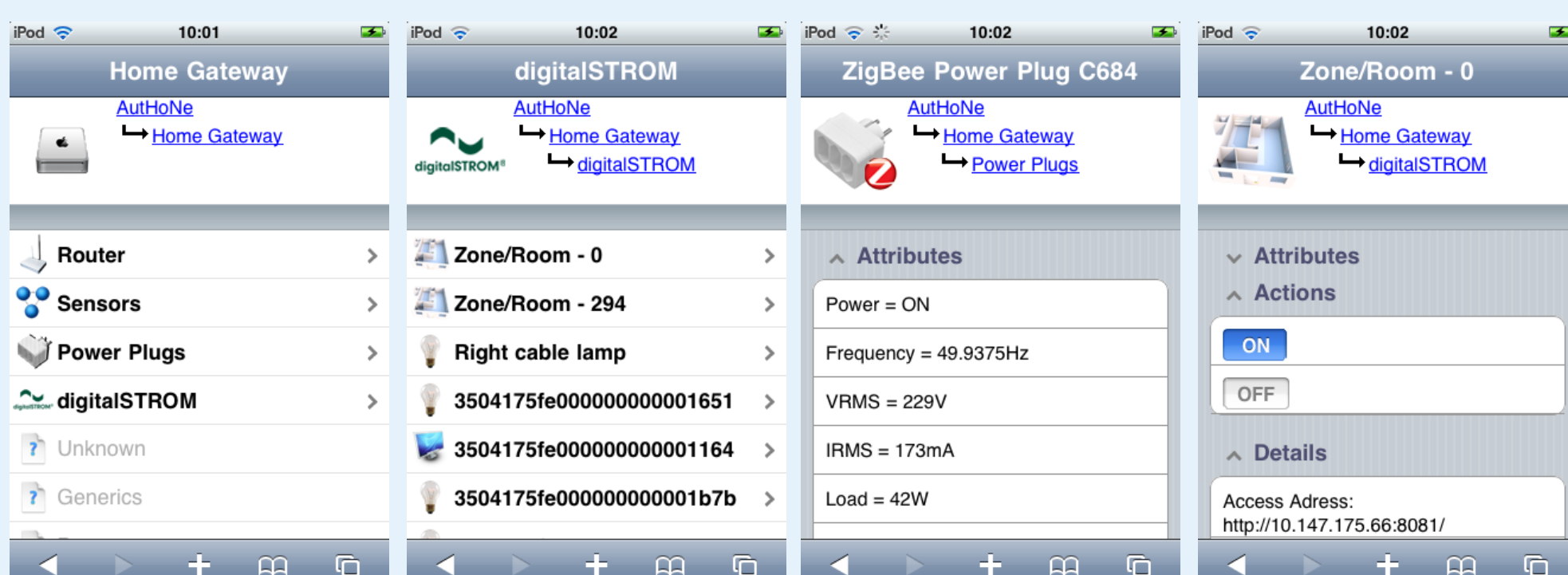
Communication

- Integration of ZigBee and digitalSTROM devices through the Home Gateway at FOKUS using different communication technologies
- UDP/IP tunneling protocol is used to access ZigBee and IEEE 802.15.4 nodes via a base station
- Web Service (SOAP) communication is used to access the digitalSTROM Server (dSS) that is connected to a digitalSTROM Meter (dSM) managing the powerline communication (~220V)

ZigBee/digitalSTROM Setup



iPod/iPhone



Home Gateway Features

- Software modules abstract from the specific technology details and adapt all parameters to the unique model that can be understood by the Web Service of the Home Gateway
- A frontend Web Application creates the end device dependent user interfaces (e.g. iPod/iPhone) based on the information gathered from the Web Service using Web 2.0 techniques such as HTTP, AJAX, JavaScript, and iWebKit

Outlook

- Additional technologies like KNX, EnOcean, and Smart Meters can be added to the Home Gateway by new software modules
- New scenarios for home and building automation, Smart Energy/Smart Grid, Ambient Assisted Living (AAL) can be supported
- Next generation end devices can be supported by simply creating a new Web Application or adapting the old one, the Web Service itself is unaffected

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