



# **Project Update EclipseCon Europe 2016**

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# ARCHITECTURE



eclipse  
smarthome

REST API

ONEM2M

3RD PARTY EMULATION

MODULES

TEMPLATES

TEXT-TO-SPEECH

SPEECH-TO-TEXT

HUMAN LANGUAGE

MEMORY

LOCAL

CLOUD

WIDGETS

ICON SETS

CHART ENGINE

RULE ENGINE

VOICE ENABLING

PERSISTENCE

GUI

ECLIPSE SMARTHOME  
CORE

THINGS / BINDING API

UPNP

MDNS

MQTT

SERIAL

PROTOCOL  
SUPPORT

DISCOVERY  
SERVICE

PROTOCOL  
BINDING

PRODUCT  
BINDING

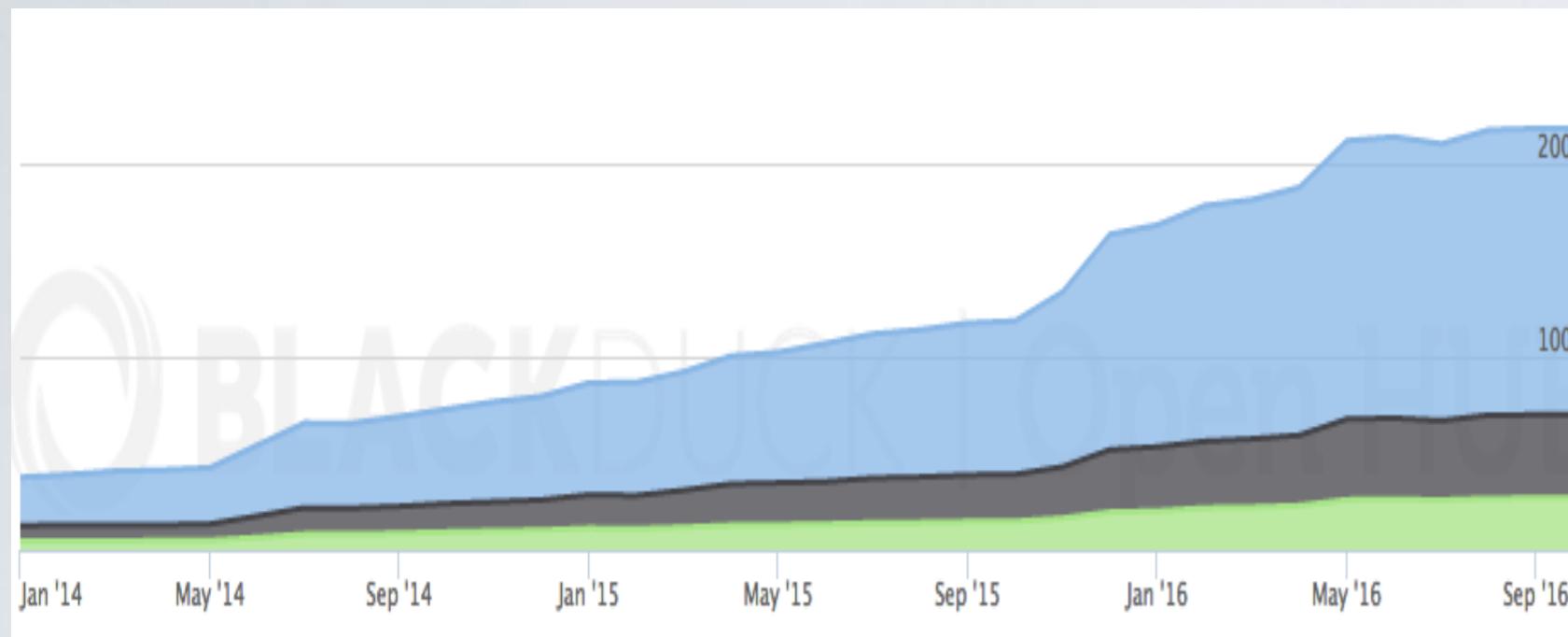
CLOUD  
BINDING

SUB-SYSTEM  
BINDING



Extension Points

# Statistics



150k LOC

361 Forks

85 Contributors

Oct 2015

80k

191

39

Jan 5, 2014 – Oct 22, 2016

Contributions to master, excluding merge commits

Contributions: Commits ▾



# 0.8.0 RELEASE IN 06/2016



- REST API + Server-sent Events (SSE)
- AngularJS Admin UI (Paper UI)
- new modular Rule Engine Framework
- Device support: Sonos, LIFX, WeMo, digitalSTROM

# COMMUNITY - AVAILABLE BINDINGS

Binding	Description
Astro	The Astro binding is used for calculating many DateTime and positional values for sun and moon.
Autelis Pool Control	Autelis manufactures a network enabled pool interface for many popular pool systems. See the Autelis website and the <a href="#">Autelis Command Protocol</a> for more information.
AVM FRITZ!	The binding integrates the AHA ( <a href="#">AVM Home Automation</a> ) system.
digitalSTROM	This binding integrates the <a href="#">digitalSTROM-System</a> .
DSC Alarm	This is an OpenHAB binding for a DSC PowerSeries Alarm System utilizing the EzezOn Envisalink 3/2DS Interface or the DSC IT-100 RS-232 interface.
Feed	This binding allows you to integrate feeds in the OpenHAB environment.
Freebox	This binding integrates the <a href="#">Freebox Revolution</a> to your openHab installation.
FS Internet Radio	This binding integrates internet radios based on the Frontier Silicon chipset.
Logitech Harmony Hub	The Harmony Hub binding is used to enable communication between openHAB2 and multiple Logitech Harmony Hub devices. The API exposed by the Harmony Hub is relatively limited, but it does allow for reading the current activity as well as setting the activity and sending device commands.
Hunter Douglas PowerView	This is an openHAB binding for the Hunter Douglas PowerView Motorized Shades via the PowerView Hub.
Homematic	This is the binding for the eQ-3 Homematic Solution.
Philips Hue	This binding integrates the Philips Hue Lighting system.
IPP	This binding integrates printers, which implement the Internet Printing protocol (IPP). This is the successor of the CUPS binding.
Keba	This binding integrates the Keba KeContact EV Charging Stations.
Kostal Inverter	Scrapes the web interface of the inverter for the metrics of the supported channels below.
LIFX	This binding integrates the LIFX LED Bulb. All LIFX bulbs are directly connected to the WLAN and the binding communicates with them over a UDP protocol.
Lutron	This binding integrates with Lutron light control systems.
MAX!	This is the binding for the eQ-3 MAX! Home Solution.
Meteostick	This is the binding for the Meteostick weather receiver dongle. This is an RF receiver that can receive data directly from Davis weather devices (and others).
Milight	The openHAB Milight binding allows to send commands to multiple Milight bridges.
Netatmo	The Netatmo binding integrates the following Netatmo products :
Network	This binding allows to check, whether a device is currently available on the network.
NTP	The NTP binding is used for displaying the local date and time based update from an NTP server.
Onkyo	This binding integrates the Onkyo AV receivers.
OpenSprinkler	This binding allows basic control of the OpenSprinkler and OpenSprinkler PI (Plus) devices. Stations can be controlled to be turned on or off and rain sensor state can be read.
Orvibo	This binding integrates Orvibo devices that communicate using UDP. Primarily this was designed for S20 WiFi Sockets but other products using the same protocol may be implemented in future.
PioneerAVR Configuration	The binding can auto discover the Pioneer AVRs present on your local network. The auto discovery is enabled by default. To disable it, you can create a file in the services directory called <code>pioneeravr.cfg</code> with the following content:
Pulseaudio	This binding integrates pulseaudio devices.
RFXCOM	This binding integrates large number of sensors and actuators from several different manufacturers through RFXCOM transceivers.
RME	This binding integrates the RME RainManager rain water pump and management system.
Samsung TV	This binding integrates the Samsung TV's.
SMA Energy Meter	This Binding is used to display the measured values of a SMA Energy Meter device. It shows purchased and grid feed-in power and energy.
Sonos	This binding integrates the Sonos Multi-Room Audio system.
Logitech Squeezebox	This binding integrates the Logitech Media Server and compatible Squeeze players.
SystemInfo	System information Binding provides operating system and hardware information including:
Tesla	This binding integrates the Tesla Electrical Vehicle.
Somfy URTS II	The addressable Universal RTS Interface I (URTSI II) can be used to communicate between home automation or other third party systems and SOMFY's RTS Motors and controls. It is capable of individual or group control, and can be operated via infrared remote, RS232 and RS485 serial communication. Once an input is activated, an RTS radio command is sent to the automated window treatment.
vitotronic	Miessmann heating systems with vitotronic has a opto link Interface for maintenance.
Belkin WeMo	This binding integrates the Belkin WeMo Family.
YahooWeather	This binding uses the Yahoo Weather service for providing current weather information.
ZWave	The ZWave binding supports an interface to a wireless Z-Wave home automation network.

# COMMUNITY - CONTRIBUTIONS IN QUEUE

28 Open ✓ 46 Closed		Author	Labels	Milestones	Assignee
<input type="checkbox"/>	<a href="#">New Atlona PRO3 binding (#1171) ✓ newbinding</a>	#1262	opened a day ago by tmrobert8		
<input type="checkbox"/>	<a href="#">Add Russound Binding ✓ newbinding</a>	#1250	opened a day ago by tmrobert8		
<input type="checkbox"/>	<a href="#">New sony binding - currently only Bravia but will add bluray players ✓ newbinding</a>	#1249	opened a day ago by tmrobert8		
<input type="checkbox"/>	<a href="#">MySensors binding added ✓ newbinding</a>	#1243	opened 3 days ago by lobuf		
<input type="checkbox"/>	<a href="#">Binding for control of LG TVs via serial port ✓ newbinding</a>	#1242	opened 4 days ago by fa2k		
<input type="checkbox"/>	<a href="#">Rotel RA11/RA12 Binding ✘ newbinding</a>	#1241	opened 4 days ago by fa2k		
<input type="checkbox"/>	<a href="#">Amazon dash button binding ✓ newbinding</a>	#1236	opened 7 days ago by OLibutzki		
<input type="checkbox"/>	<a href="#">Add Z-Way binding ✓ newbinding</a>	#1227	opened 10 days ago by pathed		
<input type="checkbox"/>	<a href="#">Bosch Indego Connect Binding ✓ newbinding</a>	#1202	opened on 22 Aug by jofleck		
<input type="checkbox"/>	<a href="#">Add ImperiHome IO binding ✓ newbinding</a>	#1197	opened on 18 Aug by pdgeurus		
<input type="checkbox"/>	<a href="#">Added minecraft server binding ✓ newbinding</a>	#1196	opened on 12 Aug by ibaton		
<input type="checkbox"/>	<a href="#">Binding for CoolAutomation CoolMasterNet HVAC controller ✓ awaiting feedback newbinding</a>	#1122	opened on 14 Jul by projectgus		
<input type="checkbox"/>	<a href="#">New Binding Fileregexparser ✓ newbinding</a>	#1028	opened on 16 Jun by meju26		
<input type="checkbox"/>	<a href="#">New Binding for Silvercrest Wifi Socket ✓ newbinding</a>	#1000	opened on 5 Jun by jmavaz		
<input type="checkbox"/>	<a href="#">Initial contribution for Apache Camel integration ✓ newbinding</a>	#994	opened on 1 Jun by paulianttila		
<input type="checkbox"/>	<a href="#">Initial contribution of Hyperion binding ✓ awaiting feedback newbinding</a>	#862	opened on 30 Apr by tavalin		
<input type="checkbox"/>	<a href="#">Initial contribution of ZigBee binding ✓ newbinding</a>	#779	opened on 8 Apr by cdjackson		
<input type="checkbox"/>	<a href="#">Initial contribution of Clipsal C-Bus Binding ✓ newbinding</a>	#776	opened on 30 Mar by taltechdude		
<input type="checkbox"/>	<a href="#">Fix for WiFi LED controller Binding (see #496) ✓ awaiting feedback enhancement newbinding</a>	#758	opened on 22 Mar by PH-B9		
<input type="checkbox"/>	<a href="#">Second contribution of a Binding for WiFi LED controllers (Implements #496) ✓ awaiting feedback newbinding</a>	#755	opened on 22 Mar by xylo		
<input type="checkbox"/>	<a href="#">Initial commit of telldus/tellstick binding ✘ newbinding</a>	#701	opened on 3 Mar by Jarlebh		
<input type="checkbox"/>	<a href="#">Initial release of the Tivo 1.1 binding for OpenHAB2 ✓ awaiting feedback newbinding</a>	#684	opened on 27 Feb by DigitalBites		
<input type="checkbox"/>	<a href="#">Initial contribution of the Exec 2.0 binding. ✓ newbinding</a>	#168	opened on 19 Nov 2015 by kgoderis		
<input type="checkbox"/>	<a href="#">Modbus binding for openhab 2 awaiting feedback newbinding</a>	#362	opened on 8 Sep 2015 by vnrss8		
<input type="checkbox"/>	<a href="#">Initial contribution of the Miele binding that supports the Miele@Hom... ✘ newbinding</a>	#347	opened on 19 Aug 2015 by kgoderis		
<input type="checkbox"/>	<a href="#">Initial contribution of the Helios IP (www.2n.cz) binding ✓ newbinding</a>	#80	opened on 15 Dec 2014 by kgoderis		
<input type="checkbox"/>	<a href="#">Initial contribution of the KNX 2.0 binding ✓ newbinding</a>	#21	opened on 22 Oct 2014 by kgoderis		
<input type="checkbox"/>	<a href="#">Initial contribution of IRtrans 2.0 binding ✓ newbinding</a>	#16	opened on 3 Oct 2014 by kgoderis		

# CHALLENGES

- Maintainers needed!
- Complex technology stack (OSGi, EMF, Xtext)
- Java is not in focus for many IoT players  
(see BT/BLE, OCF, Z-Wave etc.)

# OUTLOOK 0.9.0



- Java 8!
- Voice Features
- Rule Engine Enhancements
- New Persistence Features

# COLLABORATION



- Sample lightweight distro using Eclipse Concierge
- OM2M integration for oneM2M compatibility
- Vorto / Ontologies



# THANK YOU!



@smarthome