

Do-Dots Introduction

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do-Dots - a M2M communication framework

Introduction

do-Dots is the framework we offer to our customers to ease the management and realization of automation and communication systems.

do-Dots is based on a common, readable and high level protocol that connects various components with simple and very specific functions:

- protocol translation
- data transfer
- logics execution
- graphics interface

What does do-Dots do?

It provides components ready to realize an automation system ranging from embedded to cloud.

It enables to integrate your system with other devices using Dot.

It ensures to use of what already exists and to enables to write what is missing.



When can do-Dots be used?

Whenever a new hardware is created and it has to be quickly integrated in a more complex market.

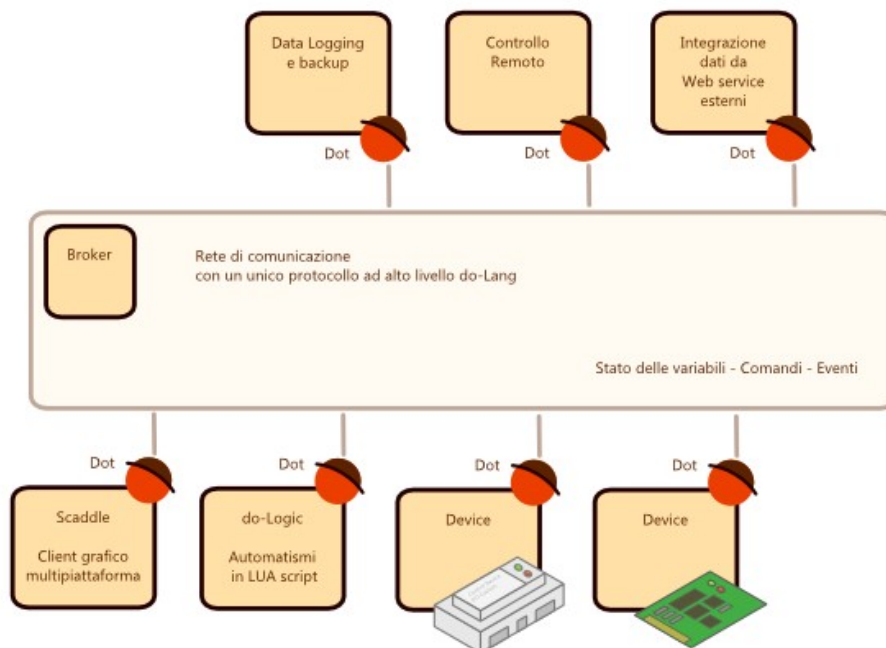
Whenever logics, remote connection, multimedia, M2M communication must be combined.

Whenever a system easy to be extended and to be installed has to be realized.

To whom is it addressed?

- Small-sized but innovative hardware manufacturer who wish to have high connectivity quickly and easily.
- General automation system manufacturers who wish to extend their connectivity offer and more heterogeneous solutions.
- Project developers and System Integrators who wish to minimize time and efforts needed to deliver functioning systems.
- Remote service and control suppliers.
- Home automation installation manufacturers.
- Vending machine and leisure machine manufacturers.
- Multimedia system manufacturers.
- Hobbysts and automation fan.

What are the components of do-Dots?



Dot is the basic element of the framework. It's a driver-like component translating a device or a protocol in an object "defined" by variables, actions and events.

Dot can be written in any language, it can be chosen among a wide library available, it can be as simple as a CSV chart.

Dots communicate with a common, high level protocol. They are connected to a Broker to communicate and to realize a network of heterogeneous elements, The Broker manages the band, the access, the connection and it distributes the data on the basis of a publish/subscribe model.

The Dots network has no fixed hardware or system limits: it can be fully installed in just one hardware component and it can be executed in just one application.

A Dots network can be connected to pre-defined or customized components: graphic interfaces to control the elements of the network; logics and automations realized through script; backup, log or remote control components. All the above listed components are Dots.

Scaddle is the standard graphic client we offer on the do-Dots systems. It's a



simple and essential graphic interface created to transfer as quickly as possible the structure of a Dot in a series of interactive graphic elements.

Scaddle is not a fundamental requisite for a do-Dos system. Each developer can realize his own interface to "customize" the system.

What makes do-Dots unique?

- It's a platform created by the software
- It does not require a specific hardware
- It's scalable from cloud to embedded
- Most Dots are Open Source
- Low entry barrier
- Low expansion costs
- It enables the creation of an integrated logics
- Open to on the cloud integrated services

do-Dots is NOT in competition with the existing systems

- Each system keeps the components already created
- do-Dots can be distributed on your own hardware
- New systems are gaining market
- Specialized systems can be integrated
- Generic systems complete the offer



Our service

As designers of the do-Dots projects we provide consultancy service and assistance to realize specialized Dots or the validation test for Dots made by third companies.

In addition we manage the complete library of the components offering the assisted creation of the "kit" suitable for each system.

Moreover in cooperation with skilled partners we directly provide connectivity service for remote assistance, remote communication, backup and log on the cloud.

The screenshot shows the 'Bundle - selezione Dot installati' page. It features a navigation bar with 'Interfacce - Comunicazione - Logica - Remoto - Multimediale - Informazioni'. Below this, there is a list of four bundles:

Bundle Name	License	System	Language	Download
EIB (European Installation Bus) Interfacciamento con sistemi EIB KNX basato su Calimero EIBnet/IP. European standard EN 13321-2:2006	?	Tutti	Java	[Download]
OpenWebNet Interfacciamento con sistema OpenWebNet per sistema myHome in grado di interfacciarsi con gli oggetti del gruppo principale	?	Windows	C++	[Download]
Modbus Interfacciamento con protocollo Modbus RTU generico - necessita di tabella di configurazione per identificare i registri su cui comunicare. Fa uso della libreria NModbusLib compilata per Mono	?	Mono compatibile	C#	[Download]
CANOpen	GPL 3.0	Tutti		[Download]