

# DomoBus Simulator

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# Outline

- Introduction
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# Motivation

- Installation of domotic devices is **expensive**
- It's hard to achieve a perfect system configuration on the first try
- Optimally, the configuration should be made one time only

## Objectives & Benefits

- **Simulate** a real world environment (a house)
- Allow for **visualization** of changes in the environment
- Ease the process of **decision** for the user
- **Test** if a certain programmed behavior is working as expected
- Is compliant with the DomoBus protocol
- Is flexible


# Functionality

- Visualize the relevant devices in the workspace
- Change the state of devices directly
- Changes can be automated with scripts
- Can send/receive messages to/from the DomoBus Supervisor
- The current state of the simulated system can be saved

# Interface


Three main components:


- Workspace
- Devices selection and preview
- Property control


DomoBus Simulator


FileScriptAbout


Workspace

  
Kitchen\_Cand

  
Kitchen\_Lamp

  
Kitchen\_Heater

  
Kitchen\_TV

  
Livingroom\_TV

Floor	Room	Device	Preview
Basement	Kitchen	Kitchen_Cand	On-Off : 0
Ground-floor	Living-room	Kitchen_Lamp	Luminosity : 0
Up-floor	Hall	Kitchen_Heater	Lamp name : KitchLamp
		Kitchen_Blinds	
		Kitchen_TV	
		Kitchen_Movsensor	
		Kitchen_Window	
		Kitchen_Tempsensor	

Properties - Kitchen\_Lamp

On-Off

☒ Off

☐ On

☐ Invalid value

Luminosity

0

Percentage (0-100) (%)

Ok

☐ Invalid value

Lamp name

KitchLamp

Ok

☐ Invalid value

**Name:** Example - Images

**Version:** 007

**Date:** 01/03/2075

# Scripts

Three operations:

- **Set**

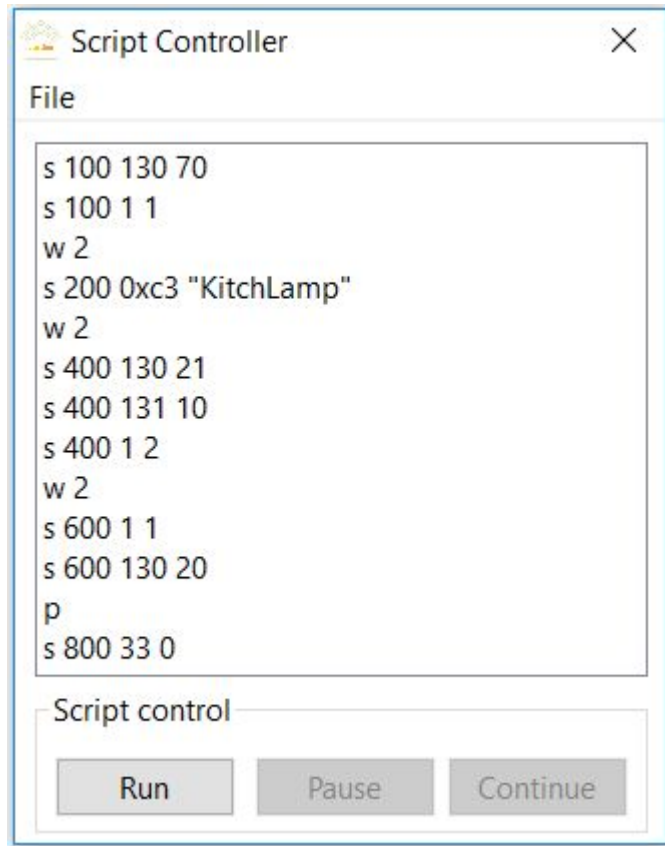
- s <dev\_addr> <prop\_desc> <value>

- **Wait**

- w <seconds>

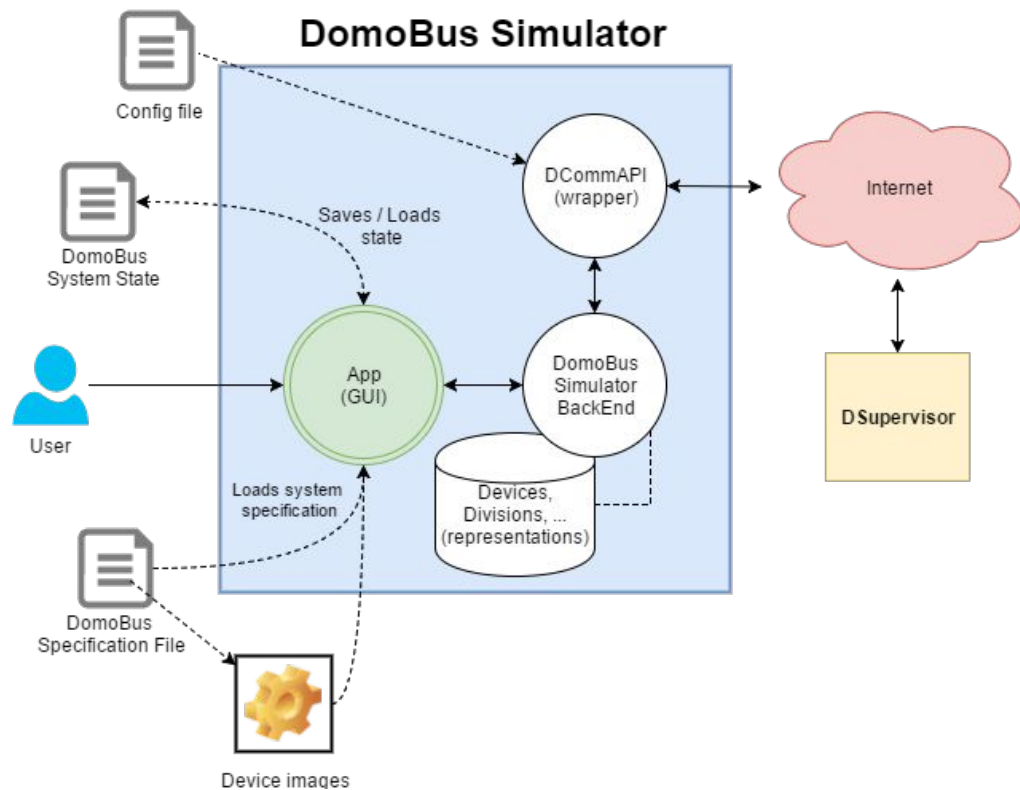
- **Pause**

- p





# Architecture



# Conclusion

## The DomoBus Simulator:

- Prevents extra costs of configuration and installation
- Helps to better visualize the environment changes caused by the domotic system
- Helps testing complex behaviors programmed in the supervisor

# Demonstration

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