



# Security Demo

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# The use case

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In the University we have door signs:

- Show when we will be back
- Location (cafeteria, conference room, etc.)

This could be improved to leverage wireless technologies:

- Only show location or status to authorized users

This demo shows how to leverage contextual information (who is in front of the door) to show more or less information while using AGILE software stack, and AGILE-IDM.

# Rough overview

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AGILE pings a list of known bluetooth MAC addresses

AGILE queries Google calendar (using a token obtained by IDM) to query the next appointments

AGILE show information in the screen according to the person who is in front of the screen (using AGILE IDM groups)

# “Smart” door sign

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# “Smart” door sign

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# What we use in the demo

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**Node-RED  
Developers ui**

Get updates from I2ping,  
Query Google Calendar,  
check IDM and return info

**docker  
Agile-stack**

I2ping (Node.js  
native module)

Office  
Dashboard  
(static HTML)

# What we use in the demo

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**Agile-stack:** to deploy our containers with l2ping modified code and dashboard ui

**Protocol:** We implemented a RAW socket ping for bluetooth based on l2ping

## **Agile-idm:**

- Authentication with OS.js, Node-red and propagation of entity info
- Show integration of Google token with Calendar
- How IDM can be extended to have additional attributes and how entities can be found by such attributes, i.e. mac address in the user profile.
- How to use the oauth2 example to add entities to groups and remove them
- How adding and removing entities from groups can make access control easy

**Notion of declassification of information:** although declassification is not there, there is a function node showing how this will work in the future.

# We split the demo in 2

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## **A video for the part interacting with Google:**

- Required because of lack of internet access (from the gateway) during the meeting.

**A live demo part to show the bluetooth ping, IDM interaction with groups and displaying information to the user.**