

Demonstrations Supplement

International Conference on Networked Sensing Systems (INSS)

Please replace this description with your own.

CONTACT INFO

First Name

Last Name

Organization

Street Address

City

State/Province

Country

Postal Code

Daytime Telephone

Email

URL

DEMONSTRATIONS DESCRIPTION

Title: Practical considerations using eSeals

Project Description (100 words max):

The demo will show a prototype implementation of the system presented in the paper. We focus on showing intuitive usage and user friendly handling of object and the electronic parts and devices necessary for an eSeal

ENVISIONED INTERACTION

The visitor will interact with all the parts of the eSeal system. The important hardware parts are: the eSeal device, the goods to be sealed and supporting devices like the authentication device. The devices are based on the particle computer platform. The pictures show some parts of the demo hardware.

PICTURES.:



A hard disc drive with an eSeal based on particle computer



a wearable authentication device



an eSeal device



A small mobile display as checkpoint

The visitors can reconstruct the theoretical flow of the use of the eSeal system by taking the actual goods and eSeal devices in their hands, apply the seal, supervise the functionality of the seal using displays, understand how authentication and access control works in an implicit and ergonomic way. A hands on experience would look like this:

A visitor takes one of the goods (represented by plastic copies) and takes of the the eSeal devices and attaches it to the good. Then, the visitor brings an authentication device near to the good and the eSeal is automatically initialized. This action can be seen by watching LEDs on the eSeal device or using a mobile display. Then, the good is sealed which can be as well seen on the display. The required integrities are assured by the eSeal device, a small sensor node. At the end, the eSeal can be removed using another authenticated device, the reception device. All these devices are small is size (some cm) and based on the sensor system platform *particle computers*. Additional information will be given and the demo stand like how the system works, what messages are exchanged between the active tags and sensor nodes, technical background information of the underlying hardware platform etc.

The visitor can understand and experience the major demonstration subject in around 3 to 4 minutes but can – if interested – play and experience with the hardware components for longer time. We will provides multiple devices of each necessary part of the demo to run more than one demo at a time.

TECHNICAL REQUIREMENTS

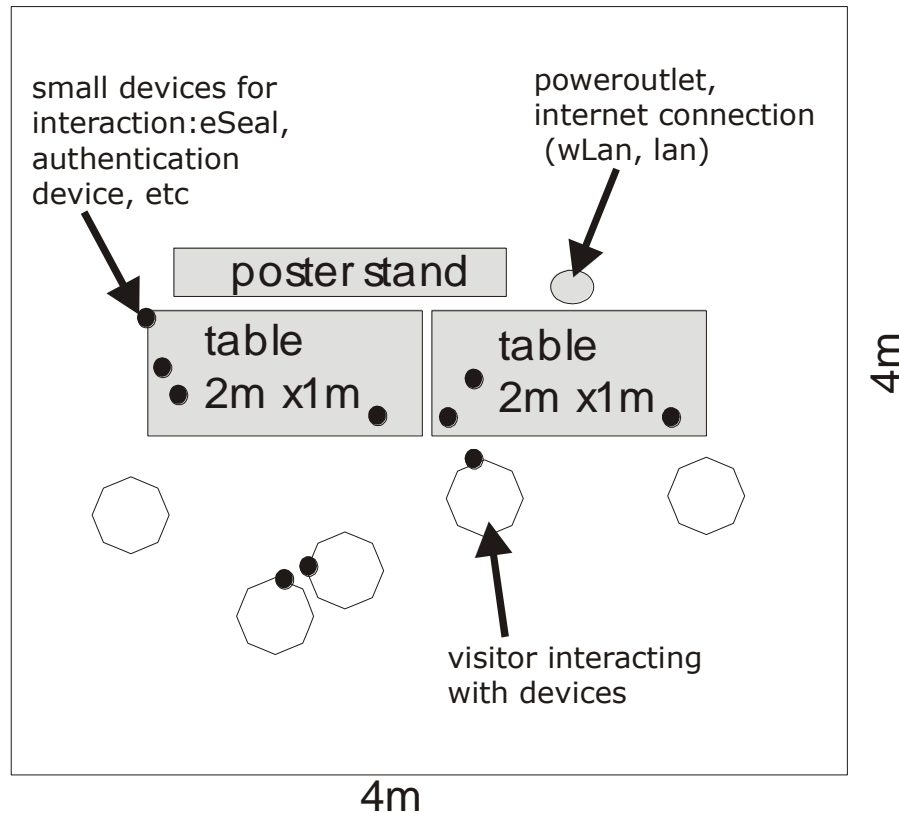
SPACE

Please consider the following example questions when describing your demo space requirements:

How much space will your demo require (length/height/width)? Should it operate in two separate locations? Should it be presented against a wall? In a doorway? At a table? In a kitchen? On the ceiling? On the floor? On a tree? Etc? Does your demo need a special table, chair, carpet, sandbox, etc.?

<Example: Please replace this description with your own.>

FLOOR PLAN



The gray cells are the things we require from the organizing committee: 2 tables, a poster stand and a power outlet and internet connection. If wlan is provided on the conference, we need no extra wired internet. We need no projection area. The height can be anything (normal room). We will not attach anything to the ceiling.

ACOUSTICAL

Please consider the following example questions when describing your demo requirements:

Are there special acoustical needs? How much sound does your demo produce?

Lighting

Please consider the following example questions when describing your demo requirements:

Does the demo require special lighting? Does it require a dark area?

Time

Please consider the following example questions when describing your demo requirements:

Should the demo run only at the opening demo reception or throughout the conference? Does it work best with a single person at a time? A pair? A group? Does the demo evolve over the course of the conference or is it self-contained within a 2 minute interaction?

Networking

Please consider the following example questions when describing your demo requirements:

Do you need to be connected to the Internet? Wired? Wireless? Will 802.11b be used? How many connections will you need? What is your demonstration's typical bandwidth usage?

Radio Frequencies

Please consider the following example questions when describing your demo requirements:

Does your demonstration use, produce, or require any radio frequencies? Wireless cameras, microphones, Bluetooth, sensor nodes? What frequencies? At what power levels?

POWER

Please consider the following example questions when describing your demo requirements:

How many power sockets do you require? Does your demonstration require power converters / socket adapters?

Please be aware that Japan supplies 110V, 60Hz.

MISSING THINGS

If you have further requirements please let us know how we can provide the best support for you.