

**iMuse**

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# Communication & Administration tools

- iMuseWiki, a Wiki for internal collaboration
  - Internal Project information diffuse
  - Ideas exchange
  - Literature
  - Deliverables handling
- Users/Content: Project Members
- Admin: CERETETH (Apostolos Tsiovoulos)
- <http://www.inf.uth.gr/iMuse>

# Communication & Administration tools

- Openmeetings web-conference system
  - Video-audio streaming
  - Chat
  - File transfer
  - Whiteboard
- Users/Content: Project Members
- Admin: CERETETH (Nikos Fraggogianis)
- <http://www.inf.uth.gr:8080/imuse>

# Communication & Collaboration

- Emailing list for fast team communication
  - [imuse@inf-server.inf.uth.gr](mailto:imuse@inf-server.inf.uth.gr)
- iMuse forum
- Users/Content: Project Members
- Admin: CERETETH (Nikos Fraggogianis)

# Publicity

- Public Portal
  - Project publicity
  - Research dissemination
  - Joomla Content Management System
- Content: Project management team
- Users: Public
- Admin: CERETETH (Apostolos Tsiovoulos)
- [http://www.inf.uth.gr/imuse\\_site/](http://www.inf.uth.gr/imuse_site/)

# Museum RFID Experience

- RFID Application scenarios
  - Handheld RFID Readers
    - Reader held by visitor
    - Tags installed on exhibits
  - Exhibit mounted Readers
    - Reader mounted on exhibits
    - Tags carried by visitors

# Museum RFID Experience

## Handheld RFID Systems

- Museum of Natural History Aarhus Denmark
  - CF RFID Reader
  - Reading Distance 10cm
  - Functionality
    - Text, audio, video, quizzes



# Museum RFID Experience

## Fixed RFID Reader Systems

- eXspot system, Exploratorium, San Francisco
  - Fixed Low Power RFID Reader (13.56MHz)
  - RFID Cards carried by Visitors
  - Wireless communication
  - Functionality
    - Exhibit bookmarking for post visit experience



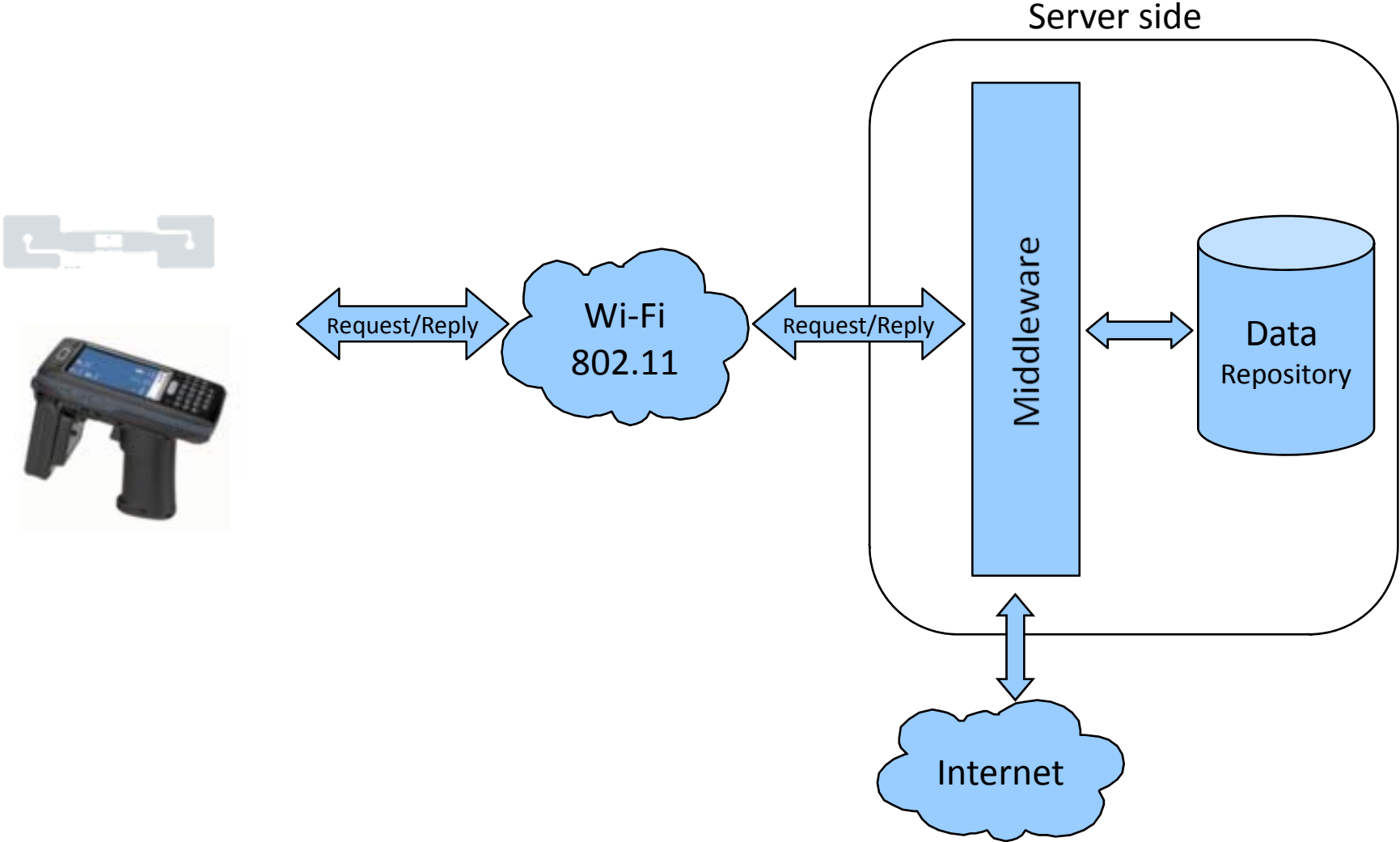


# iMuse RFID Approach

- RFID Tags installed in exhibit labels
- Handheld RFID reader
- Wireless communication 802.11
- Central Electronic repository



# System Architecture



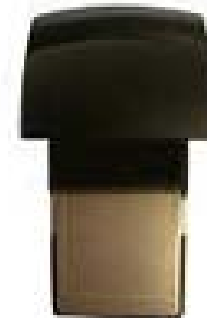
# RFID Technology

iDtronic UHF – CF Reader &  
HP iPAQ 214 Enterprise Handheld

## Development

MS Windows Mobile SDK, RFID Reader  
Library (.NET v2.0), eVC++, C#

PROS	CONS
Low cost (~900€)	Reading distance < 20cm
Lightweight (220gr)	Power autonomy
Wide display 4.3"	



# RFID Technology

## Convergence Systems CS101

### Development

Windows CE 5.0, full SDK

PROS	CONS
Reading Distance 2-2.5m	High Cost (<2000€)
	Heavyweight (1Kgr)
	Uncomfortable



# RFID Technology

## iDtronic UHF Gun RFID Reader

### Development

Windows CE 5.0, RFID Reader  
Library (.NET v2.0), eVC++, C#



PROS	CONS
Reading Distance 2m	Medium Cost (1748€)
Lightweight (320Kgr)	
Comfortable	