



Maestro

a Virtual Museum model for Visitor Experience

Orchestration :: Preliminary system architecture, technologies and protocols

Athena Vakali

Prof. Aristotle University, Thessaloniki, Greece

Maestro

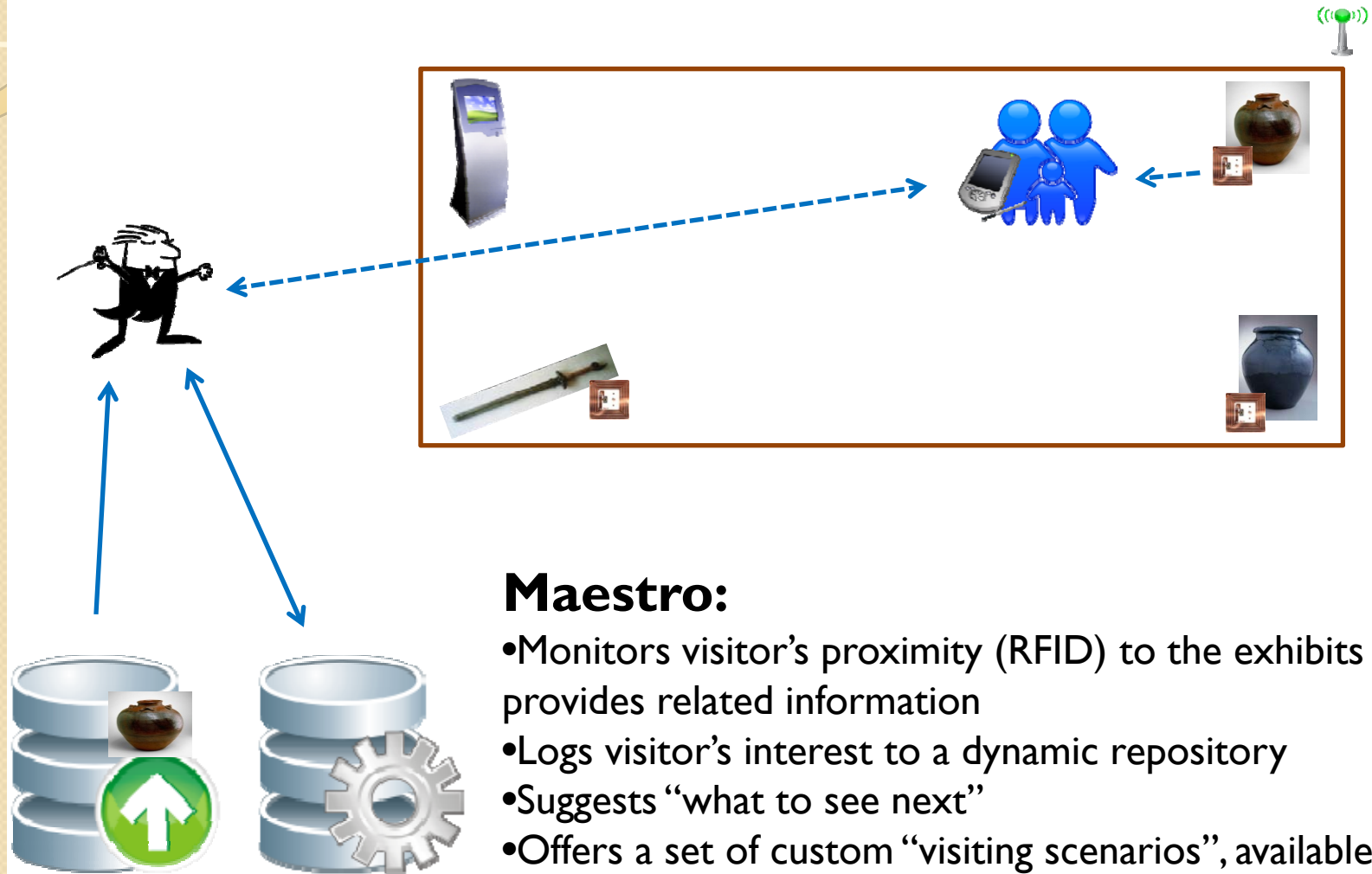
The new Virtual Museum model



Goals:

- On-site experience orchestration
- Post-visit experience
- Knowledge Discovery

On-site experience orchestration



Maestro:

- Monitors visitor's proximity (RFID) to the exhibits and provides related information
- Logs visitor's interest to a dynamic repository
- Suggests "what to see next"
- Offers a set of custom "visiting scenarios", available also to info-kiosks



Identified flows of information

- Visitor Experience:
 - RFIDs - PDAs
 - Maestro – PDAs
 - Maestro – Info-kiosks
- IT experts:
 - Maestro – Archaeologists
 - Maestro – System improvement, deployment, backup, habitat



Visitor Experience:: Maestro – PDAs

- **RFIDs – PDAs:** Black Box to the AUTH team.
- **Maestro – PDAs:**
 1. PDA application is actively pulling content from Maestro via Web services (SOAP/XML), synthesizes and presents it to the visitor. Maestro offers a Web Service interface for querying content only.
 2. PDA application is a dummy Web browser pulling Web pages from Maestro Web server. Maestro is actively synthesizing dynamic “mini” Web pages.



Visitor Experience:: Info-kiosks

- **Maestro – Info-kiosks:**
 1. Maestro is a dummy content provider. A Web application, running on info-kiosks, is pulling content and presents it to the screen.
 2. Maestro is an active Web server that synthesizes Web pages on demand. Info-kiosks are dummy Web browsers consuming Web pages from Maestro Web server.



IT experts::Maestro – Archaeologists

- Archaeologists should strictly identify:
 - Type of content (*Text, Images, etc.*)
 - The content itself, the database fields (*Era, material, etc.*)
 - Type of queries (*I want this exhibit and all the related of this era*)
 - Scenario builder (*Define what a scenario is*)
 - *Is there already digitized content available?*
- Then, the DB schema is to be built.
 - A continuously changing schema is a stopper for the development of the Maestro

IT experts:: System improvement, deployment, backup, habitat

- We suggest the extensive use of Virtual Machines (VirtualBox)
 - Better management, deployment, backup, security, utilization.
 - We would like to **encourage** the rest of the developers to adopt the Virtual Machine approach, even at this early stage.
- Maestro will be developed using open source technologies (php, mysql, java) and will run on Linux.



-Thank you for your attention