VRE Architecture Design Notations

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Introduction

- Web has becomes a popular implementation platform for Virtual Research Environment (VRE)
- Grid/Web services and portals are a new paradigm for communication and interoperability between applications.

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Why use design notations?

- Enabling fast prototyping, and automation of program codes generation
- There are also increasing interests in the use of declarative design languages, e.g. WebML and UML in Web applications development

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The CORE approach

- The CORE project aims to provide an infrastructure that combines clinical, educational, and research activities and resources under a VRE
- The development team has produce a set of design notations for the VRE architecture

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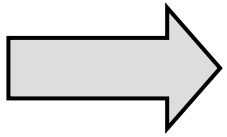
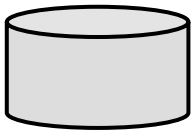
Architecture Design notations

Notation	Description
	Web Service
	Message (e.g. SOAP message)
	Infrastructure (e.g. middleware)
	Portlet
	Database
	Data

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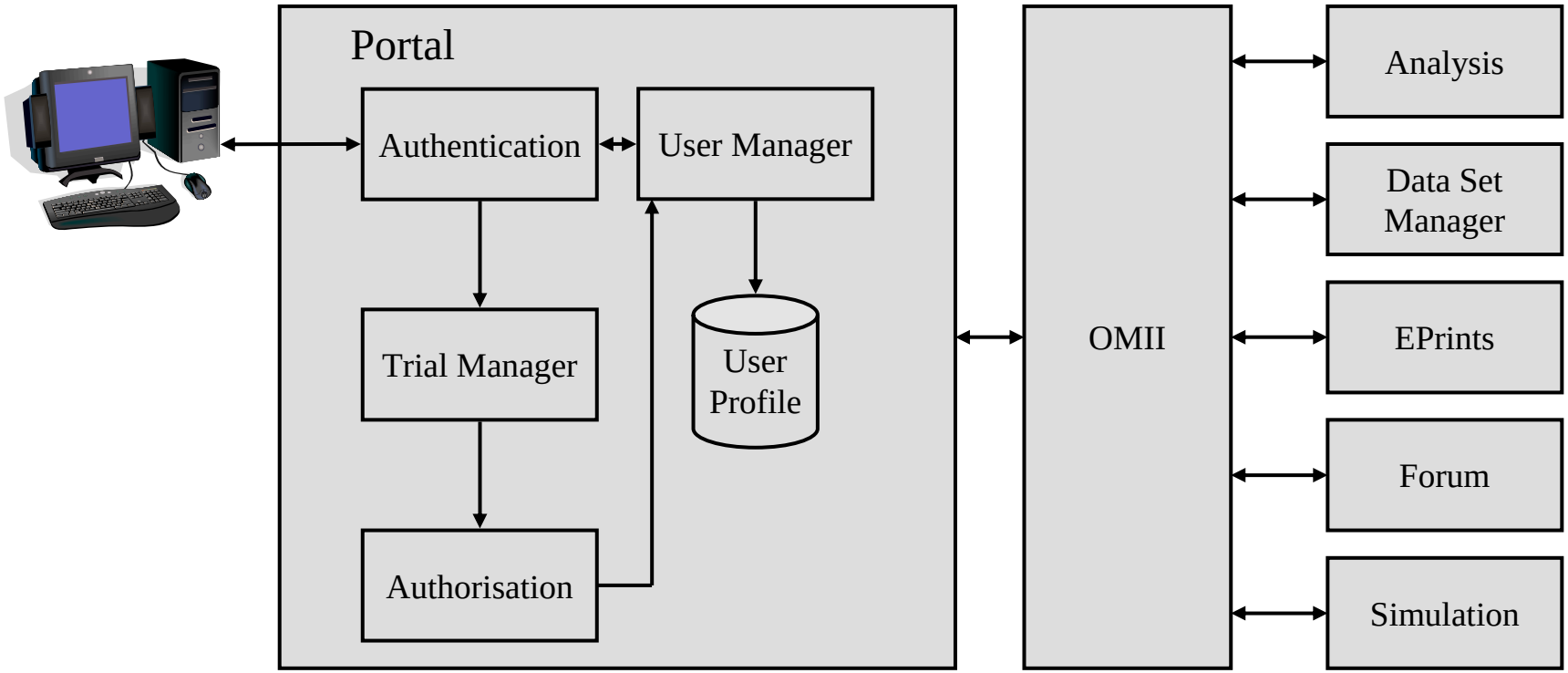
The CORE architecture

- Without design notations



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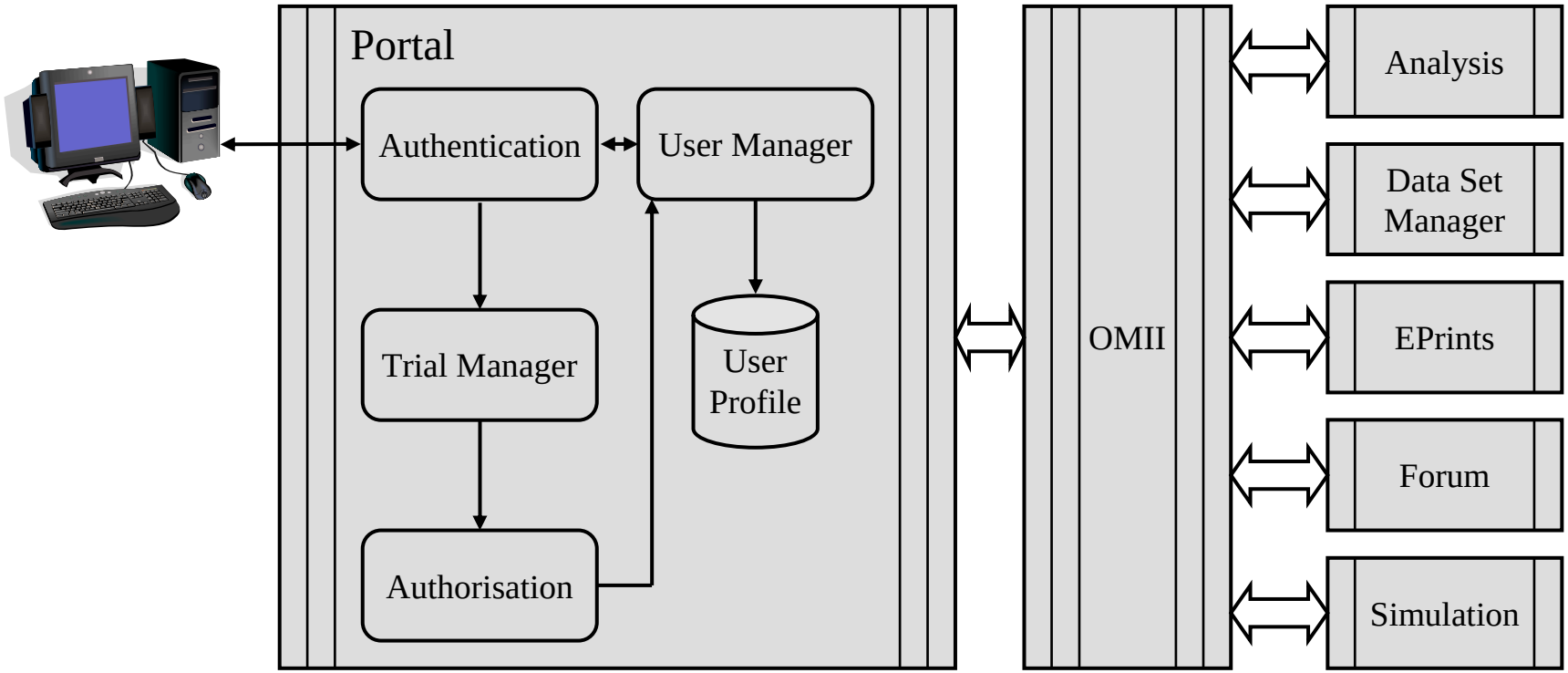
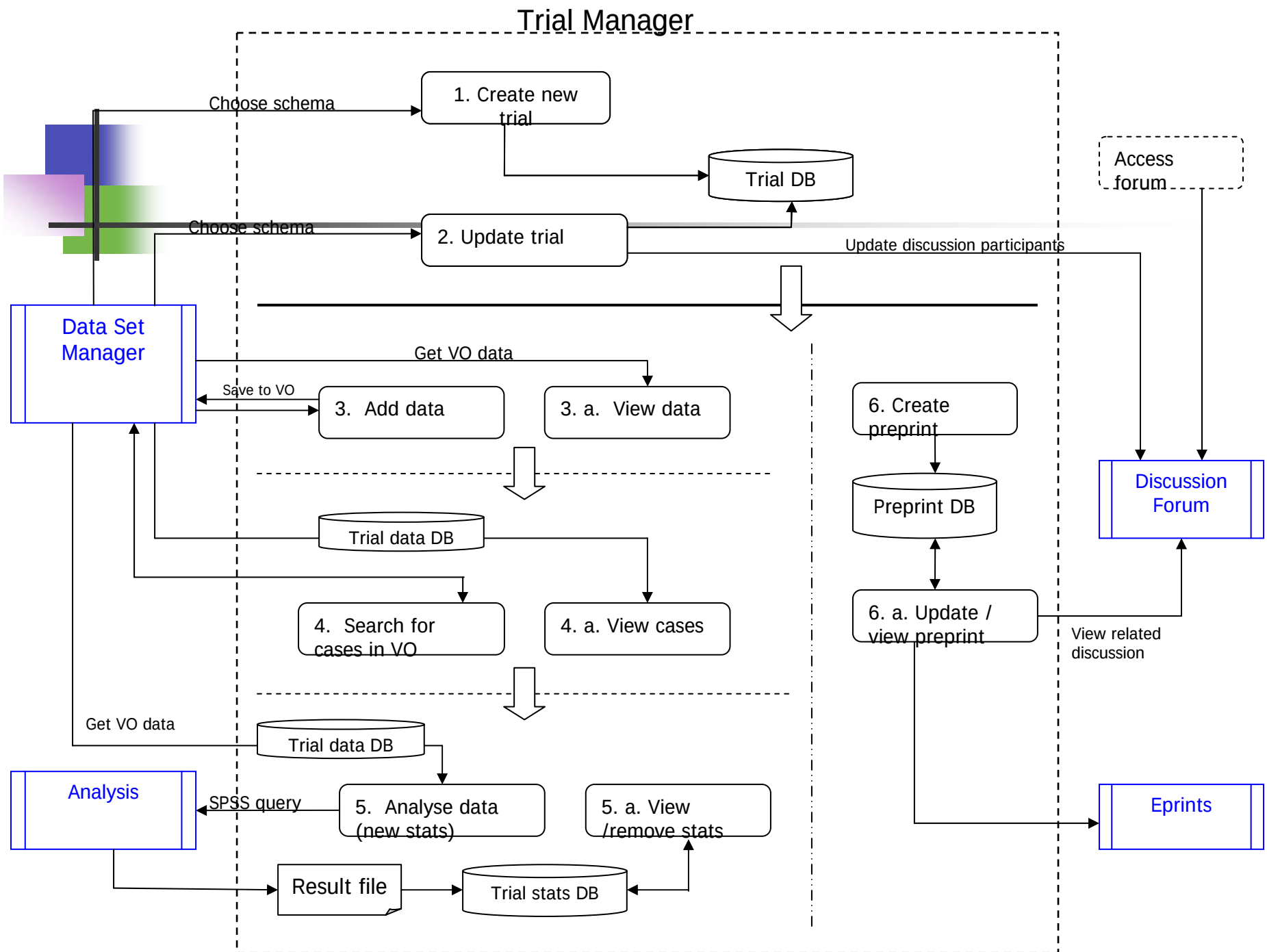
The CORE architecture

- With design notations




Trial Manager
Choose schema
1. Create new trial
Trial DB
Access forum
Choose schema
2. Update trial
Update discussion participants
Data Set Manager
Get VO data
Save to VO
3. Add data
3. a. View data
6. Create preprint
Preprint DB
Discussion Forum
Trial data DB
4. Search for cases in VO
4. a. View cases
6. a. Update / view preprint
View related discussion
Get VO data
Trial data DB
Analysis
SPSS query
5. Analyse data (new stats)
5. a. View /remove stats
Eprints
Result file
Trial stats DB

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Discussion

- Questions and comments are welcomed