A tool for e-Learning:

GLOREP

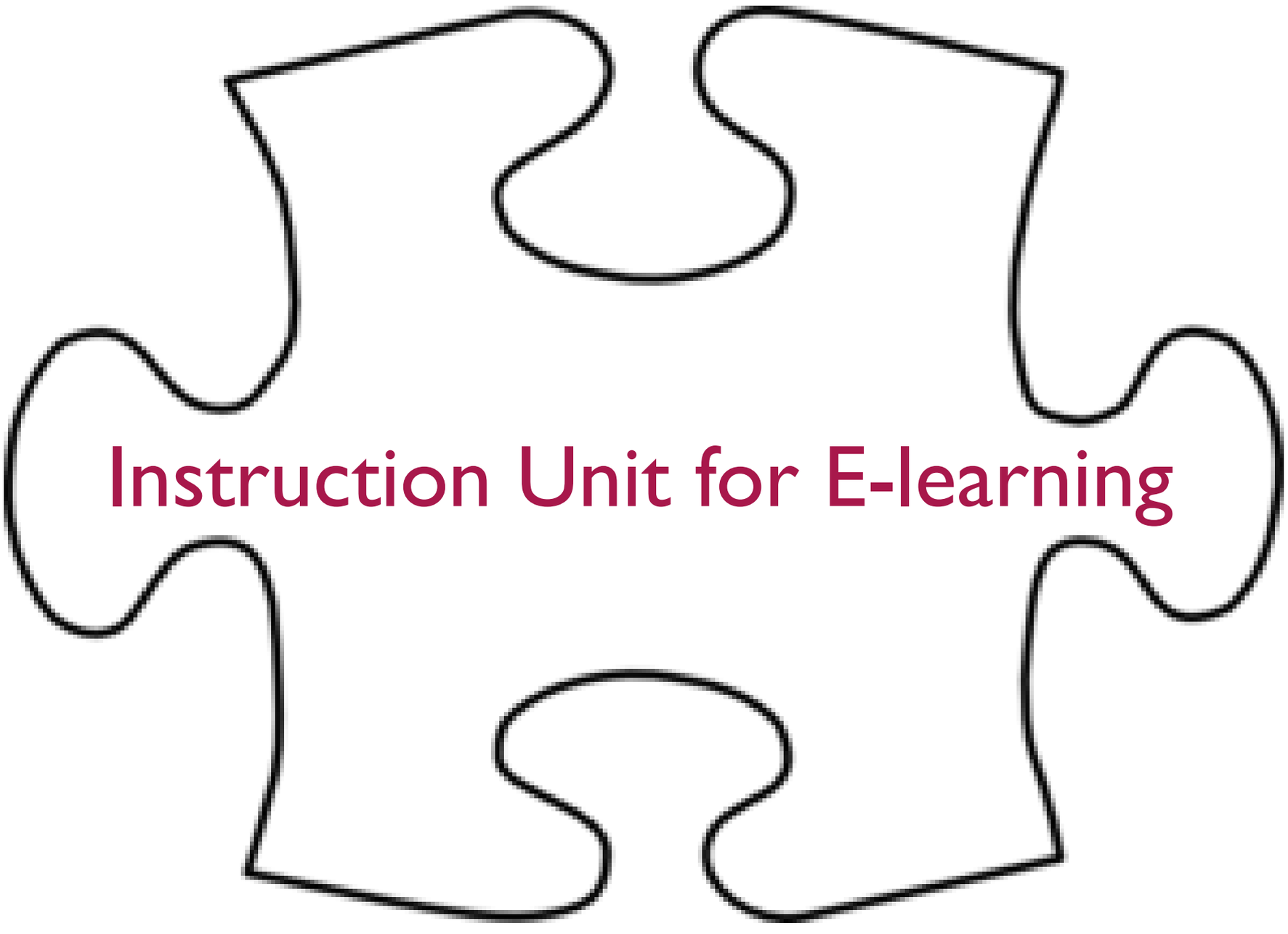
Perugia, September 14-15, 2015

Introduction to learning objects

Learning Object (LO)

A LO is defined as:

“any digital resource that can be reused to support learning”.



Learning Object

We can assume various types of teaching strategies, but the main ones that directly affects learning objects can be divided into six main categories:

- Tutorial and video tutorial
- Case of Study
- Simulation
- Problem solving
- Survey
- Summary

LO properties

To be efficient and effective a Learning Object must be:

Modular

Self-consistant

Interoperable

Available

Reusable

How to build a Learning Object

The construction of a LO requires special attention, because it is an object with:

a content,

a context,

a learning purpose

How big should be a LO?

The more complex contents are broken down into individual units, self-contained and designed to be used in multiple contexts, in order to form a repository of learning objects immediately available.

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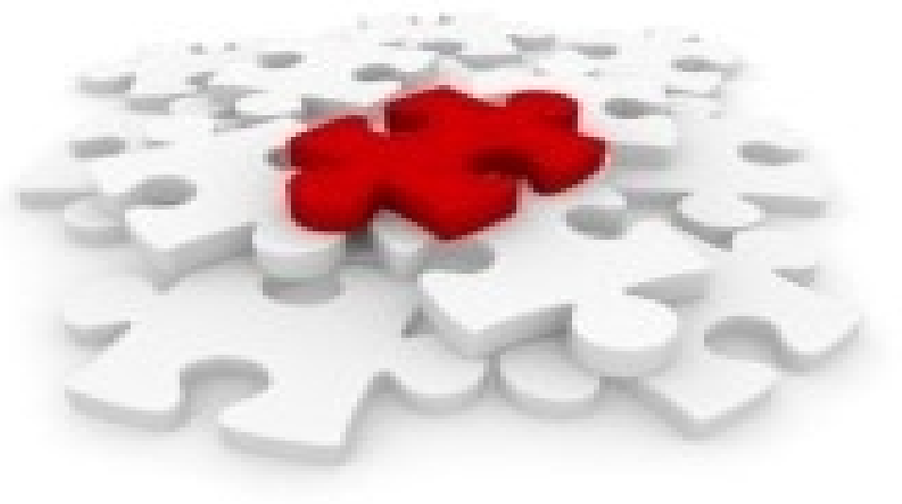
How big should be a LO?

A LO is a single unit of learning, self-consistent, which could be equivalent to a single lesson (2 hours) belonging to a teaching block of 8/4/2 hours, which is also self-consistent, corresponding to the front teaching of 1, ½ and ¼ of the ECTS credits and accompany it with a written text (corresponding to an oral comment of the appropriate length).



LO description

Metadata

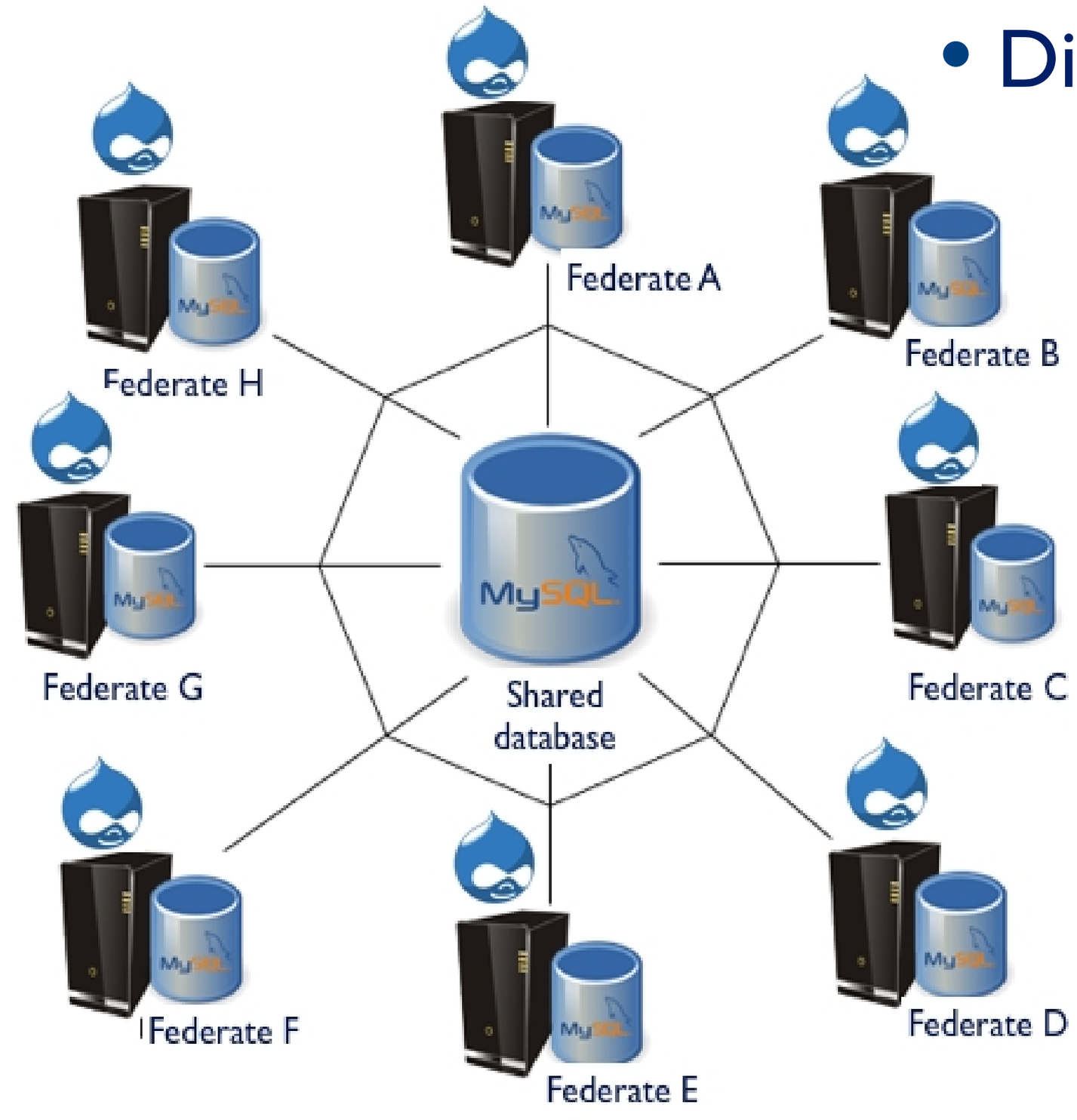
data about data

- Metadata are standardized descriptions of the LO content
- They are implemented using markers which define each LO characteristic
- Metadata Schem
  - IEEE LOM

GLOREP

Assemblage of distributed repositories of educational material: the GLOREP (Grid Learning Object REPository) federation

The GLOREP federation



- Distributed in a Federation
- Collaborative
- Free and Open source

The GLOREP Login

The GLOREP federation is accessible
from any one of its federated servers
e.g. http://glorep.unipg.it

G-LOREP Features

- Federation management:
  - Joining and leaving
  - Distributed search
  - Synchronization recovery

- LO management:
  - Creation/Deletion/Modify

G-LOREP Features

- Moodle data import tools
- Classification with a new Assistant
- Definition of an extended LO format (IEEE LOM based)

G-LOREP Roadmap

- Near future:
  - Populating of the federation with contents from new federated members (i.e. Royal Society of Chemistry)
  - Extend the use of some admin modules to users with specific skills
  - Training activity in LO designing and management

G-LOREP Roadmap

THE VEC SC ECHEMTEST+ PROJECT

TRAINING EVENT

14-15 September

Department of Mathematics and Computer Science

of the University of Perugia