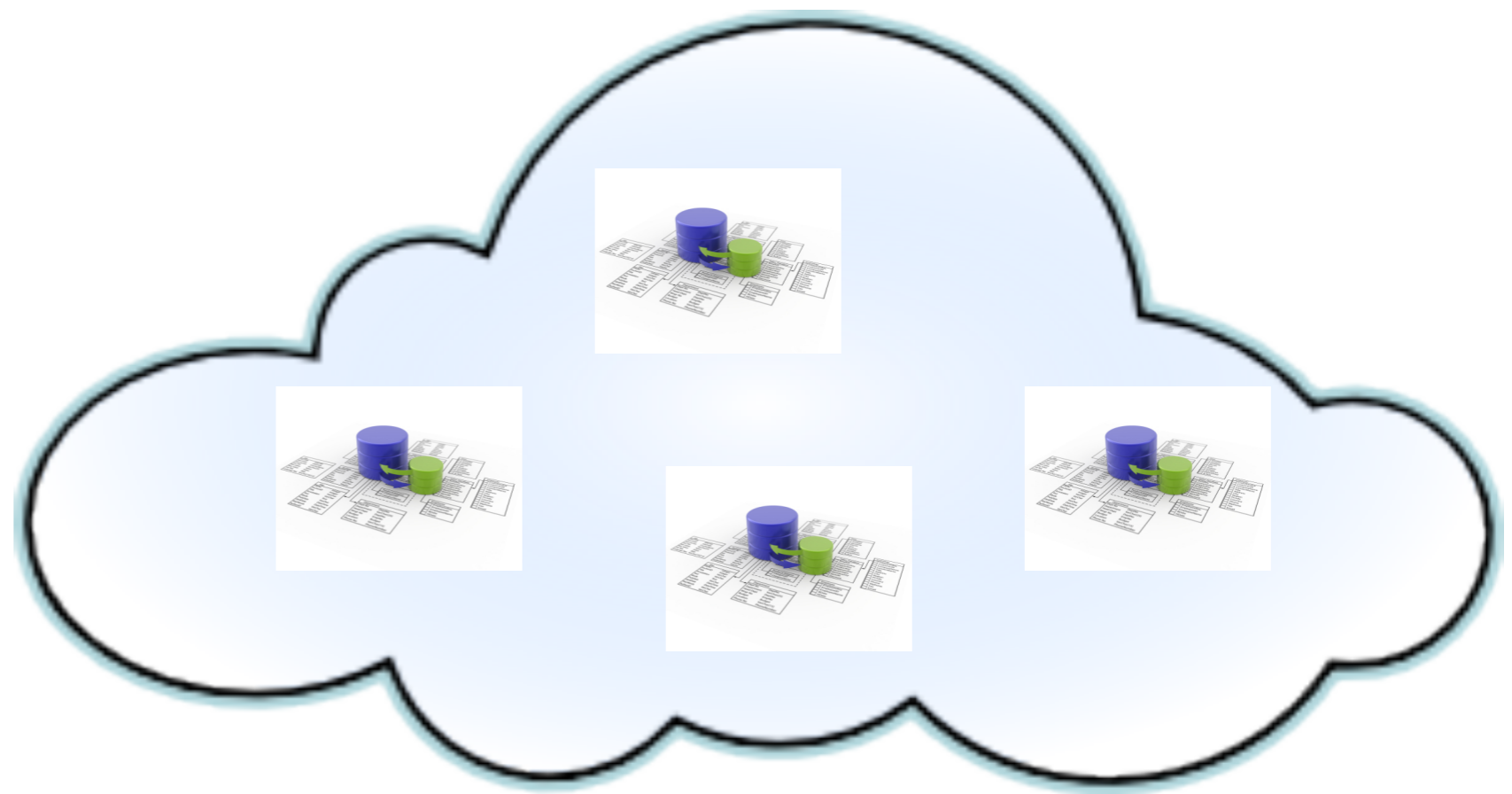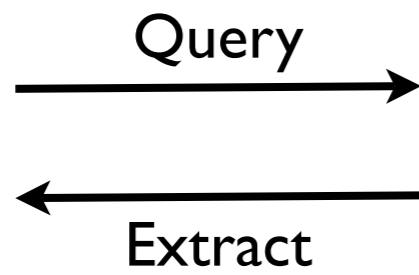# Using VAMDC: tutorial introduction

Guy Rixon
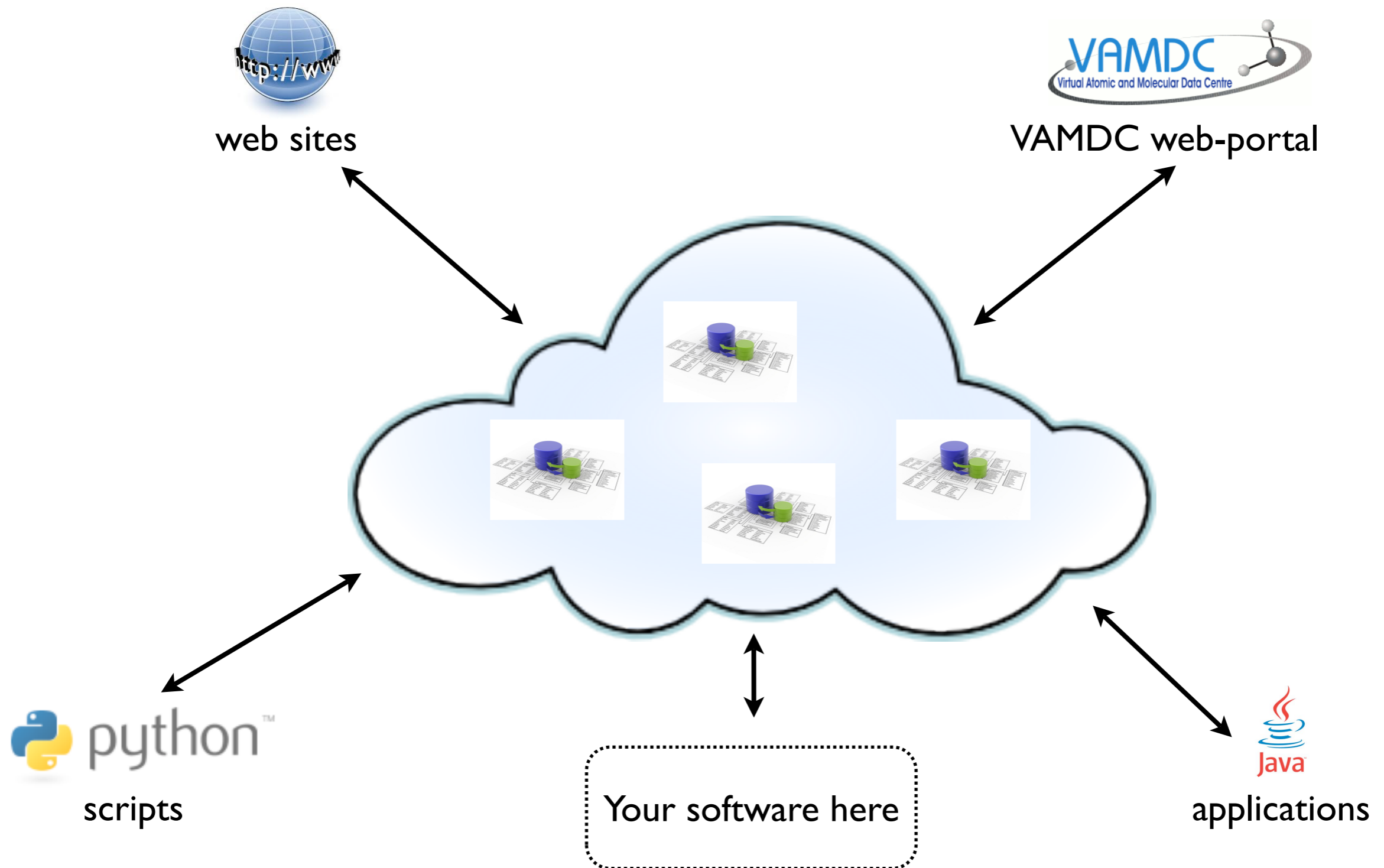VAMDC annual meeting 2013, Open University

Tutorial agenda

- 09:45 - 10:00 Context of using VAMDC

- 10:00 - 11:00 Demonstrations

- 11:00 - 12:30 Hands-on exercises
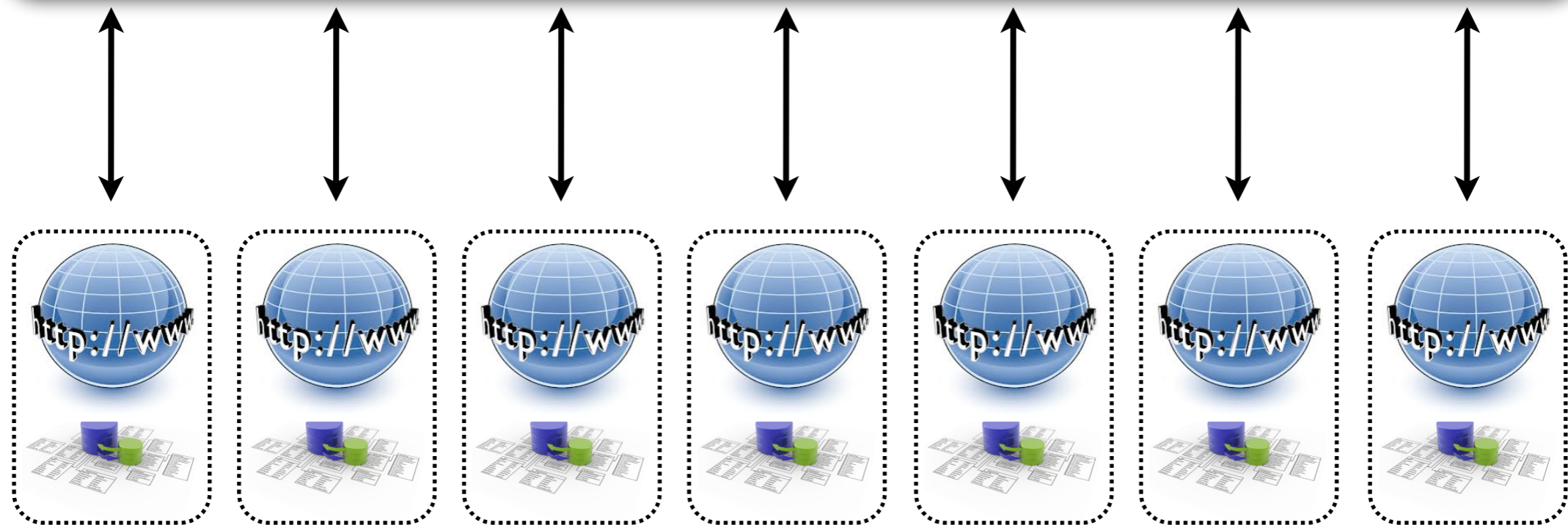
- 12:30 - 13:00 Discussion

VAMDC is in the cloud

Many UIs

web sites

VAMDC web-portal

scripts

Your software here

applications

A flock of databases

Science application
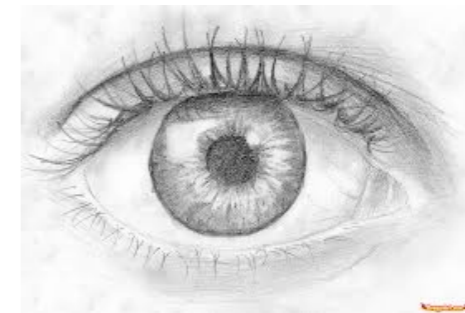
VAMDC data nodes

Two-stage selection

Select

XSAMS

Filter and extract

OR

Science code

XSAMS

- XML Schema for Atoms, Molecules and Solids

- IAEA originally; developed by VAMDC

- Rich ⇒ good for transforming to other formats

- See http://www.vamdc.eu/documents/standards/dataModel/vamdcxsams/index.html

Some UIs and applications

- VAMDC web portal - the starting point

- SpectCol - combine spectroscopy and collisions

- Specview - STScI's spectrum viewer with VAMDC support

- Query Builder - app to generate queries for scripting

- VAMDC as IVOA PDL service - astronomy integration

- Taverna - workflow engine with VAMDC plug-in

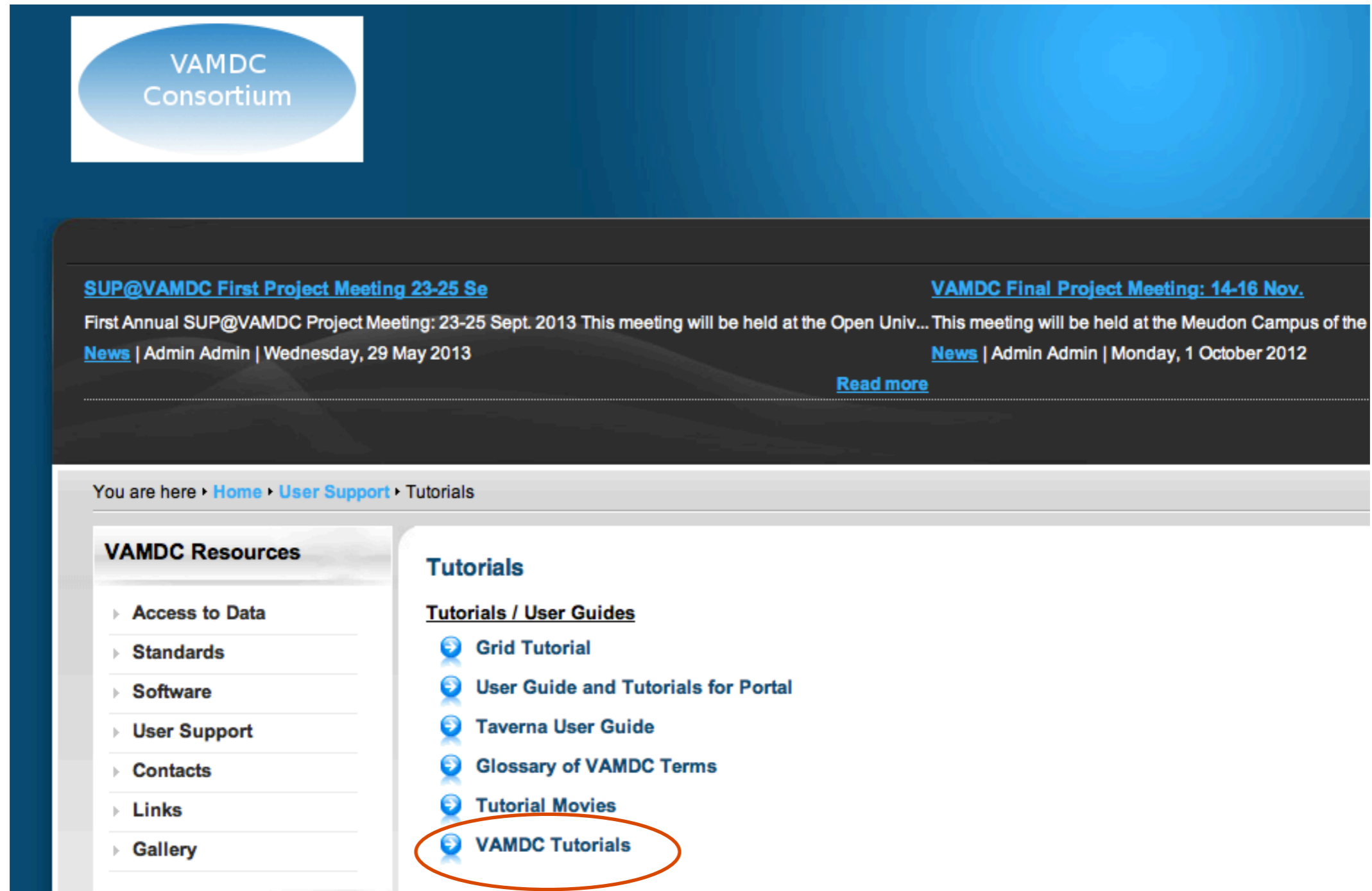- Selection of Python scripts from VAMDC

Finding things: registry

Application

2: Discover

3: Query

Registry web-service   1: Register   **Data node**
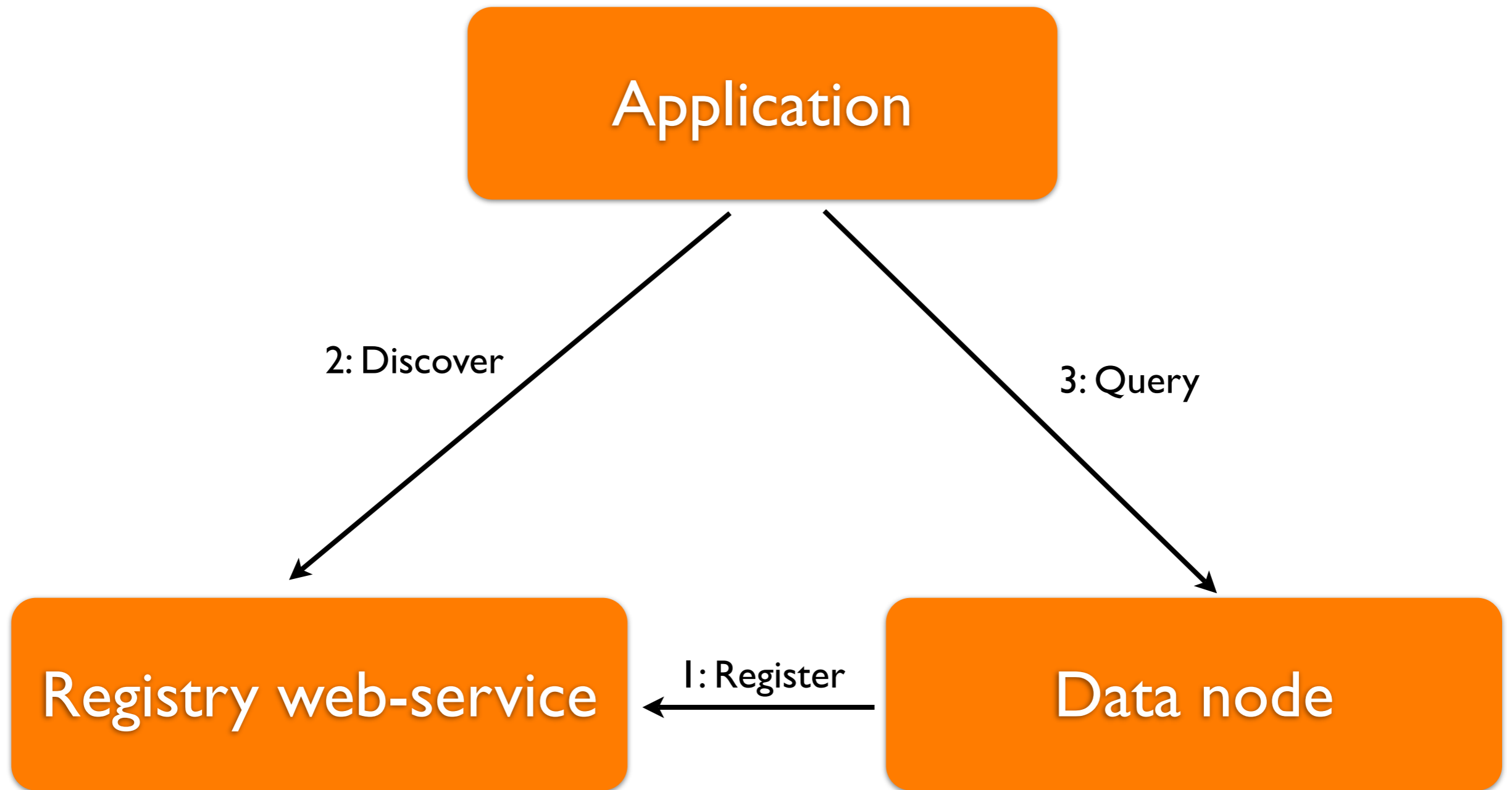
Avoids hard-coding addresses: data nodes may move

Demonstrations...

Hands-on exercises

http://www.vamdc.eu/usersupport/tutorials

For those using OU's PCs

- Log on to windows as vamdc

- Start VirtualBox VM - it runs Ubuntu Linux

- Log on to VM as vamdc

- System Python has relevant modules

- Look in ~/resources for some pre-installed apps

- Copy anything you want to keep before end of day