

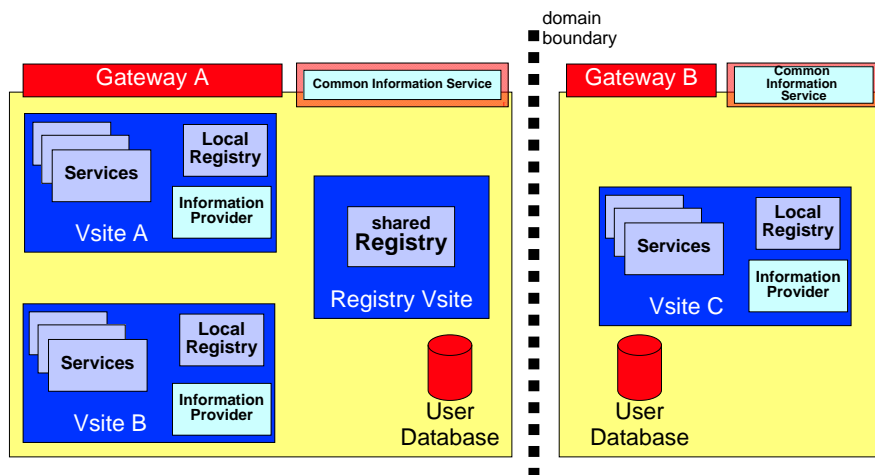
# Monitoring in **UNICORE** 6 - an update -

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## UNICORE 6 Components

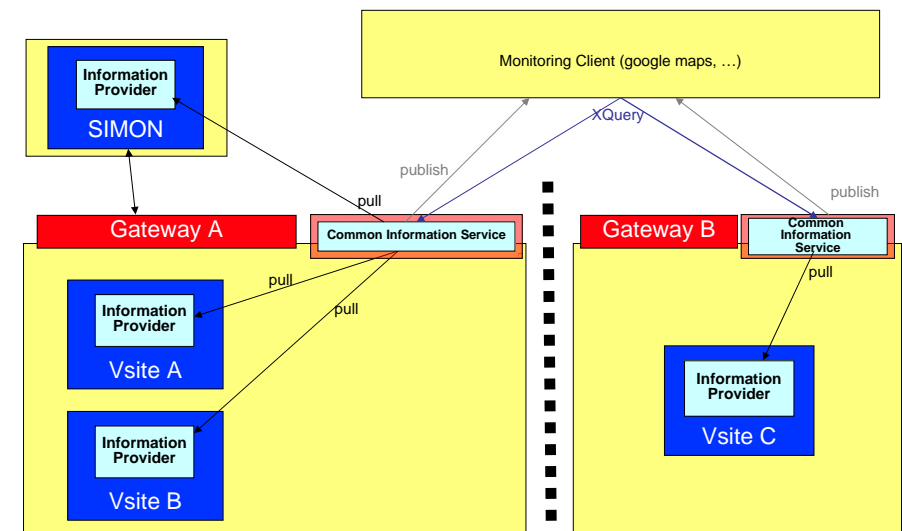


## Overview

- ▶ UNICORE 6 - Common Information Service
- ▶ CIS Data
- ▶ Job Monitoring
- ▶ Outlook



## Common Information Services - Architecture



## Common Information Service - Architecture

- ▶ CIS pulls information from Information Provider (IP) services
- ▶ CIS aggregates collected information and stores in XML DB
- ▶ CIS publishes information as Atom 1.0 feeds
- ▶ Client queries information from CIS or registers for the Atom feed
- ▶ SIMON sends test jobs to check for component failure / dynamic information
- ▶ CIS formats data in *GLUE 2.0 schema* format

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## Common Information Provider – Interface

- ▶ Data provided as Atom feed
- ▶ Currently provided information:
  - ▶ Name (AdminDomain, ComputingService)
  - ▶ URL
  - ▶ Description
  - ▶ GeoData (longitude, latitude)
  - ▶ *Number of physical CPUs in execution environment*
  - ▶ Job information (# total and # running jobs)
  - ▶ Health state
  - ▶ *Application environments*
  - ▶ Service start time

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## CIS Data - example

```
Eingabeaufforderung
Number of records in CIS: 1
1. <v29:Grid xmlns:v29="http://schemas.ogf.org/glue/2008/03/spec/2/0/v29" xmlns:
inf="http://www.unicore.eu/unicore6/cis/infoprovider" xmlns:xsd="http://www.w3.o
rg/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:
xsi="http://www.w3.org/2001/XMLSchema-instance">
  <AdminDomain>
    <Name>"Forschungszentrum Juelich GmbH"</Name>
    <Location>
      <Latitude>50.94545</Latitude>
      <Longitude>6.377907</Longitude>
    </Location>
    <Services>
      <ComputingService>
        <Name>"UNICORE 6 Target System Factory Service"</Name>
        <TotalJobs>0</TotalJobs>
        <RunningJobs>0</RunningJobs>
        <ComputingEndpoint>
          <URL>"https://dmon-unic.fz-juelich.de:9115/FZJ-JUGGLE-DMON/se
rvice/TargetSystemFactoryService"</URL>
          <HealthState>"ok"</HealthState>
          <StartTime>"2008-05-19T18:05:43.678+02:00"</StartTime>
          </ComputingEndpoint>
          <ComputingResource CreationTime="2008-05-19T18:05:43.678+02:00">
            <ExecutionEnvironment>
              <PhysicalCPUs>1</PhysicalCPUs>
            </ExecutionEnvironment>
            <ApplicationEnvironments>
              <ApplicationEnvironment>
                <Name>"Date"</Name>
                <Version>1.0</Version>
              </ApplicationEnvironment>
              <ApplicationEnvironment>
                <Name>"POURay"</Name>
                <Version>3.5</Version>
              </ApplicationEnvironment>
            </ApplicationEnvironments>
          </ComputingResource>
        </ComputingService>
      </Services>
    </AdminDomain>
  </v29:Grid>
```

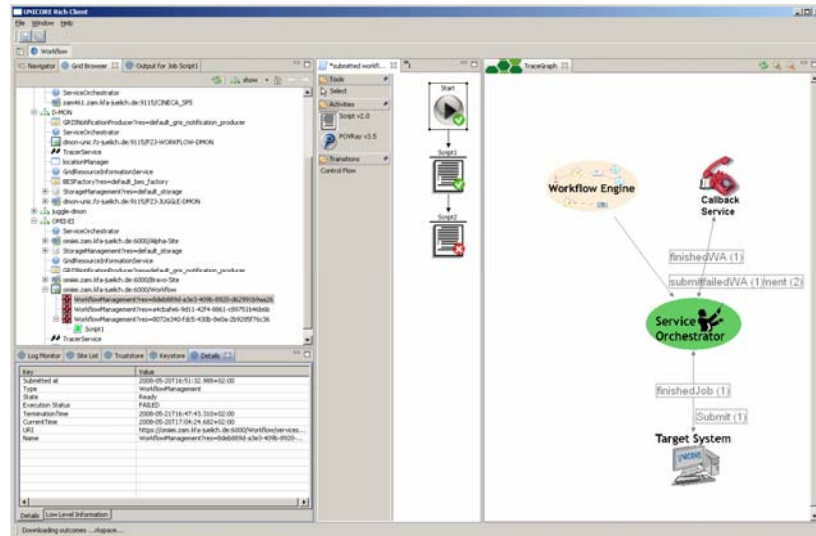
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## CIS Data - example

```
<ApplicationEnvironment>
  <Name>"Bash shell"</Name>
  <Version>3.1.16</Version>
</ApplicationEnvironment>
<ApplicationEnvironment>
  <Name>"C shell"</Name>
  <Version>6.14.00</Version>
</ApplicationEnvironment>
<ApplicationEnvironment>
  <Name>"Korn shell"</Name>
  <Version>"Version M 1993-12-28 q"</Version>
</ApplicationEnvironment>
<ApplicationEnvironment>
  <Name>"Perl"</Name>
  <Version>5.8.8</Version>
</ApplicationEnvironment>
<ApplicationEnvironment>
  <Name>"Python Script"</Name>
  <Version>2.4.2</Version>
</ApplicationEnvironment>
</ApplicationEnvironments>
</ComputingResource>
</ComputingService>
</Services>
<Extensions>
  <Extension>
    <Key>"UpSince"</Key>
    <Value>"Fri May 16 17:52:27 CEST 2008"</Value>
  </Extension>
  <Extension>
    <Key>"EntryLastPublished"</Key>
    <Value>"Mon May 19 18:05:43 CEST 2008"</Value>
  </Extension>
</Extensions>
</AdminDomain>
</v29:Grid>
```

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## Job Monitoring in User Client



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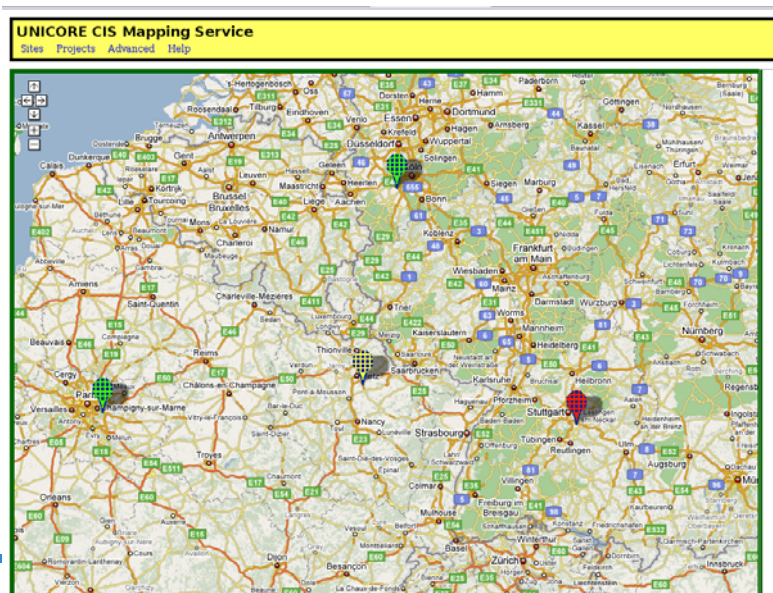
## Outlook

- ▶ Extend information provider
  - ▶ Add more data
  - ▶ Improve mechanisms for obtaining data
  - ▶ Add job monitoring information

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## User View



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