



EGEE Grid Hands On Training for MI-SASA Researchers
Mathematical Institute of Serbian Academy of Sciences and Arts

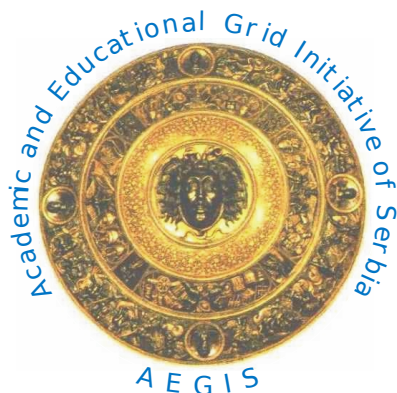
Information Service

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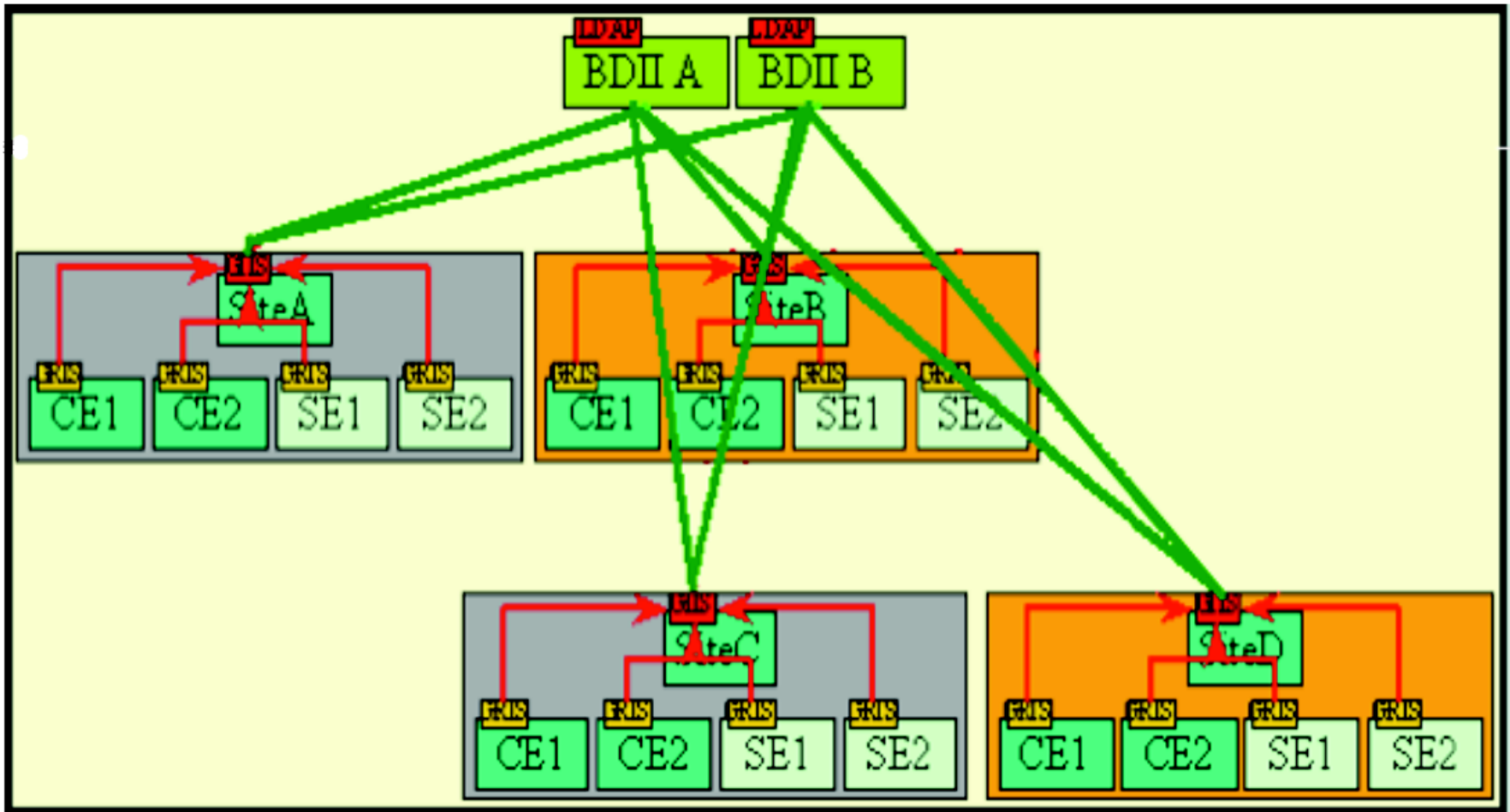
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www.eu-egEE.org



- The **Information Service (IS)** provides information about the Grid resources and their status.
- There are two types of information services on gLite grid:
 - MDS
 - R-GMA
- The **MDS** (Globus Monitoring and Discovery Service) implements the, an open source implementation of the Lightweight Directory Access Protocol (**LDAP**), a specialised database optimised for reading, browsing and searching information.
- **R-GMA** makes all the information appear like one large relational database that may be queried to find the information required.

- **BDII** (Berkeley Database Information Index) is an LDAP-based information system which holds information about all grid resources available.
- This information is published via a **GRIS**, which normally runs on the resource itself. **The site-level BDII** is used to store and publish data from all the resource-level BDIIs at a site.
- Finally, a **top-level BDII** is used as the top of the hierarchy. BDIIs at this level are configured to read from a specific set of sites, which effectively defines a view of the overall Grid resources. These BDIIs act as a cache by storing information about the Grid status in their database.



- **BDII Information System**

- Main Information System for the current production gLite based grids
- Two types of commands:

lcg-infosites: simple, meets most needs

lcg-info: supports more complex queries

- The `lcg-infosites` command can be used to obtain VO-specific information on existing Grid resources

Usage:

```
lcg-infosites --vo <vo name> options -v <verbose level>  
--is <BDII to query>
```

Examples:

```
lcg-infosites --vo aegis se
```

```
lcg-infosites --vo aegis ce
```

- The **Lightweight Directory Access Protocol**, or **LDAP** is an application protocol for querying and modifying data over network

- Usage:

```
ldapsearch -x -h <hostname> -p 2170 -b "mds-vo-name=local,
o=grid"
```

- Examples:

- resource:

```
ldapsearch -x -H ldap://ce64.ipb.ac.rs:2170/ -b 'Mds-vo-name=resource,o=Grid'
```

- sBDII

```
ldapsearch -x -H ldap://ce64.ipb.ac.rs:2170 -b mds-vo-name=AEGIS01-IPB-
SCL,o=grid
```

- top-level BDII

```
ldapsearch -x -H ldap://bdii.ipb.ac.rs:2170/ -b 'Mds-vo-name=cal,o=Grid'
```

- The **WatG** Browser (What is at the Grid Browser) is a web-based Grid Information System (GIS) visualization application providing detailed overview of the status and availability of various Grid resources in a given gLite-based e-Infrastructure.
- <http://watgbrowser.scl.rs:8080/>



[Documentation](#) | WatGBrowser-v1.1.4

Host

Base

Filter

Attributes

Submit

- ⊕ Mds-Vo-name=local,o=grid
- ⊕ Mds-Vo-name=resource,o=grid
- o=grid
- objectClass=organization