

Batch Systems and the Info (Dynamic) Provider scripts

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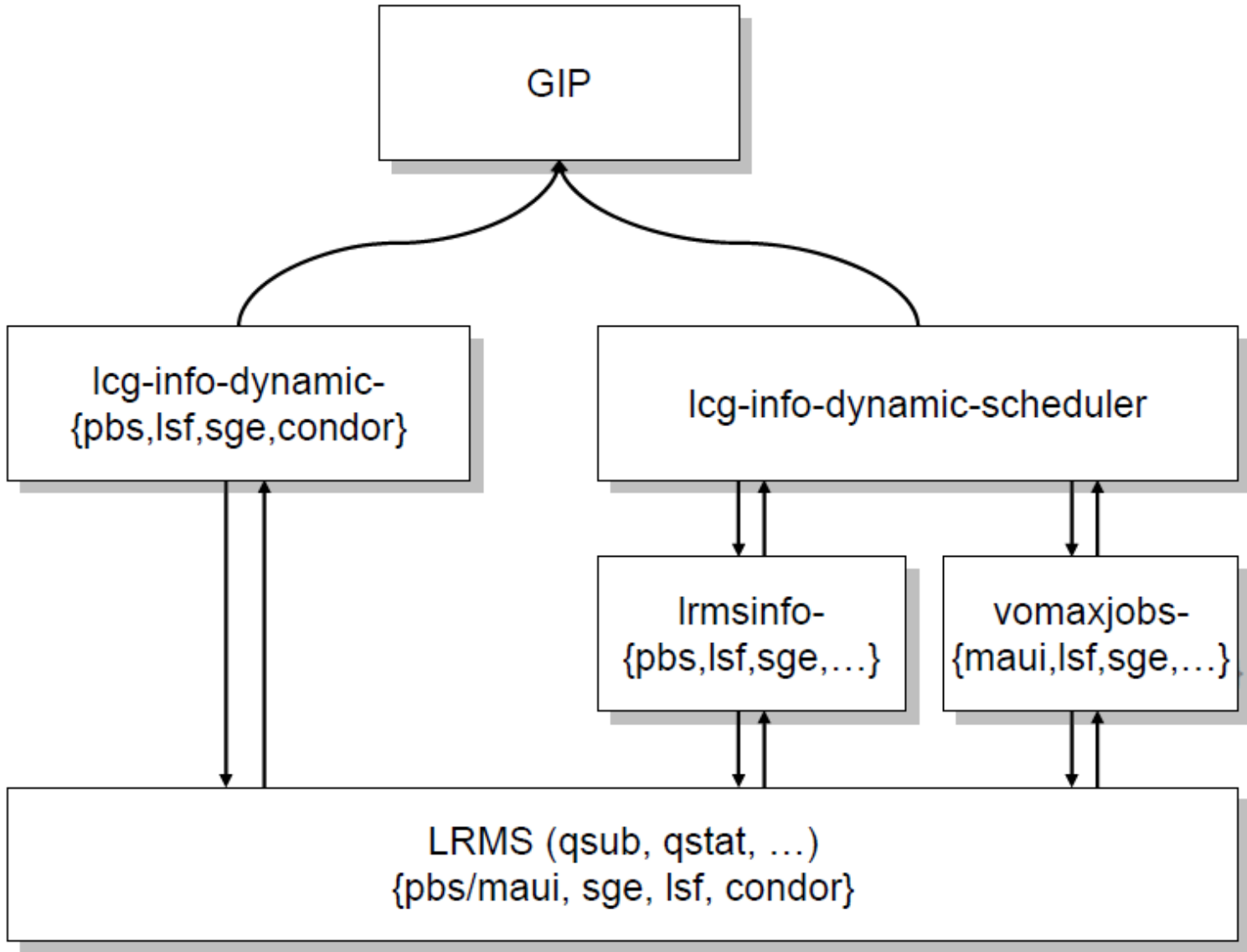
- **Generic Info provider (GIP) scripts**
- **Current situation**
- **Future situation**
- **Impact on batch system integration**
- **Upgrade path**
- **Questions**

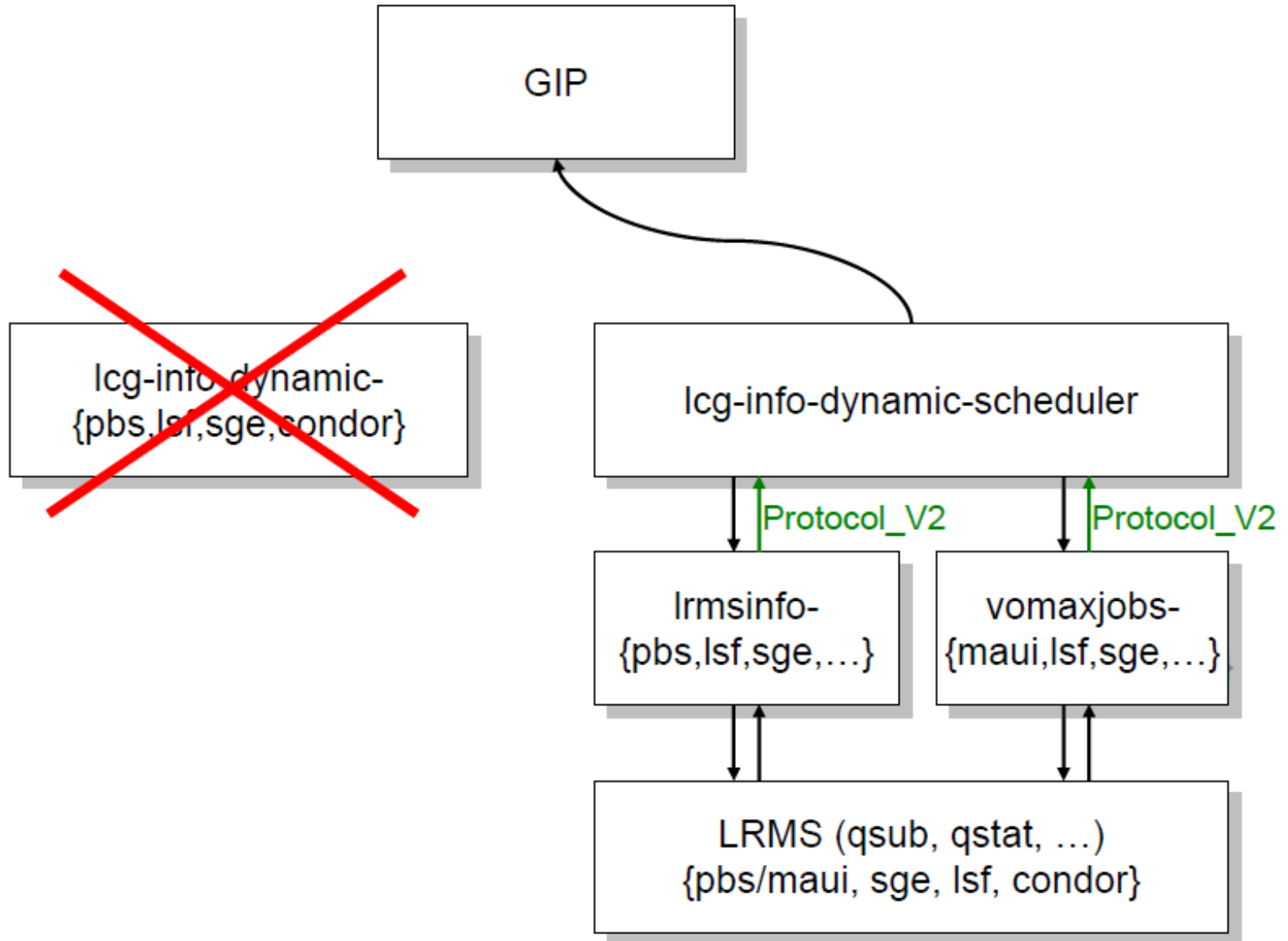
- **What are they?**

- Provide LDIF information about a grid service in accordance to the data model adopted (Glue schema)
- It can be used to produce any kind of information for use with LDAP based grid information systems
- Dynamic information (es. Running jobs, Free CPUs) is updated by means of GIP plug-ins

(from: G. Misurelli, CNAF INFN, I Corso di formazione INFN per amministratori di siti Grid)

- **Static information is inserted into GIP using a static LDIF file**
- **Which scripts currently exist for dynamic information?**
 - lcg-info-dynamic-`{pbs,lsf,condor,sge}`
 - These scripts query the underlying batch system directly
 - lcg-info-dynamic-scheduler
 - Uses a plugin architecture
 - The plugins query the underlying batch system
 - Two types of plugins: `lrmsinfo` and `vomaxjobs`
 - *lrmsinfo* scripts: `lrmsinfo-{pbs,lsf,condor,sge}`
 - *vomaxjobs* scripts: `vomaxjobs-{maui,lsf}`







- **Initially nothing changes for BSI**
 - If no new lrmsinfo and vomaxjobs scripts are written then the behaviour is as before
- **In the new setup there are actually *less* scripts to write and maintain**
- **There will not be a *big-bang* upgrade but a very phased upgrade path with full backward compatibility**
- **The BSI cookbook will contain information on the *new* setup only**

More details: <https://twiki.cern.ch/twiki/bin/view/EGEE/BatchSystems>

This transition will not be a *big-bang* upgrade but will be phased, e.g, for the batch system 'pbs':

1. a new version of the 'lcg-info-dynamic-scheduler' will be rolled out , with a flag 'use_old_style_output' set. If no new 'lrmsinfo-pbs' and 'vomaxjobs-maui' scripts are installed then the behaviour is as before
2. new versions of the 'lrmsinfo-pbs' and 'vomaxjobs-maui' scripts will be rolled out, but they will still produce old-style output (using a configuration setting)
3. the 'lrmsinfo-pbs' and 'vomaxjobs-maui' scripts will be configured to produce 'new style' output (Protocol_V2)
4. as the 'lcg-info-dynamic-scheduler' script still has it's configuration setting 'use_old_style_output' set, the GIP will not see anything different

Now for the new features:

1. the 'lcg-info-dynamic-pbs' script is stopped
2. the 'use_old_style_output' flag is set to 'false' in the 'lcg-info-dynamic-scheduler' script

The GIP now receives all information from only the 'lcg-info-dynamic-scheduler' script.

Thus a phased upgrade can be done for each batch system.



