Contribution ID: **41** Type: **Oral**

# DPM Evolution: a Disk Operations Management Engine for DPM

*Monday 10 October 2016 11:00 (15 minutes)*

The DPM (Disk Pool Manager) project is the most widely deployed solution for storage of large data repositories on Grid sites, and is completing the most important upgrade in its history, with the aim of bringing important new features, performance and easier long term maintainability.
Work has been done to make the so-called "legacy stack" optional, and substitute it with an advanced implementation that is based on the fastCGI and RESTful technologies.
Beside the obvious gain in making optional several legacy components that are difficult to maintain, this step brings important features together with performance enhancements. Among the most important features we can cite the simplification of the configuration, the possibility of working in a totally SRM-free mode, the implementation of quotas, free/used space on directories, and the implementation of volatile pools that can pull files from external sources, which can be used to deploy data caches.
Moreover, the communication with the new core, called DOME (Disk Operations Management Engine) now happens through secure HTTPS channels through an extensively documented,
industry-compliant protocol.
For this leap, referred to with the codename "DPM Evolution", the help of the DPM collaboration has been very important in the beta testing phases, and here we report about the technical choices and the first site experiences.

## Primary Keyword (Mandatory)

Storage systems

## Secondary Keyword (Optional)

Computing middleware

## Tertiary Keyword (Optional)

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**Session Classification:** Track 4: Data Handling

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