

AMGA PHP API

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- **AMGA:**
 - Features
 - Architecture
 - Interfaces
 - Client-Server protocol

- **AMGA PHP API**
 - Features
 - Methods
 - Examples

- **gLibrary**

- **Official gLite Metadata Catalogue**

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 - Username/password
 - General X509 certificates
 - Grid-proxy certificates

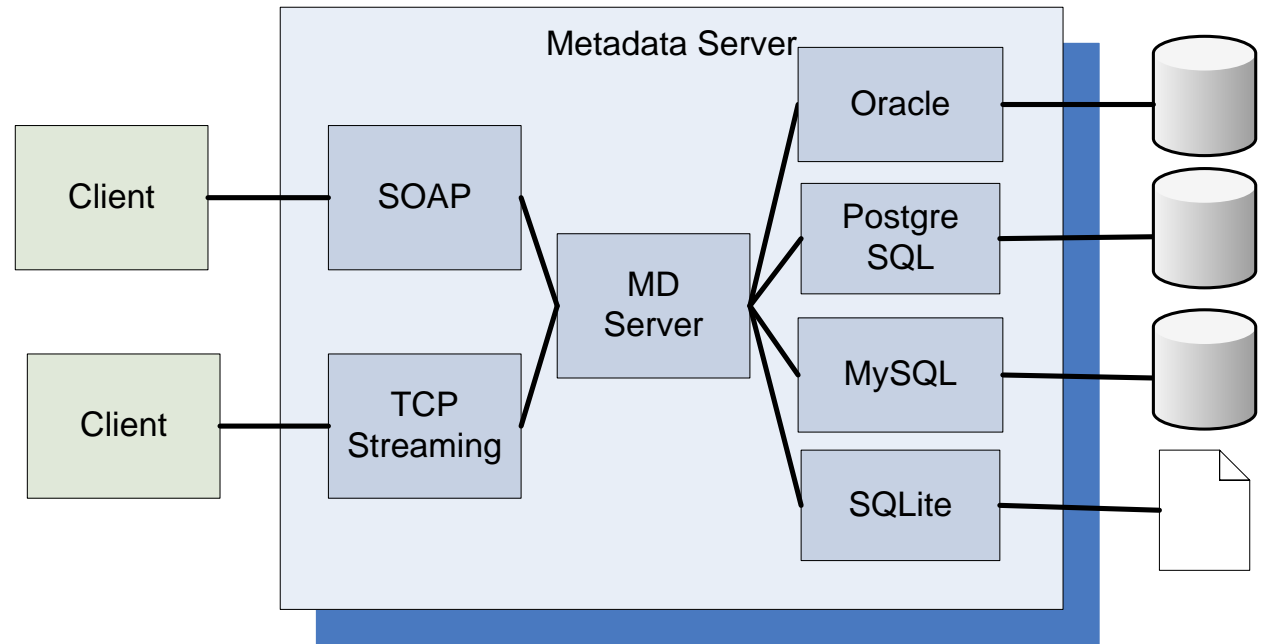
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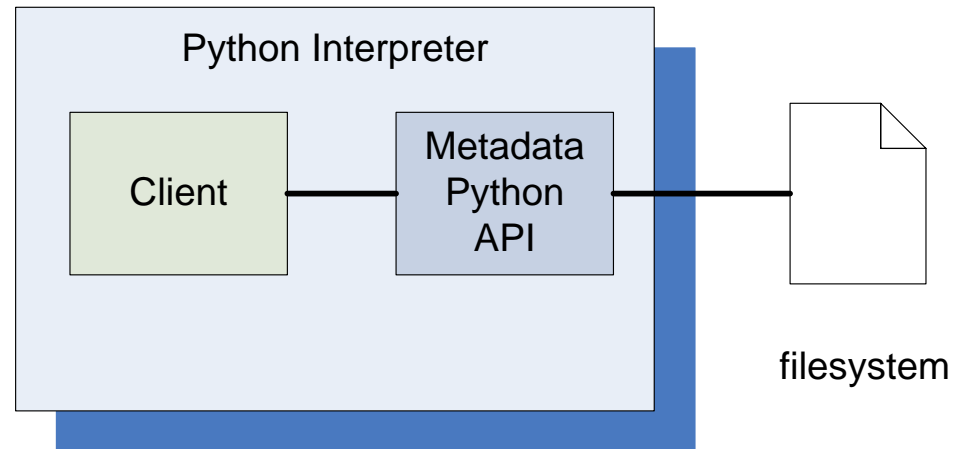
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- **Authorization using ACLs**
- **SQL-like query language**

- **C++ multiprocess server**
 - Runs on any Linux flavour
- **Backends**
 - Oracle, MySQL, PostgreSQL, SQLite



- **Two front-ends**
 - TCP Streaming
 - High performance
 - Client API for C++, Java, Python, Perl, Ruby
 - SOAP
 - Interoperability

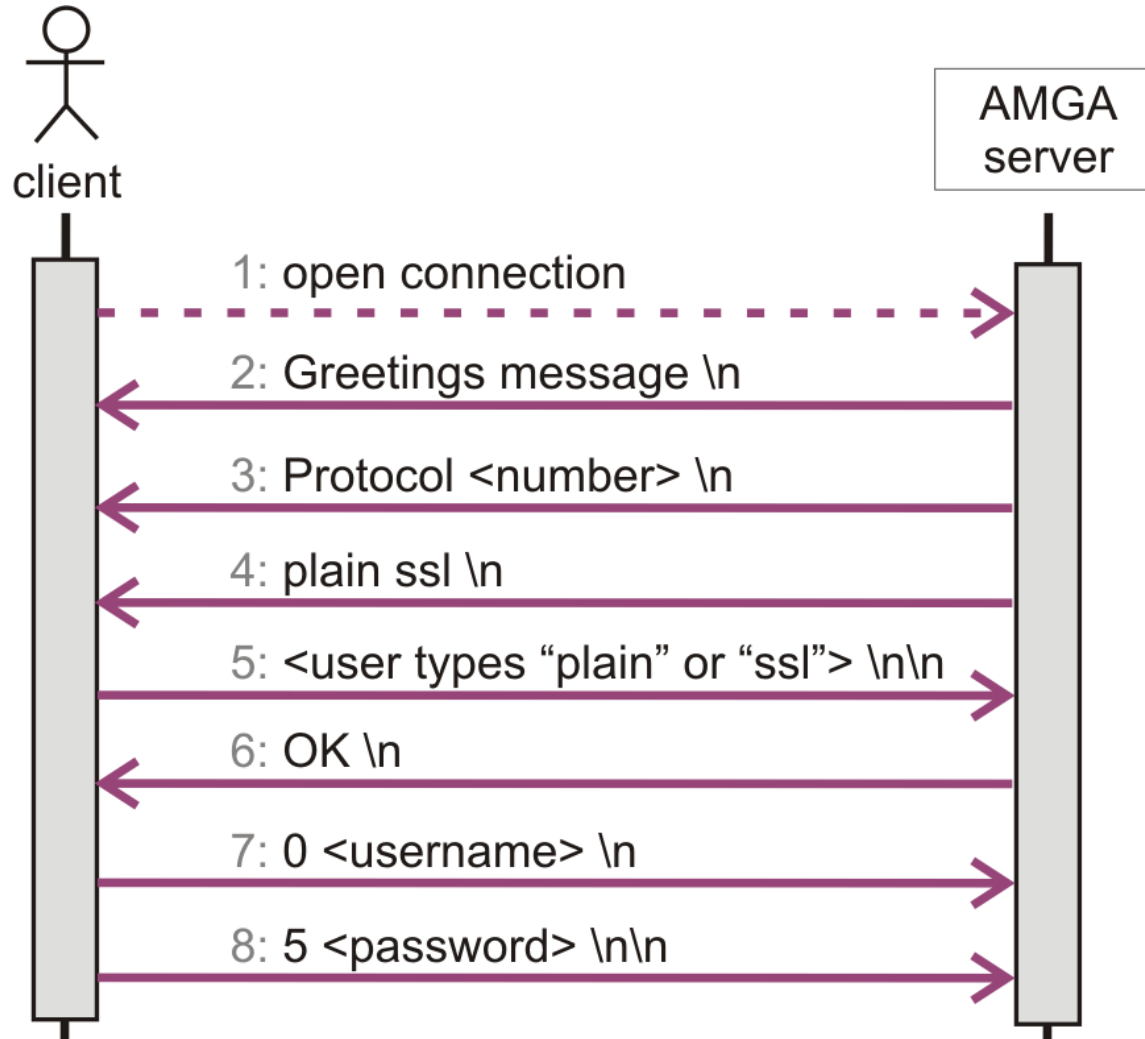
- **Also implemented as standalone Python library**
 - Data stored on filesystem



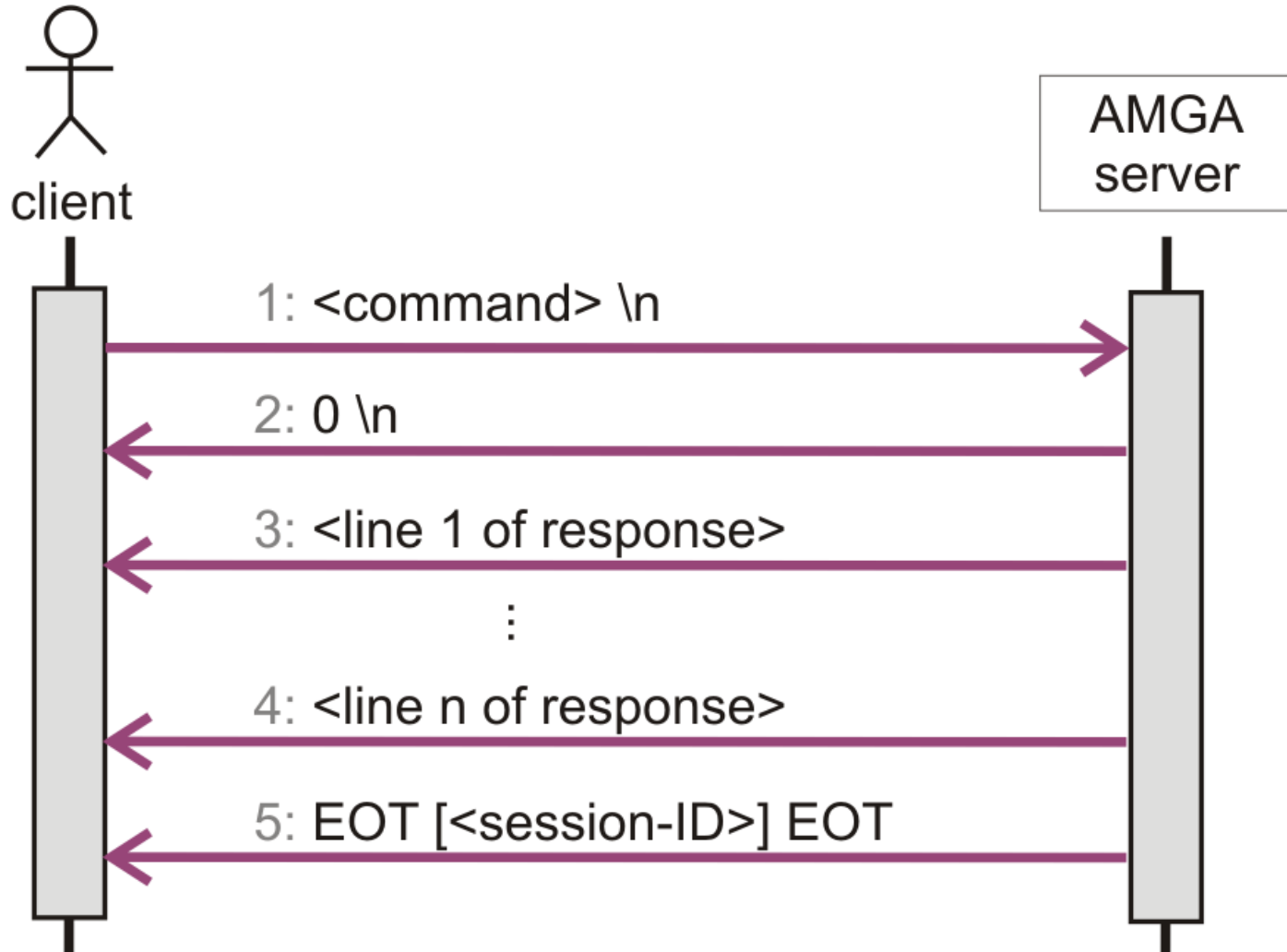
- **TCP Streaming Front-end**
 - mdcli & mdclient and C++ API (md_cli.h, MD_Client.h)
 - Python Client API
 - Java Client API and command line mdjavaclient.sh & mdjavacli.sh (also under Windows !!)
 - AMGA Web Interface
 - **AMGA PHP API**

- **SOAP Front-end (WSDL)**
 - C++ gSOAP
 - AXIS (Java)
 - ZSI (Python)

- Handshake



- Sending command and retrieving output



- **PHP5 Object Oriented Interface**
- **Ported from the C++, Python and Perl Client APIs**
- **Based on the MDClient class**
- **Can establish plain/SSL connection to AMGA server**
- **Provides a method for each AMGA command and a generic *execute(\$command)***

- `void __construct(string $host, integer $port, [string $login = "anonymous"], [string $password = ""], [boolean $keepalive = true])`
- `void requireSSL(string $key, string $cert, [$capath = "certificates"])`
- `void connect()`
- `void execute(string $command)`
- `void getAttr(string $file, array $attributes)`
- `void setAttr(string $file, string $keys, string $values)`
- `void addEntry(string $file, string $keys, string $values)`
- `void addAttr(string $file, string $name, string $t)`
- `string listEntries(string $pattern)`
- `array(array(attributes), array(types)) listAttr(string $file)`
- `void selectAttr(array $attributes, string $query)`
- `array getSelectAttrEntry()`
- ...

```
// including AMGA PHP class
include 'mdclient.php';

// login parameters
$host = "glibrary.ct.infn.it";
$port = 8822;
$login = "NULL";

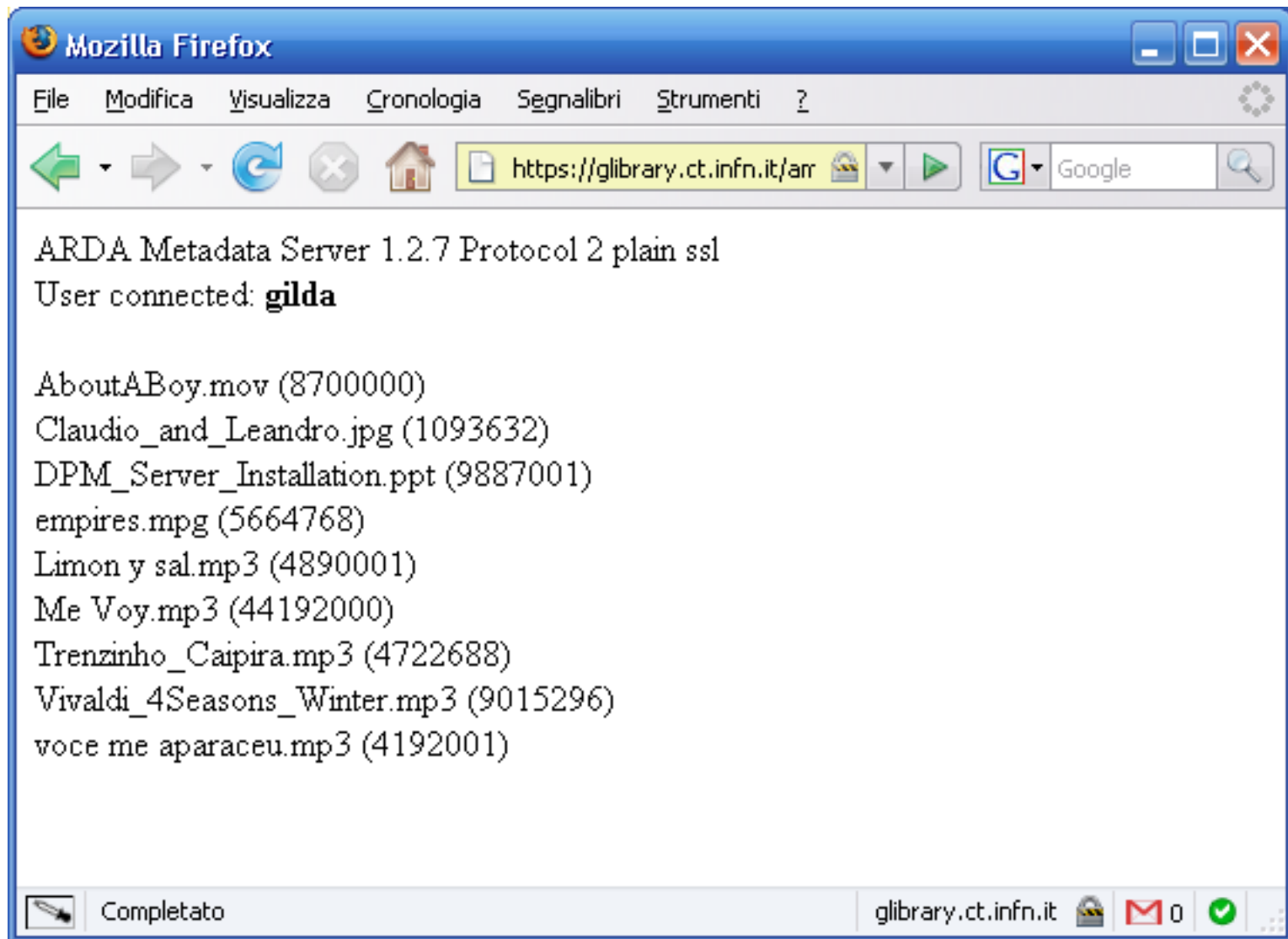
// establishing ssl connection with proxy authentication
try
{
    $client = new gLibrary($host, $port, $login);
    $client->requireSSL("x509_xxx", "x509_xxx");
    $client->connect();
}
catch (Exception $e)
{
    echo 'Unable to connect: '. $e->getMessage(). "\n";
}
```

```
// printing the greetings message
echo $client->getGreetings()."<br>";

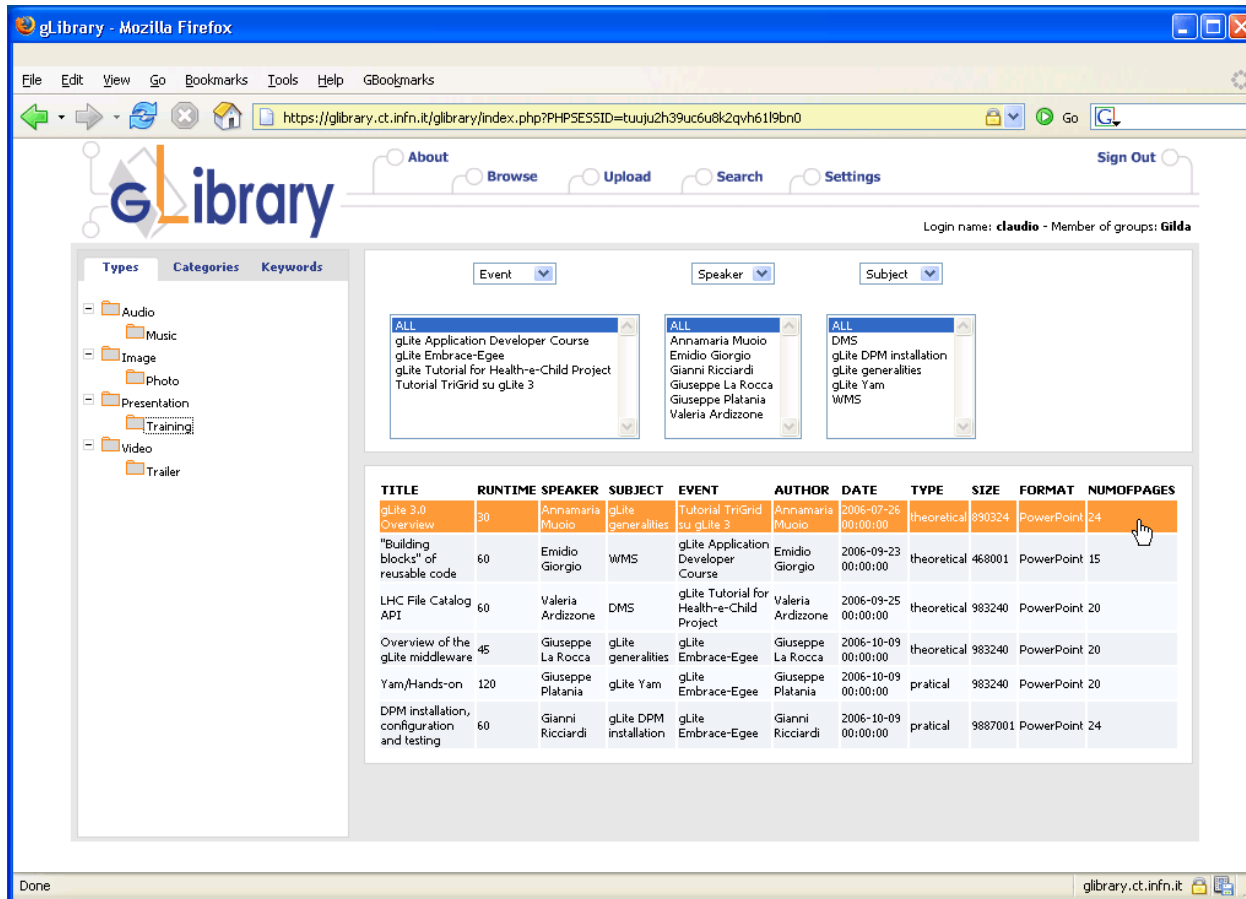
// retrieving name of the user connected
echo "User connected: <b>".$client->whoami()."</b><br><br>";

// getting FileName and Size of all entries
// in /gLibTest/Entries where Size > 1000000
$attrs = array("/gLibTest/Entries:FileName", "Size");
$condition = "'Size > 1000000 order(FileName)';
$num_attrs = count($attrs);

$result = $client->selectAttr($attrs, $condition);
while (!$client->eot())
{
    $FileName = $client->getSelectAttrEntry();
    $Size = $client->getSelectAttrEntry();
    echo $FileName[0]. " (".$Size[0].")<br>";
}
```



- Grid digital asset management software based on AMGA PHP API



gLibrary - Mozilla Firefox

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Event: ALL Speaker: ALL Subject: ALL

TITLE	RUNTIME	SPEAKER	SUBJECT	EVENT	AUTHOR	DATE	TYPE	SIZE	FORMAT	NUMOF PAGES
gLite 3.0 Overview	30	Annamaria Muoio	gLite generalities	Tutorial TriGrid su gLite 3	Annamaria Muoio	2006-07-26 00:00:00	theoretical	890324	PowerPoint	24
"Building blocks" of reusable code	60	Emidio Giorgio	WMS	gLite Application Developer Course	Emidio Giorgio	2006-09-23 00:00:00	theoretical	468001	PowerPoint	15
LHC File Catalog API	60	Valeria Ardizzone	DMS	gLite Tutorial for Health-e-Child Project	Valeria Ardizzone	2006-09-25 00:00:00	theoretical	983240	PowerPoint	20
Overview of the gLite middleware	45	Giuseppe La Rocca	gLite generalities	gLite Embrace-Egee	Giuseppe La Rocca	2006-10-09 00:00:00	theoretical	983240	PowerPoint	20
Yam/Hands-on	120	Giuseppe Platania	gLite Yam	gLite Embrace-Egee	Giuseppe Platania	2006-10-09 00:00:00	practical	983240	PowerPoint	20
DPM installation, configuration and testing	60	Gianni Ricciardi	gLite DPM installation	gLite Embrace-Egee	Gianni Ricciardi	2006-10-09 00:00:00	practical	9887001	PowerPoint	24

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<https://glibrary.ct.infn.it>

- **AMGA - ARDA Metadata Catalogue Project**
<http://amga.web.cern.ch/amga/>
- **AMGA PHP API gLite Module**
<http://jra1mw.cvs.cern.ch:8180/cgi-bin/jra1mw.cgi/org.glite.amga.api-php/>
- **AMGA PHP API Documentation**
<http://amga.web.cern.ch/amga/php/index.html>
- **gLibrary**
<https://glibrary.ct.infn.it>

