1. **Introduction**

This document will cover how to establish connection with the MongoDB server. It will show how to access in text mode through the command line and connection examples for PHP and JAVA.

2. **Service access information**

   Server name: mongodb-rdlab.lsi.upc.edu
   Port: 27017

You can get a *username* and *password* by mail at rdlab@lsi.upc.edu or by web at http://rdlab.lsi.upc.edu/index.php/en/services/resources-request.html

**NOTE:** Database name will be the same as your *username*. 
3. **Text mode connection**

In order to connect in textual mode (terminal or Command Line Interface) we can type this command while in a Unix system:

```
mongo mongodb-rdlab.lsi.upc.edu
```

This way a connection with the server will be established, but it is still necessary to authenticate against the database:

```
use <database>
db.auth("<username>"","<password>")
```

With “show collections;“ we can check if we can list the contents of our database:

```
show collections
```

4. **Php connection example**

If we want to establish connection from a PHP environment, we can do it by using the next code snippet:

```php
$server = "mongodb-rdlab.lsi.upc.edu";
$username = "<username>";
$password = "<password>";
$database = "<database>";
$m = new MongoClient("mongodb://${username}:${password}@${server}",
    array("db" => 
      "$\{database\}"));
$db = $m->selectDB("${database}");

In order to know if it works correctly, we can try to list the contents of one of our collections:

```php
$collection = new MongoCollection($db, '<myCollection>');
$cursor = $collection->find();
foreach ($cursor as $doc) {
    var_dump($doc);
}
```
5. **Java connection example**

To establish connection from a java project, it is necessary to download the driver mongo-java-driver-2.10.1.jar, add it to the CLASSPATH and import it with the commands:

```java
import com.mongodb.MongoClient;
import com.mongodb.MongoException;
import com.mongodb.WriteConcern;
import com.mongodb.DB;
import com.mongodb.DBCollection;
import com.mongodb.BasicDBObject;
import com.mongodbDBObject;
import com.mongodb.DBCursor;
import com.mongodb.ServerAddress;
```

Then, execute this snipped to connect:

```java
String server = "mongodb-rdlab.lsi.upc.edu";
String username = "<username>";
String password = "<password>";
String database = "<database>";

MongoClient mongoClient = new MongoClient(server);
DB db = mongoClient.getDB(database);
boolean auth = db.authenticate(username,
password.toCharArray());
```

In order to know if it has worked correctly, we can try to list our collections:

```java
Set<String> colls = db.getCollectionNames();
for (String s : colls) {
    System.out.println(s);
}
```

6. **Links**

1. **mongoDB manual:**
   [http://docs.mongodb.org/manual/](http://docs.mongodb.org/manual/)

2. **mongoDB desde PHP:**
   [http://docs.mongodb.org/ecosystem/drivers/php/](http://docs.mongodb.org/ecosystem/drivers/php/)
3. mongoDB desde Java:
   http://docs.mongodb.org/ecosystem/drivers/java/