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***Deployment and Administration Guide v. 0.1***

**caGRID**

**Identifier Framework**

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# Deployment Planning

Prior to deployment, the identifier prefix must be established. This involves determining the URL end points for the naming authority and the prefix authority, as well as the PURL top level domain mapping to the naming authority.

It is particularly important, and critical, to choose an appropriate domain name for the prefix authority (PURL server) and the PURL [top level domain](http://purl.oclc.org/docs/faq.html#toc1.8), as these two components make up the identifier prefix, and this is not expected to ever change after deployment. Recall that identifiers are permanent URIs by definition. The live forever.

The naming authority URL can change at anytime since it is actually hidden or protected internally by the prefix authority. When such a change occurs, the mapping from PURL domain to naming authority is simply updated to specify the new end point.

The rest of this guide assumes the following examples:

|  |
| --- |
| The Prefix Authority (PURL server) End Point |
| http://identifiers-pa.nci.nih.gov |
| PURL Top Level Domain |
| production |
| Naming Authority End Point |
| http://identifiers-na.nci.nih.gov/namingauthority/NamingAuthorityService |

With the settings above, the identifiers prefix becomes:

http://identifiers-pa.nci.nih.gov/production

And example of identifiers are:

http://identifiers-pa.nci.nih.gov/production/030494848

http://identifiers-pa.nci.nih.gov/production/948754743

etc, etc…

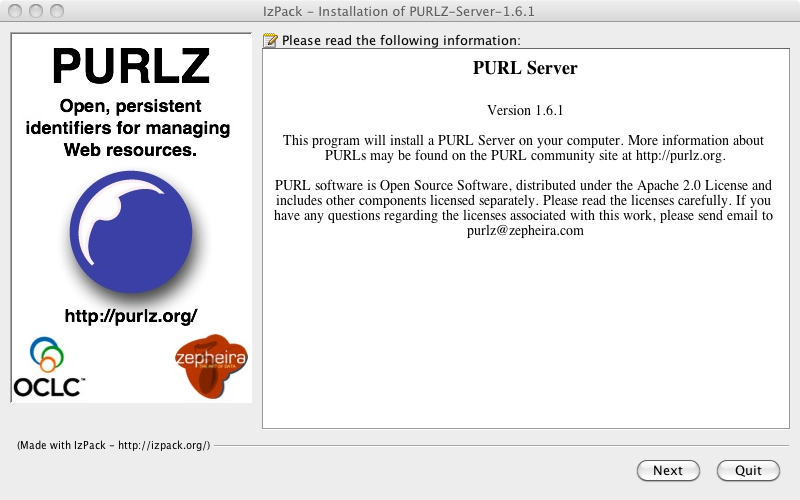
When an identifier such as *http://identifiers-pa.nci.nih.gov/production/030494848* is “followed” (resolved), the prefix authority (PURL) redirects the client to *http://identifiers-na.nci.nih.gov/namingauthority/NamingAuthorityService/030494848* for resolution services.

# Deploying PURL

## Installing PURLZ

Download PURLZ: <http://purlz.org/project/purl/downloads/PURLZ-Server-1.6.1.jar>

Double click the jar file or use “*java –jar PURLZ-Server-1.6.1.jar*” from a terminal window to start the installer.



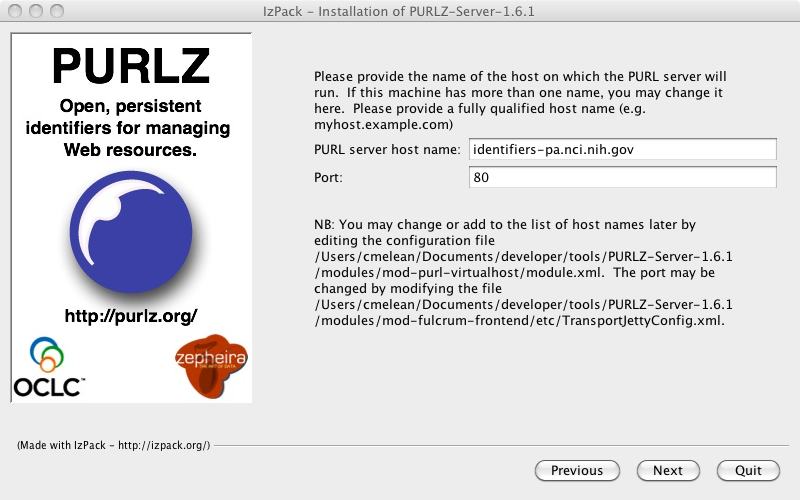
Click ***Next.***



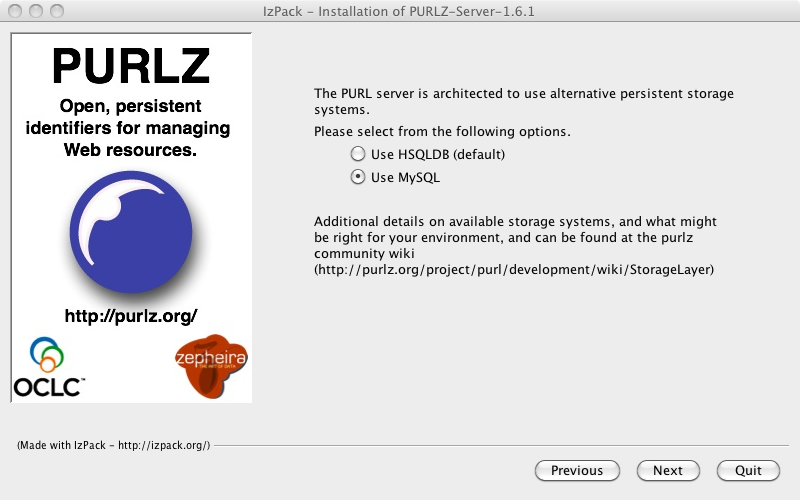
Accept the terms of the license agreement and click ***Next.***



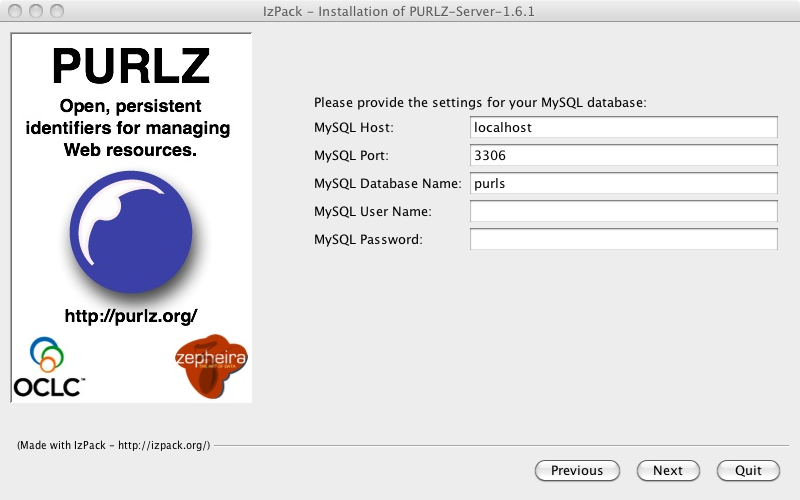
Specify an installation path and click ***Next.***



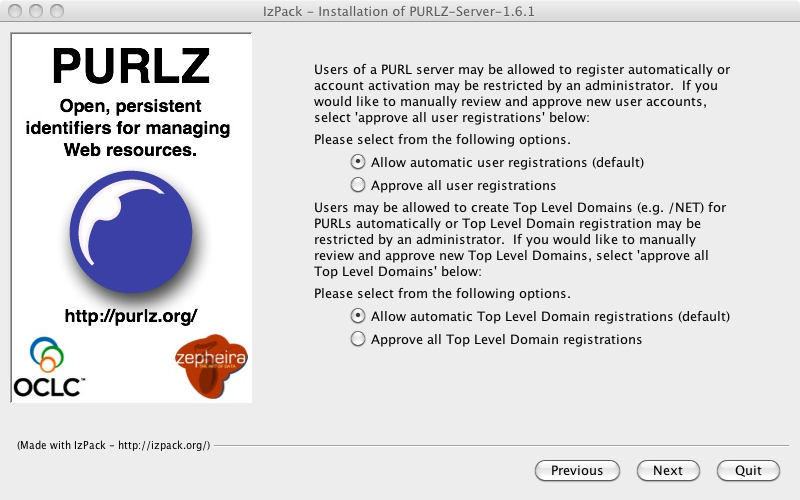
Enter the host name, port number, and click ***Next.***



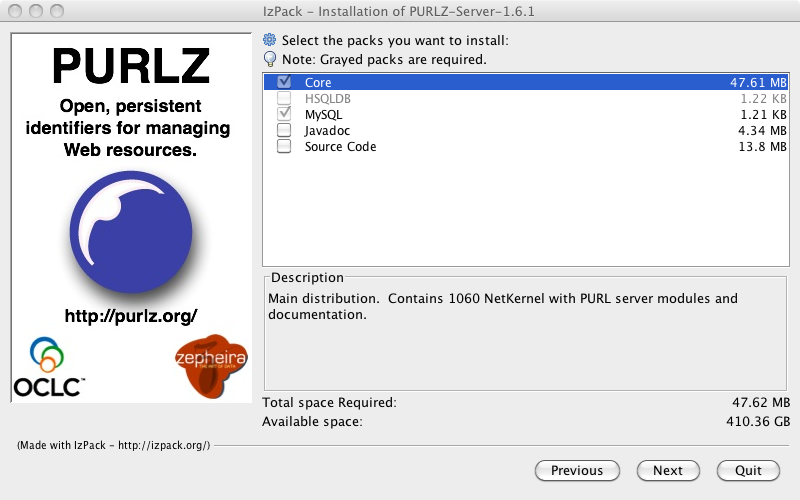
Choose “*Use MySQL*” and click ***Next.***



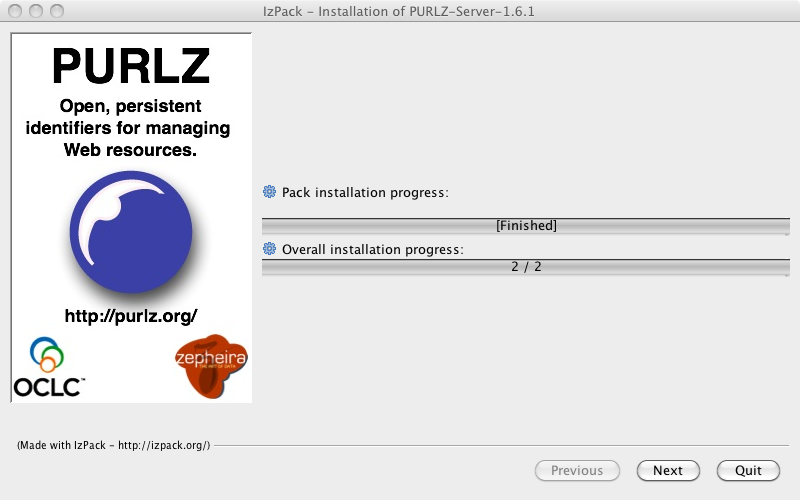
Enter *MySQL* connectivity parameters and click ***Next.***



For development and training environments, it’s probably ok to accept the defaults here. In controlled environments such as production, it is recommended that a PURL administrator be designated to approve user and top level domain registrations. Click ***Next***.



Accept defaults and click ***Next***.



The installer proceeds to complete the installation. Click ***Next*** twice and then ***Done***.

To start the server:

$ cd /Applications/PURLZ-Server-1.6.1/bin

$ ./start.sh (or startup.bat if using MS Windows)

Get started with the server by going to *http://identifiers-pa.nci.nih.gov*

You may log into the server as ‘*admin’* with the password ‘*password’* and change the password after you have logged in by modifying the user record.

## Top Level Domain Creation

A PURL domain is needed to identify the target naming authority. The domain binds the identifier prefix to the naming authority. A prefix authority (PURL server) can then be used as an authority for multiple naming authorities by defining corresponding domains.

Following our deployment plan (Chapter 1), the goal is to create the following mapping:

***production*** => *http://identifiers-na.nci.nih.gov/namingauthority/NamingAuthorityService*

Where ***production*** is our [PURL domain](http://purl.oclc.org/docs/faq.html#toc1.8), and the mapping itself is a [partial-redirect PURL](http://purl.oclc.org/docs/faq.html#toc1.9).