

HYDROSERVER LITE INSTALLATION GUIDE

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PURPOSE

The purpose of this document is show you how to set up the HydroServer Lite software on a 3rd party-hosted web server.

HydroServer Lite is an implementation of the CUAHSI HIS WaterOneFlow web services (see <http://his.cuahsi.org/>), and a standalone data publishing tool for hydrologic data.

To learn more about HydroServer Lite, or to participate in the software development effort for HydroServer Lite, please visit: <http://hydroserverlite.codeplex.com>.

STEPS FOR SETTING UP HYDROSERVER LITE

CREATE A WEB SITE

The first step is to create an account on a webhosting site. This example uses a free webhosting service found at <http://www.000webhost.com/> but you may also use any other server that has hosting space and allows a database to be created.

Open a web browser and go to <http://www.000webhost.com>. Once there, you will need to create a username and enter your email. After receiving a confirmation e-mail, your account is created and ready to be used. The following figure shows features supported by the free account on this service. Note that MySQL is included. This is a requirement of HydroServer Lite.

	» Free Hosting	» Premium Hosting
Price	\$0.00	\$4.84 / month
Disk Space	1500 MB	Unlimited Disk Space!
Data Transfer	100 GB / month	Unlimited Data Transfer!
Add-on Domains	5	Unlimited
Sub-domains	5	Unlimited
E-mail Addresses	5	Unlimited
MySQL Databases	2	Unlimited
Free domain yourname.COM, .NET, .ORG, .INFO, .CO.UK	✗	✓
Control Panel	Custom Panel	cPanel Pro, see demo
Reseller Hosting Feature	✗	✓
	Order Now	Order Now
Simple Site Builder	✓	✓
Advanced Site Builder	✗	✓

CONFIGURE MYSQL DATABASE AND USER

The user account creation system will send you an email to confirm your account. Confirm your account and then Log-in to your account and select CPanel from the main “List of Accounts” window. CPanel is short for Control Panel or the main administration panel. Select the MySQL icon near the bottom of the page and then create a new MySQL database and database user.

The screenshot shows the 000webhost.com Members Area in a Mozilla Firefox browser. The page has a header with the 000webhost.com logo and navigation links: LIST ACCOUNTS, EARN MONEY!, GET HELP, and LOGOUT [X]. Below the header, there's a section for "Manage another domain" with a dropdown menu showing "hydroserver.hostei.com" and buttons for "Go" and "Create New".

The main section is titled "Manage MySQL Databases" and includes a MySQL logo. It contains a paragraph explaining that MySQL databases are required by many web applications and that users need to create a database and user. It also includes an important note: "Important: MySQL Host for any database in this account is mysql10.000webhost.com, do not use localhost!".

Below this is a "Create new database and user" section with a form. The form has four input fields: "MySQL database name:" (containing "a6173376_his"), "MySQL user name:" (containing "a6173376_his"), "Password for MySQL user:" (containing "*****"), and "Enter password again:" (containing "*****"). There is a "Create database" button at the bottom of the form.

To the right of the form is an "Account Information" table with the following data:

» Account Information	
Domain	hydroserver.hostei.com
Username	a6173376
Password	*****
Disk Usage	0.02 / 1500.0 MB
Bandwidth	100000 MB (100GB)
Home Root	/home/a6173376
Server Name	server33.000webhost.com
IP Address	31.170.160.97
Apache ver.	2.2.19 (Unix)
PHP version	5.2.*
MySQL ver.	5.1
Activated On	2012-08-06 17:08
Status	Active

Below the table is a "HOSTING24" logo with the text "Unlimited Bandwidth" and "24/7 USER SUPPORT".

At the bottom of the page, there is a "List of your current databases and users:" section with a table that has columns for "MySQL Database", "MySQL User", "MySQL Host", and "Action". The table is currently empty, with the text "No MySQL databases are created" displayed below it. There is a "[Go Back]" link at the bottom right of the page.

Write down the database host name, database name, database username, and database password. YOU WILL NEED THIS LATER!



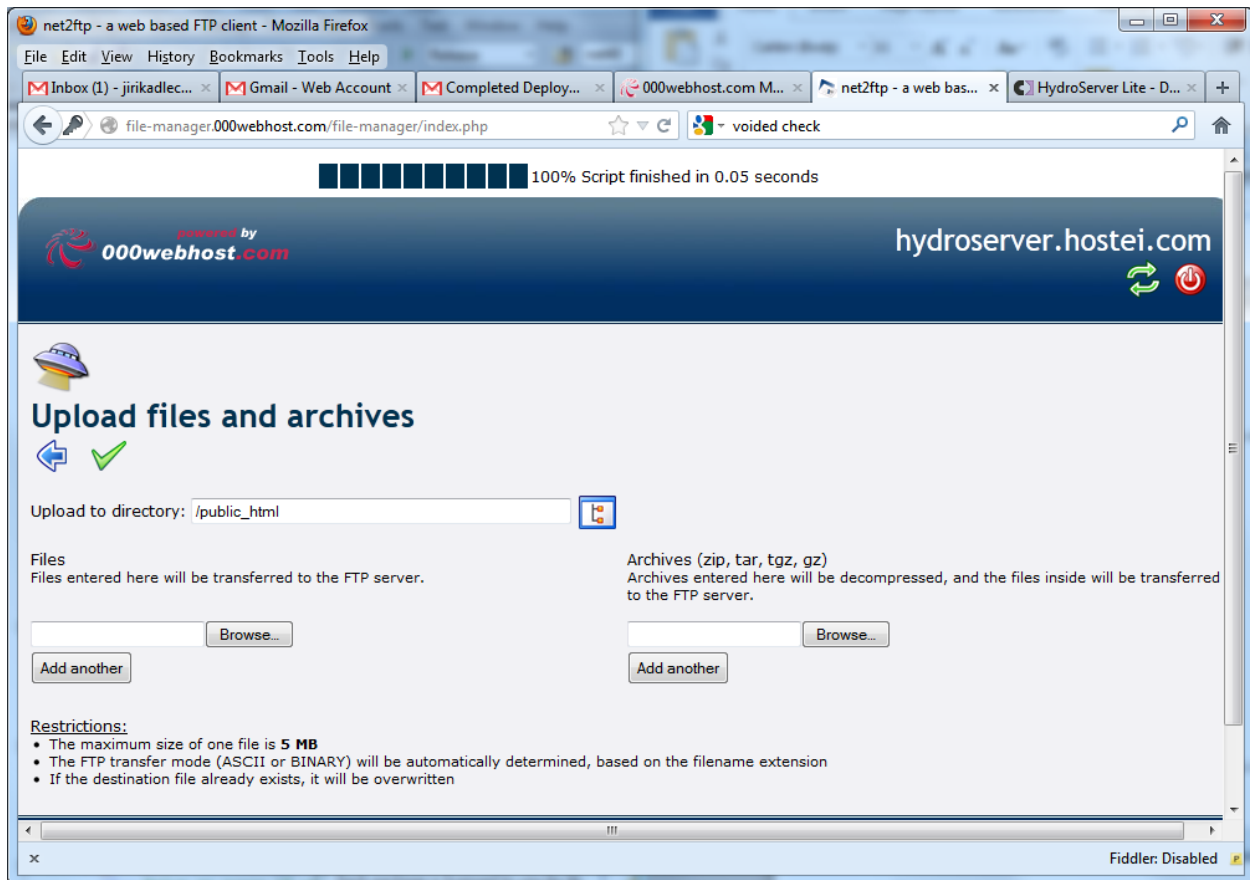
Information

MySQL database will be created in 1 minute. Use these details for your PHP scripts:

```
$mysql_host = "mysql10.000webhost.com";  
$mysql_database = "a6173376_his";  
$mysql_user = "a6173376_his";  
$mysql_password = "MapW1nd0w";
```

COPY HYDROSERVER LITE FILES TO THE SERVER

Download the HydroServer Lite files from <http://hydroserverlite.codeplex.com/>. The files will download as a zipped file called hydroserverlite_2_0.zip. To upload the files to the server, open your CPanel, go to FileManager, Select “Upload”, choose the public root directory “/public_html” and select the archives (zip, tar, gz) option, and upload the HydroServer Lite zipped file. The green checkmark will upload your file and unzip it to the root of your new web site.

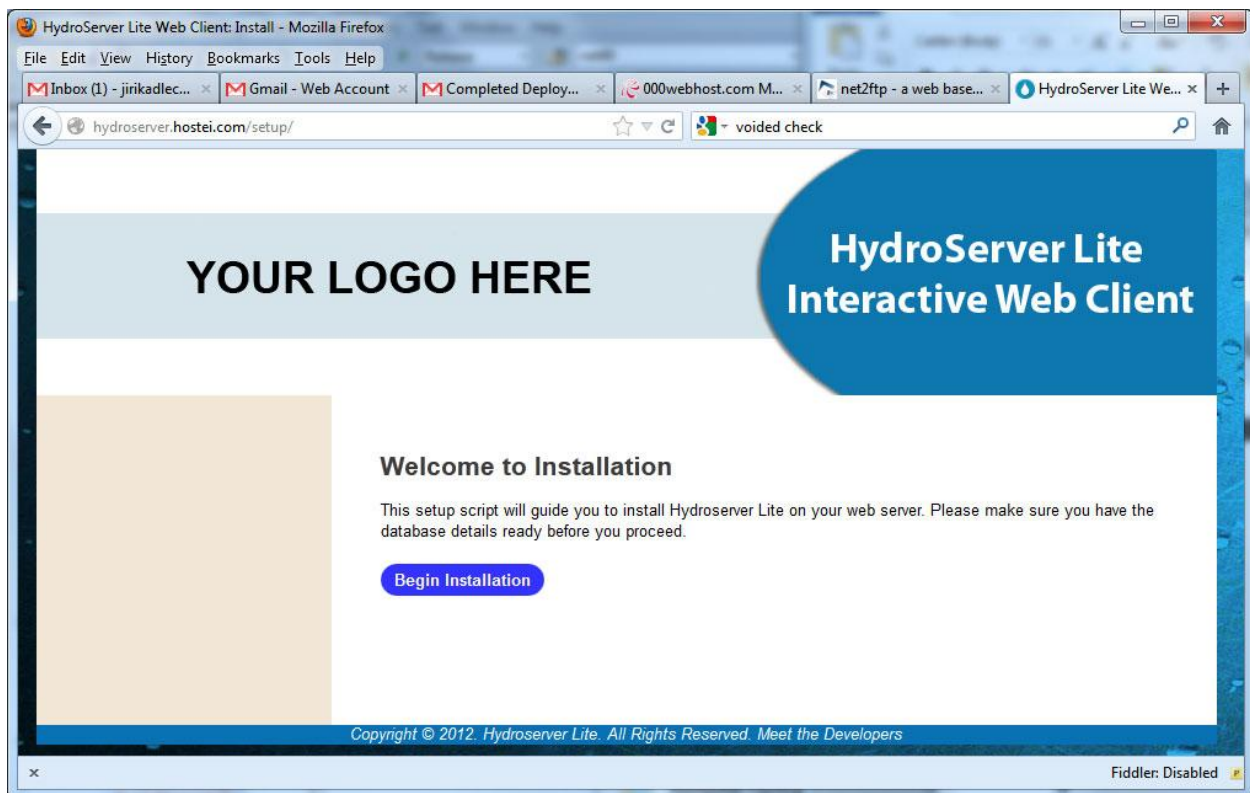


That's it! HydroServer Lite is now sitting on your server ready to be configured!

START HYDROSERVER LITE

Once the HydroServer Lite files are uploaded, run setup. To do this, open a new web browser, and go to <http://www.yourserver.com/client/setup/> (If your files were uploaded to a public_html root folder, then your setup files will be under "client/setup").

[IMPORTANT NOTE: THE REMAINING STEPS NEED TO BE CONDUCTED IN EITHER A GOOGLE CHROME OR MOZILLA FIREFOX BROWSER. INTERNET EXPLORER AND SAFARI ARE NOT PRESENTLY SUPPORTED, THOUGH THIS SUPPORT IS EXPECTED IN THE VERY NEAR FUTURE.]



Click “Begin Installation”. This will initiate a brief installation script to help configure your MySQL database tables and a settings file used by the software.

ENTER CONFIGURATION SETTINGS

On the form provided, enter a new admin password. Note that you are now managing three user names and passwords: one for the web hosting service, one for the database, and this new one for the HydroServer Lite web interface. The User name "his_admin" cannot be changed, but you must specify a password to accompany this username.

You must also enter your database host name, database name, database username, and database password. Also specify all other default configuration settings (see the help icons for instructions). Click the "Save Settings" button at the bottom to confirm your new settings. You should receive a confirmation that the database was created successfully.

HydroServer Lite Web Client: Install - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Inbox (1) - jirikadlec2... Gmail - Web Account Completed Deploy... 000webhost.com Me... net2ftp - a web base... HydroServer Lite We...

hydroserver.hostei.com/setup/edit_mainconfig.php voided check

YOUR LOGO HERE

HydroServer Lite Interactive Web Client

HydroServer Lite: Editing your site's main configuration file

Welcome, Administrator!

Please take a few minutes to change all of the fields below to setup your application with the correct default settings needed for it to run properly. If you have any questions during the process, please click the information icon next to the field or refer to the example provided.

Current username:

New password: (Must be entered now.)

Please enter your default settings below...

Configuration settings for MySQL Database

Database Host: ⓘ

Database Username:

Database Password:

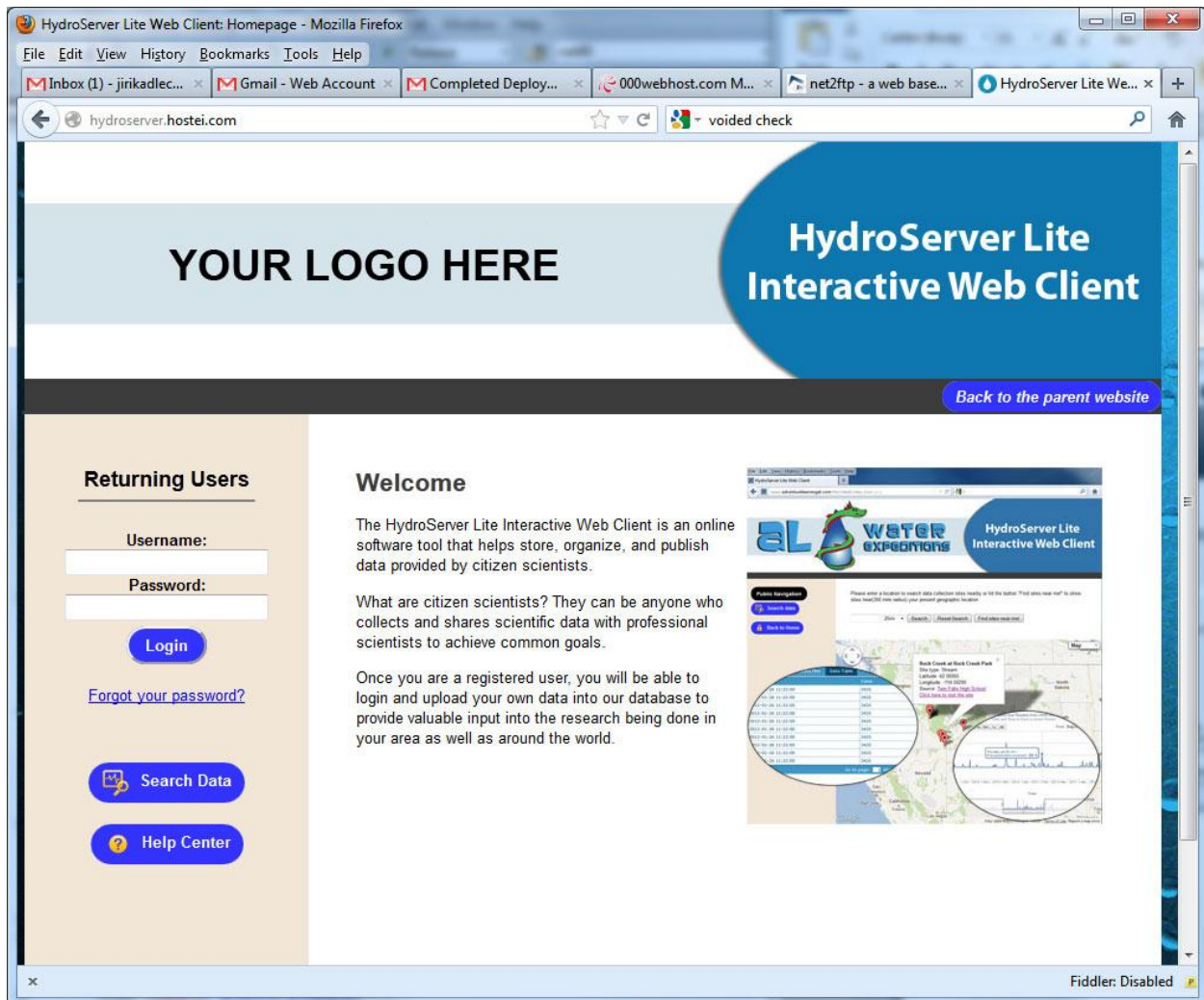
Database Name: ⓘ

Configuration settings for website's look and functionality

Fiddler: Disabled

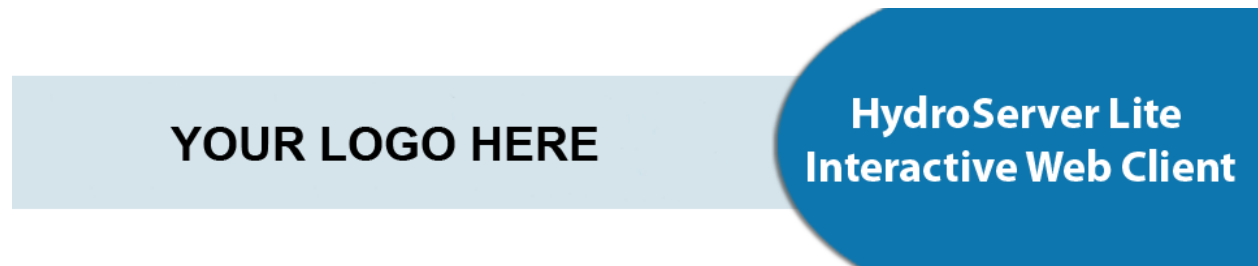
TEST YOUR INSTALLATION

To test your installation, go to the homepage or front page for HydroServer. If you installed it using the instructions here, then your homepage might be <http://mysite.000webhost.com/client/>. Or if you installed it somewhere else, your homepage might be www.yourserver.com/client/. You can login to your HydroServer instance through the web page using user name his_admin and your new password. If you are able to log in, your HydroServer Lite installation was successful and the system is now ready to use!



CUSTOMIZE THE BANNER IMAGE

It is a good idea to further customize your HydroServer Lite installation replacing the WebClientBanner.jpg (960 pixels wide by 200 pixels) image, so that your header on each page has your logo or organization's name. This file can be found in your "/client/images" subfolder. The default image is as follows:



A number of good replacement images that can be edited or customized with your own text using a graphics program of your choice are available on the HydroServer Lite documentation page here:

<http://download-codeplex.sec.s-msft.com/Download?ProjectName=hydroserverlite&DownloadId=524126>

Examples of these banners include the following:



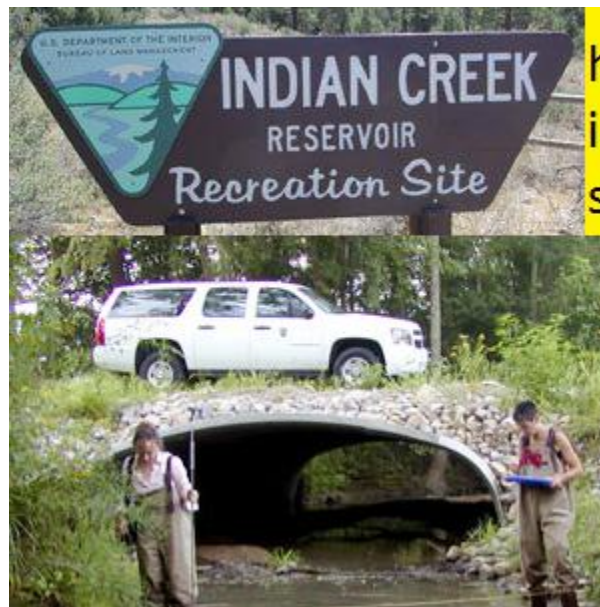
CUSTOMIZE THE HOME PAGE SCREEN SHOT

You should also customize your homepage_shot.jpg (300 pixels wide by 301 pixels) image file. This is the image that sits in the main window of your home page. Customizing it to your own image will give your system a unique look that matches your organization.

The default homepage_shot.jpg image looks like this:



A revised image could include your research team logo, a picture of your research study area or any other image that helps people recognize your site. For example:



TEST YOU HYDROSERVER

After installing HydroServer Lite, you should test its basic functionality by

- Create a new user or new users with different permission levels and see how each user level (administrator, teacher, student) gets a different view of the left menu bar.
- Create a new data source, site, variable.
- Add new data to the HydroServer using the single, multiple, and file upload data entry methods.
- View your data using the graph and tabular data views.
- Download your data using the CSV export option.

FINAL NOTES

TEST IN HYDRODESKTOP

In addition to the testing ideas noted above, you should also consider trying to attach to your database through HydroDesktop using the MetaData Fetcher plugin. This will allow you to search for and retrieve data from your HydroServer instance and validates that your server is correctly speaking the WaterML and WaterOneFlow services language. A tutorial explaining how to access such “unpublished web services” is posted on the <http://hydrodesktop.codeplex.com> documentation page here: <http://download.codeplex.com/Download?ProjectName=hydrodesktop&DownloadId=340161>.

REGISTER IN HIS CENTRAL

If you fill your server with useful data, then you should also consider registering it on the broader CUAHSI Hydrologic Information System so that others can discover your data. You can do this by following the instructions posted on the <http://hydroserverlite.codeplex.com> documentation page here: <http://download-codeplex.sec.s-msft.com/Download?ProjectName=hydroserverlite&DownloadId=504294>

REPORT YOUR EXPERIENCE

If you experience a problem with your setup, you may contact the development team for more information by submitting an issue ticket at <http://hydroserverlite.codeplex.com>.