

# Unix Services on Ben Lomand Hosting's Platform

We provide users with a wide variety of Unix services and support such technologies as Perl, PHP, Python, MySQL and more.

## Ben Lomand Hosting's Hybrid System

By default, Unix services are enabled. Once a customer has enabled the Windows services, the hosting system knows to send Windows specific requests to Windows servers based on file extension. (.html, .shtml, etc. will be served by Unix servers, .asp and .cfm requests will be served by Windows servers. This is made possible by our redundant, distributed architecture. Site content is housed on Network Filers – not individual web servers – this, along with removing individual web servers as a point of failure, allows content for one site to be served through multiple machines. In this system a user can mix Unix and Windows content in the same site.

## CGI

End users on our platform will have full access to their cgi-bin directory if they have the equivalent of the BRONZE and higher packages. The cgi-bin currently supports Perl as well as PHP scripts.

## CGI FAQ

### Are there any limitations placed on CGI scripts?

The following limitations will be placed on ALL CGI scripts:

- CPU TIME = 10 Seconds This is the amount of CPU time one CGI program can use at a given time.
- MAXIMUM FILESIZE = 100 KBytes This is the maximum size that one CGI script can reach
- MAXIMUM STACK SIZE = 8 MBytes This is the amount of stack memory that can be used by any CGI program.
- MAXIMUM NUMBER OF PROCESSES = 32 Processes This is the number of processes that can be created by the CGI program at a given time.
- MAXIMUM NUMBER OF OPEN FILES = 32 Open Files This is the number of files that can be opened by the CGI program at a given time.
- MAXIMUM NUMBER OF OPEN CONNECTIONS TO MYSQL = 20

### **How do I upload my CGI scripts using FTP?**

All CGI programs must be uploaded to your cgi-bin directory. You should be sure to use ASCII mode when uploading Perl scripts.

### **How do I call my CGI script?**

In your HTML documents, reference your cgi script with the following path:  
`http://www.yourdomain.com/cgi-bin/script`

### **What path do I use to call sendmail?**

`/usr/sbin/sendmail`

### **Do you support Server Side Includes?**

Yes! You need to make sure that the page with the SSI has a .shtml extension. The web server will only parse files with this extension.

### **Can I use server-parsed image maps?**

Yes. You may store the image and its associated map file in your own directories. The server then processes the map file as part of the normal html document parsing performed.

### **Can I change file permissions if I only have FTP access?**

Yes. FTP access also allows you to run a variety of commands. These include the chmod command.

### **What path do I use to access files in my home directory using my cgi script?**

The path would be as follows:

`/services/webpages/[first_letter_of_domain]/[second_letter_of_domain]/[domain]/[file]`

- [domain] is replaced with your domain
- [file] is replaced with the filename including sub-directory information being accessed

Here is an example:

`/services/webpages/h/o/hosting.partner.com/chat/chat.log`

## Perl

Perl is a general-purpose programming language invented in 1987 by Larry Wall. With over one million users worldwide, it has become the language of choice for World Wide Web development, text processing, Internet services, mail filtering, graphical programming, systems administration, and every other task requiring portable and easily-developed solutions.

All Perl scripts should reside within the cgi-bin located in the root directory. Please ensure that the permissions on your scripts are 755.

## Perl FAQ

### What version of Perl is supported?

5.006001

### What path do I use to call Perl?

/usr/bin/perl

### How do I install and use Perl modules?

We will only install Perl modules that have been approved and listed on CPAN. Once we receive the proper documentation on the module, our programming staff will review it to make sure that it complies with our security standards. This typically takes a week from review to implementation.

Another option is to upload the script that is using the module to the cgi-bin. Then upload the Perl module to the cgi-bin. If you put it in the cgi-bin, you can call it by using the “use” command. Example:

```
use perlmodule;
```

If you have multiple modules and you want to put them in their own directory then you have to use the “use lib” command. Example:

```
use lib '/directory name/';  
use perlmodule;
```

### What is CPAN?

CPAN is the **C**omprehensive **P**erl **A**rchive **N**etwork, a large collection of Perl software and documentation. You can begin exploring from either <http://www.cpan.org/>, <http://www.perl.com/CPAN/> or any of the mirrors listed at <http://www.cpan.org/SITES.html> and <http://mirror.cpan.org/>.

## PHP

PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML.

We support the newest stable version of PHP on all Bronze and higher packages.

## PHP FAQ

### What version of PHP do you support?

We currently support PHP version 4.4.1 on Apache

### How do I enable PHP error logging to show in a browser?

To enable errors being displayed to the browser, add an .htaccess file containing:

```
php_flag display_errors on
php_value error_reporting 7
```

The number after error\_reporting is calculated as follows: error\_reporting integer  
Set the error reporting level. The parameter is an integer representing a bit field.  
Add the values of the error reporting levels you want.

### How do I connect to my MySQL database with PHP?

Here is an example:

```
<?
```

```
$dbhost = "[prefix].megasqlservers.com"; /* database server */
$dbuser = "[prefix].domainname.com"; /* database username */
$dbpass = "password"; /* database password */
$dbname = "dbname_domainname_com"; /* database name */
$db = mysql_connect($dbhost,$dbuser,$dbpass); /* connecting to database*/
SELECT * FROM table;
```

```
?>
```

Your dbuser prefix is assigned by the Database Manager application in WebsiteOS when you create your database. Your dbhost prefix is also listed within the Database Manager application.

## MySQL

MySQL is the most popular open source database server in the world with more than 4 million installations powering websites, data warehouses, business applications, logging systems and more. Customers such as Yahoo! Finance, MP3.com, Motorola, NASA, Silicon Graphics, and Texas Instruments use the MySQL server in mission-critical applications.

We support MySQL on all Silver and higher packages.

## MySQL FAQ

### What version of MySQL do you support?

We currently support MySQL version 4.0.27.

### How do I create a MySQL database?

1. Login to your WebsiteOS, go to Website Management and open Database Manager
2. Set up the Database Manager password. Then create a database. The format will be prefix\_yourdomain\_com where the prefix is something you will choose. (eg. products\_yourdomain\_com)

### What are the connection settings for MySQL?

MySQL connection settings are displayed within the Database Manager application in WebsiteOS.

### How do I connect to my MySQL database with PHP?

Here is an example:

```
<?
```

```
$dbhost = "[prefix].megasqlservers.com"; /* database server */
$dbuser = "[prefix].domainname.com"; /* database username */
$dbpass = "password"; /* database password */
$dbname = "dbname_domainname_com"; /* database name */
$db = mysql_connect($dbhost,$dbuser,$dbpass); /* connecting to database*/
SELECT * FROM table;
```

```
?>
```

Your dbuser prefix is assigned by the Database Manager application in WebsiteOS when you create your database. Your dbhost prefix is also listed within the Database Manager application.

## How do I connect to my MySQL database with ColdFusion?

### DSN connection for MySQL:

```
<CFQUERY NAME="TableName" DATASOURCE="prefix_domainname_com"
USERNAME="dbm.domainname.com" PASSWORD="password">
SELECT * FROM TableName
</CFQUERY>
```

### DSNless connection for MySQL:

```
<CFQUERY NAME="TableName" DBTYPE="dynamic"
CONNECTSTRING="Driver={mysql};Server=megasqlservers.com;
Database=prefix_domainname_com;UID=dbm.domain.com;PWD=password;">
SELECT * FROM TableName
</CFQUERY>
```

## How do I connect to my MySQL database with ASP?

### DSN connection for MySQL:

```
Set conn = Server.CreateObject("ADODB.Connection")
conn.open "DSN= prefix_domain_com;UID=dbm.domain.com;PWD=password"
```

### DSNless connection for MySQL:

```
Driver={MySQL};Server=megasqlservers.com;DATABASE=prefix_domain_com;
UID=dbm.domainname.com;PWD=password;
```

## How can I manage my MySQL database?

There are two ways to manage your MySQL database. Database Manager is a web based MySQL client that allows you to create and manipulate a maximum of two MySQL databases. This can be found in the WebsiteOS under the Website Management section. It is best used for creating databases and tables. For populating a database, you should consider using a script such as PHP or CGI.

Database Manager builds SQL statements from the various options that you select. This is the reason for the "Build Query" button. Viewing the Query gives you an opportunity to review the query before running it. Clicking the "Run Query" button submits the query to the SQL server.

*\*\*\*Database Manager is designed for advanced users. Knowledge of relational databases and SQL is required in order to use this Database Manager efficiently.*

### **Using SQLFront to manage your database.**

MySQL Front is a third party tool, which can be used by clients to establish a connection with the server. This tool will provide customers the power to export and import existing MySQL databases from and to our system as well as convert MS-Access databases to MySQL on the fly. SQLFront 3.2 can be downloaded from <http://www.sqlfront.com>. The MySQL 30-day trial database has to be created using Database Manager within WebsiteOS. First time users of Database Manager will have to setup the user password which is encrypted on the system.

For assistance using SQLFront, please consult the documentation provided with SQLFront.

### **How do I convert my MS Access database to MySQL?**

For the most part MS Access databases suit web applications reasonably well, however, high traffic sites may benefit from upgrading to a true multi-user database platform such as MS SQL or perhaps even MySQL.

You need to download the Access database from their website file space to their local hard drive.

1. Login to your WebsiteOS, go to Website Management and open Database Manager
2. Set up the Database Manager password if you haven't yet. Then create a database. The format will be prefix\_yourdomain\_com where the prefix is something customer will choose. (eg. products\_yourdomain\_com)
3. Open SQLFront and configure the connection screen using information provided by the Database Manager application in WebsiteOS.
4. Once connected, click on "File" from the top menu bar and then select "MS Access file" from the "import" submenu.
5. When the Open Window appears, select the locate your Access database by clicking on the yellow folder on the right side. This will bring up the local Windows file and folder viewer.
6. Once you select the database another window will open up, but you can click on "OK" as most likely your database is not password protected. The database and content will then be converted.