



# TECHNICAL NOTE TNPC20

**Subject: MySQL Backup to a Linux Machine**

**Product(s): G3, Data Station Plus, Modular Controller**

## **ABSTRACT:**

Automatic back up data to a MySQL database on a Linux Machine (Fedora 4). [Click here to download the file.](#)

## **REQUIREMENTS:**

This Tech Note assumes a working knowledge of the below requirements.

1. Linux machine. This was successful on a Fedora 4 machine. Any flavor of Linux should work.
2. Packages: PHP, Apache, MySQL (server and client), ProFTPD
3. Compact Flash card for the Red Lion device, up to 2GB. These manufactures are recommended: SanDisk and SimpleTech

## **CREATE NEW USER:**

Create a new user and group “backupuser” with the password of “password” (without the quotes.)

## **DIRECTORY STRUCTURE:**

```
/home/backupuser/  
----> config  
-----> config.php  
-----> users.php  
-----> history.php  
----> upload (chmod 777)  
help.txt  
index.php  
login.php  
logout.php  
mysql.php (chmod 755)
```

If there are any files missing from the zipped file please email [support@redlion.net](mailto:support@redlion.net)

## **FIREWALL AND SELINUX:**

For ease of use the firewall and SELinux are disabled.

## **PHP:**

```
/etc/php.ini file:  
Line 334: comment out  
Line 342: uncomment  
Line: 363: log_errors to Off
```

## APACHE SETUP:

Line 215: User backupuser  
Line 216: Group backupuser  
Line 254: /home/backupuser (This path is created when you created the new user)  
Line 290: /home/backupuser  
Line 375: DirectoryIndex index.html index.htm index.php

## FTP SERVER SETUP:

The default configuration file will work. But you might want to change the MaxInstances to 2.

## MYSQL USER/PASSWORD:

```
[user@computer user]# su
Password: yourpass for root

[root@computer /]# mysql -u root
mysql> use mysql;
Database Changed
mysql> UPDATE user SET password=PASSWORD('password') WHERE user='root';
Query OK
mysql> FLUSH PRIVILEGES;
Query OK
mysql>
```

## CREATE DATABASE AND TABLES:

```
mysql> CREATE DATABASE g3backup;
Query OK
mysql> use g3backup;
Database Changed
mysql> CREATE TABLE setpoints (setpoints varchar(255));
Query OK
mysql> CREATE TABLE users (uid bigint(255) primary key auto_increment, username varchar(255), password
varchar(255));
Query OK
mysql> INSERT INTO users VALUES ('1', 'admin', PASSWORD('password'));
Query OK
mysql> CREATE TABLE login_history (id bigint(255) primary key auto_increment, username varchar(255),
date_login varchar(255), ip_addr varchar(255));
Query OK
mysql> quit
Bye
[user@computer user]#
```

**NOTE:** The username and password may be change to your liking.

## CRON TAB (SCHEDULED TASKS):

```
[user@computer user]# crontab -e
VI comes up, type the following to run every 15 minutes.
*/15 * * * * /usr/bin/php /home/backupuser/mysql.php
crontab: installing new crontab
[user@computer user]# chmod 755 mysql.php
```

## IMPORTING A TEXT FILE:

The format of the text file must be as follows:  
234,  
32423,  
etc.  
The comma must be at the end of the number.

## CLEAR LOGIN HISTORY:

```
mysql> use g3backup;  
Database changed  
mysql> TRUNCATE TABLE login_history;  
QUERY OK
```

## CHANGE LOG:

[Oct. 10, 08](#) – Added password protected for the web server on the MySQL Server side.

Files Added: users.php, logout.php, login.php

```
mysql> use g3backup;
```

Database Changed

```
mysql> CREATE TABLE users (uid bigint(255) primary key auto_increment, username varchar(255), password  
varchar(255));
```

Query OK

```
mysql> INSERT INTO users VALUES ('1', 'admin', PASSWORD('password'));
```

Query OK

## ADDED LOGIN HISTORY:

```
CREATE TABLE login_history (id bigint(255) primary key auto_increment, username varchar(255), date_login  
varchar(255), ip_addr varchar(255));
```

If there is any questions please contact us at: [support@redlion.net](mailto:support@redlion.net)

Here is a screen shot of the web interface of the MySQL server.

## Main Page

Logged in as: **admin** | [Logout](#)

### Database Values

06153  
06922  
06730  
06346  
07115

[View Text File](#) (Opens in a new window)

### Import Text File

Import:    [Help](#)

### Manually Backup From G3

Get File FTP:  [Help](#)

### Manually Backup To Database

Backup:  [Help](#)

### Complete Backup

Complete Backup:  [Help](#)

[ADMINISTRATORS](#) (New Window)

[LOGIN HISTORY](#) (New Window)