**BACKUP PROCEDURE**

**Summary of the procedure**

1. Import structure and data from [csulbsharklab.com](http://csulbsharklab.com) within 30 minutes of the update procedure.

2. Save the import on permanent, detached medium (e.g. CD-ROM).

3. Make changes to the structure and data on [csulbsharklab.com](http://csulbsharklab.com)

If we encounter an unrecoverable error, then we will reload the backup and, if possible, restart this procedure at step 2.

This procedure will be done through a program called **MySQL Workbench.** Workbench is a program that allows an administrator to model and manage a database.

Let’s start by Downloading **MySQL Workbench** from [www.mysql.com/products/workbench](http://www.mysql.com/products/workbench)

**Within MySQL Workbench**

(SKIP THIS STEP IF YOU’VE ALREADY CREATED A CONNECTION)

**Creating Connection to Database**

Add "New Server Instance." This will be instance of actual sharklab database.

- select "Remote Host"

- Address: [www.csulbsharklab.com](http://www.csulbsharklab.com)

- click Next

- Give your connection a name, I named it [www.csulbsharklab.com](http://www.csulbsharklab.com)

- Connection Method: Standard (TCP/IP)

- Hostname: [www.csulbsharklab.com](http://www.csulbsharklab.com/)

- Port: 3306

- Username: csulbsha\_shark

- Password: acoustictelemetry

- click Next

- Select "Do not use remote management", click next

- Name your instance name. I named it [www.csulbsharklab.com](http://www.csulbsharklab.com)

Now that you have everything set up, you can import/export data from/to databases.

**Exporting**

You can save a backup of your current database by exporting the schema and current data to a .sql file.

- click "Manage Import / Export”

- In the browser to the left, select “Data Export”

- Under ‘Database Objects to Export’ select the database to export from.

- Under ‘Options’ select “Export to Self-Contained File” and enter the file path you want save your .sql file to

- click “Start Export”

This .sql file contains the database schema and all the data entries from the database you exported from.

**Importing**

You can revert to a backup by importing the .sql file that contains your backup data. The .sql file you’re going to import contains the schema and all the data entries from the database you exported from.

- click "Manage Import / Export”

- In the browser to the left, select “Data Import/Restore”

- Under ‘Options’ select “Import From Self-Contained File” and enter the file path to the .sql file to import

- Click “Start Import”

Your database should now contain the schema changes and imported data entries from the .sql file.