



# **Database Backup and Restore**

**Version 1.00**

**For VP-ASP Shopping Cart**

**And**

**Generic (any ASP application)**

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# 1 Database Backup and Restore Overview

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## 1.1 *Benefits of this software*

- Backup your database at any time. Do not let system crashes bring down your shop.
- This software provides a comprehensive database backup and restore facility.
- Easily move databases between servers or web hosting companies
- Easily transfer data between different database types

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## 1.2 *Main Features of this software*

- One click backup of your entire database.
- One click restore of your entire database to same or different database
- Individual table restore from full backup
- Individual table backup
- Selective restore (restore only new records)
- Backup to a file or to a portable Access database
- Restore to different database type
- Restore to a different database
- Create file with SQL structure
- Generates Standard SQL insert statements in addition to backup files

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## 1.3 *More Features*

The **Smart Restore** will check that tables and fields exist in the database being restored and automatically add those extra fields or tables.

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## 1.4 *International Features*

The Database Backup and Restore facility can display menus and captions using most other languages. The only language file supplied is English. By translating the few language phrases the menus and forms it will display in your language.

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## 1.5 *Software Versions*

The VP-ASP version and Generic Version are two different products. The VP-ASP version is designed for use with VP-ASP shopping cart software.

The Generic Version is a standalone application that can be used with just about any other ASP database application.

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## 2 Installation

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The installation instructions for VP-ASP Shopping Cart and the Generic version are described below.

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### 2.1 *Installation for VP-ASP version*

No VPASP files are modified during this installation.

1. Installation is simple and involves taking the supplied zip file and placing all the files into the VPASP folder.
2. Logon to VP-ASP administration and add new Menu to using Occasional/Admin Menus.  
Menu name: Database Backup  
Filename: hkdbmenu.asp  
Section: Everyday  
Menu: Advanced
3. Go To Occasional/Admin Users  
Edit a userid  
Check the box next to new Database Backup menu
4. You will now see Database Backup menu in the Advanced section of the Administration
5. Edit File hkdb\_config.asp and change one line.  
config\_outputpath="export"  
This is where output backup files are created. It must be a writeable folder. Then upload hkdb\_config.asp to the VPASP folder.

Installation is now complete

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### 2.2 *Generic Version Installation*

The generic version is a standalone application that can be used with most MYSQL, SQL Server or Access applications.

1. Create a new folder and unzip the files into that folder. They can also be installed into an existing application folder.
2. Start the application by going to yourdomain.com/yourfolder/hkdbmenu.asp
3. The Database Backup and Restore Logon menu should appear.  
It will prompt you to logon. The userid is ADMIN, the Password is ADMIN
4. Select Generate Encrypt Secret Word. Enter your new secret word(password

5. Enter your new password and a large string will appear such as:  
**524ebd80eb59d6bb32bc184771835421**
6. Edit file hkdbsecurity.asp and change the userid and paste in your new secret word.  
For example:  
`const config_secretword="524ebd80eb59d6bb32bc184771835421"`  
`const config_userid="myuserid"`
7. In the future you will then login with userid MYUSERID and the secret word (in English) that you entered in step 5.
8. If you constantly use the same database, you can also set-up a default database. This is explained in the Generic configuration section.

Installation is now complete

### 3 Database/Restore Menu

Database Backup/Restore Menu	
<b>Backup Existing database</b> <ul style="list-style-type: none"><li>• Backup database to file</li><li>• Backup database to access database</li><li>• Database Structure</li><li>• Create insert SQL for a table</li><li>• SQL execution from file</li></ul>	<b>Restore Database</b> <ul style="list-style-type: none"><li>• Restore Database from file</li><li>• Restore Database from access database</li><li>• Generate encrypted secret word</li></ul>

This is the main menu for database backup and restore software. It is created by hkdbmenu.asp.

For the VP-ASP version, there should be a link from VPASP Everyday/Advanced administrative menu.

For the generic version you should direct your browser to the folder where you installed this software.

#### 3.1 Backup Database to File

This is the main backup function. It will create a file with the tables that are selected. This file can be used to restore all or some of the tables. The file can be copied to a safe place. To restore data on another server, copy the file to the other server.

The menu displays all the tables in the current database.

Database Backup/Restore Menu --> Backup database to file

Table *	Select Table
	All
	<input type="button" value="Continue"/>

##### 3.1.1 Backup Database to a File results

For each table the number of records backed up is displayed. The final line is a link to the output file created. Sample output is shown below

```
No records found affiliatelog
9 records created for table categories
484 records created for table configuration
No records found configuration1
10 records created for table content
11 records created for table currencyvalues
```

File Name: bu\_databasename\_240409.txt

### 3.1.2 File Created

The file created will have the date of the creation and the database name. It is in a special format which can only be used with this Database Backup and Restore utility.

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## 3.2 Backup Database to Access database

This feature allows you to move data from your existing MYSQL, SQL Server or Access Server database to a portable Access Database.

For VP-ASP version, we recommend you use an empty VP-ASP Access database.

All tables in existing database are displayed. Select an individual table or all tables. You must also enter name of output database and its location. Location can be full path or relative path.

The output database must be writeable.

Database Backup/Restore Menu --> Backup database to access database

Table *	Select Table All
Database name *	Output Access database name
Database location *	Output database location

Continue

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## 3.3 Create Database Structure

This feature generates SQL statements to recreate the current database.

Three files are created. One file is created for Access database; one file is created for MYSQL and the third file is for SQL SERVER.

Database Backup/Restore Menu --> Database Structure

Table *	Select Table All
---------	---------------------

Continue

### 3.3.1 Create Structure Sample Output

Database Backup/Restore Menu --> Database Structure

**Structure Created for table configuration**  
**Access file created:** export/structure\_access\_configuration.txt  
**SQL Server file created:** export/structure\_sqlserver\_configuration.txt  
**MYSQL file created:** export/structure\_mysql\_configuration.txt

Table *	Select Table configuration
---------	-------------------------------

Continue

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### 3.4 Restrictions

The database structure routine generates only field names and field types. It does not generate indexes, constraints, defaults or any advanced database features.

This means that if you are doing a total recovery of a database, you must have the database creation scripts from your original application to rebuild the database structure.

The database Backup and Restore will then be used to reload those tables from your backup files. It has a smart logic built in to add additional fields and tables created after the original creation scripts.

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### 3.5 Create Insert SQL statements

This feature generates plain SQL insert statements for each record of a database table. Each table creates its own file. Use this feature only if you want to use plain SQL in another utility. This feature does not replace the Database Backup and Restore functions and should be used only for those knowledgeable in SQL.

Database Backup/Restore Menu --> Create insert SQL for a table

Table *	Select Table All
Database type *	Final database where data is to be inserted Select
Identity field *	Should identity field be included. Select Yes for empty data base. Yes

Continue

#### 3.5.1 Create SQL Sample Browser output

The file created is listed. It holds insert statements such as:

```
Insert into categories(categoryid,catdescription,highercategoryid,catimage,impressions)
values(1,'Office',0,'images/thumbs/vpasdemo_lucent_work.jpg',3);
```

Database Backup/Restore Menu --> Create insert SQL for a table

7 records created for categories in export/insert\_200409\_categories.txt

Table *	Select Table categories
Database type *	Final database where data is to be inserted Access
Identity field *	Should identity field be included. Select Yes for empty data base. Yes

Continue

#### 3.5.2 What are identity fields

Identity fields are auto numbers that generate unique records ids. For VP-ASP these are the first field in each table. For generic applications if the first field is numeric, then it assumed to be an identity field.

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### **3.6 *SQL Execution from a file***

This feature requires some knowledge of SQL. Takes a file of plain SQL statements and runs them against the default database. To use this function, create a file with the SQL you want to execute and then upload the file to your server.



## 4 Restoring Files

The restore feature only works with files created by the backup feature of this software. It reads the specially formatted file and restores all the data or data from a selected table. Optionally it can add only new records to an existing table.

The following form will be displayed. The full path to the backup file must be entered.

Database Backup/Restore Menu --> Restore Database from file

File Name \* export/backup\_200409\_shopping650.txt

Continue

### 4.1 Restoring tables and database selection

Once a file has been selected, you will see this form. From this form you will be able to:

- See when backup file was created
- Select the table or all tables to be restored
- Replace all records in the current database or only add new records
- The data can be restored to a database different from the default database

Database Backup/Restore Menu --> Restore Database from file  
Backup created on 20/04/2009 4:02:11 PM

Select table or table to restore  
File Name export/backup\_200409\_shopping650.txt

Select Table

Table *	Select Table
	All

Restore Options

Do you want full restore or partial restore

☒ Replace all records

☐ Only add missing records

Field to match

Match field when adding records.

Output database if different from default database

Database name *	Output database name
Database type	Final database where data is to be inserted if not default database
	Select
Database location	Database Location (Access only)
Database userid	Database Userid (MYSQL and SQLSERVER only)
Database password	Database Password (MYSQL and SQLSERVER only)
Database Server	Database Server (MYSQL and SQLSERVER only)
Database Driver	Microsoft Database Driver. If unsure do not select a value
	Select

Continue

[Return to backup file selection](#)

### 4.2 Restore Options

The restore can bypass existing records or replace all records in a table.

**Replace all Records** deletes all the data in the table being restored and takes the data from the backup file.

**Only add missing Records** checks each record from the backup file and compare it against the database. If the record does not exist, it is added. The field it checks is called the match field. Only one table can be restored at a time if you use this option.

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#### 4.3 Output Database

The output database is optional. Only fill in these fields if you want to restore the data to a database other than the default database.

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#### 4.4 Restore Results

For each table the number of records restored is displayed.

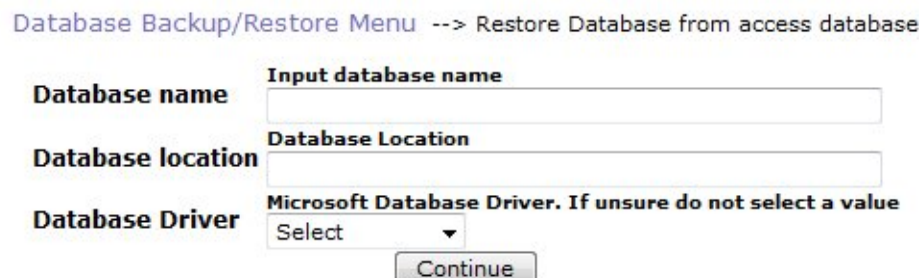


Database Backup/Restore Menu --> Restore Database from file  
7 records created for table categories  
[Go Back]

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#### 4.5 Restore from Access Database

This function takes data from an Access database and updates the output database. It is similar to restore from a file and has the same restore options.



Database Backup/Restore Menu --> Restore Database from access database

Database name	<b>Input database name</b> <input type="text"/>
Database location	<b>Database Location</b> <input type="text"/>
Database Driver	<b>Microsoft Database Driver. If unsure do not select a value</b> <div>Select ▼</div> <div>Continue</div>

A similar menu to restore from file will be displayed.

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## 5 Configuration Options

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The configuration is a file **hkdb\_config.asp**.

Its primary use is to define the path where backup files are written to. It also defines what language file to use.

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### 5.1 *config\_outputpath*

Defines the location path where any files are created. It can be a relative address or a full disk address.

For example:

```
config_outputpath="..\database\export"
```

or

```
config_outputpath="c:\myoutputpath\backups"
```

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### 5.2 *config\_Displayfilelinks*

Determines how the filenames being created are displayed.

```
config_Displayfilelinks="No"
```

Only displays the simple name of the file be created

```
config_Displayfilelinks="Yes"
```

Displays the full path and a hyperlink to the created file. **Yes can be a security issue because it may allow download of your backup data.**

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### 5.3 *config\_language*

This option determines which language file to use. The default file is **hkdblanguage\_english.asp**.

If you choose to translate this file into another language, for example Spanish, Then create a file call **hkdblanguage\_spanish.asp** and change this configuration option to Spanish.

```
config_language="Spanish"
```

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### 5.4 *Language Facilities*

The supplied program comes with English captions. This can be changed by translating the values in file **hkdblanguage\_english.asp**. The steps are

1. Translate the values after the equal sign. Sample is shown below.

```
langadmintasks="Database Backup/Restore Menu"
```

```
langbackupmenu="Backup Existing database"
```

2. Create a new file called **hkdblanguage\_xxxx.asp**

3. Update hkdb\_config.asp to have your language name  
config\_language="xxxx"

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## 5.5 Generic Version Configuration

The generic version of this software has additional configuration options to define the default database.

config_databasename=""	Default database name
config_databasetype=""	ACCESS, SQLSERVER or MYSQL
config_databaselocation=""	For access only. The location either as full path such as c:\mysite\test\database" Or a relative path ../test/database
Config_databaseuserid=""	Userid for SQL Server and MYSQL
Config_datbasepassword=""	Password for SQL Server and MYSQL
Config_databaseserver=""	Url such as <a href="http://www.mysite.com">www.mysite.com</a> or IP address"
config_databasedriver=""	May be required depending on the web site and database you are using. If you cannot connect to the database try these options specific to your database type.  MYSQL351 for MYSQL ACCESS2007 for Access SQLOLEDB for Sql Server SQLSERVER2005 for SQL Server

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## 6 Security Options

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Security is important. There are two levels of security built into the Database Backup and Restore program.

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### 6.1 VP-ASP Security

The first level is that you must be logged into VP-ASP Administration to use any of the features.

The second level is an optional secret word facility. With this feature you create a secret word which is then encrypted. When using this program you will be required to enter the secret word before the encryption. It is then encrypted and matched against the encrypted string.

If the secret word is entered incorrectly to many times, you are locked out of the Database Backup and Restore Facility. You must stop the browser and start again.

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### 6.2 Setting Up Secret Word Security

Select "Generate Encrypted Secret Word". You enter your secret word and a string of characters is displayed.

Edit file hkdbsecurity.asp and place the string into that file and upload it.

Next time you need to use Database Backup and Restore you will need to enter your original secret word.

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Database Backup/Restore Menu --> Generate encrypted secret word  
**The encrypted secret word is b8e09ad27ff75f7097626a4f3d69ac4d**

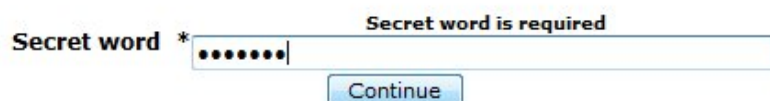
Edit file hkdbsecurity.asp and place the encrypted string into the file. Then upload hkdbsecurity.asp to the VP-ASP folder.

```
const config_secretword="b8e09ad27ff75f7097626a4f3d69ac4d"
```

---

### 6.3 Using Secret Word

Before using any Database backup features you will be prompted to enter your secret word



If too many attempts are made then you will see this message.

**TOO MANY TRIES**

If this occurs, you need to stop your browser and relogin back to VP-ASP administration.

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#### **6.4 What to do if you cannot remember your secret word.**

Remove the secret word from hkdbsecurity.asp. Then logon to administration. Generate a new secret word and update hkdbsecurity.asp with your new encrypted secret word.

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#### **6.5 Logoff**

If using a secretword feature for VP-ASP or using generic logon, we recommend you logoff. A link to Logoff will appear on the main menu. The Logoff will prevent unauthorized use of the Database Backup and Restore.

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#### **6.6 Generic Version Security**

The generic version security relies on userid and secretword. When you first install the software the default userid is ADMIN and Default password is ADMIN.

Edit file hkdbsecurity.asp and paste in your new encrypted secret word and change the userid

```
const config_secretword="524ebd80eb59d6bb32bc184771835421"  
const config_userid="bob5555"
```

---

#### **6.7 Generic Version Logon**

The generic version requires that you logon to use any of the facilities. The logon file hkdblogon.asp can also be renamed to whatever you choose for additional security.

The screenshot shows a web form titled "HK Programming Database Backup and Restore". At the top, a message states: "Supplied userid and password still in use! This represents a possible security issue Please change as soon as possible!". Below this is a blue header bar with the text "Logon to Database Backup/Restore". The form contains two input fields: "Userid" and "Password". Below these fields is a "Logon" button. At the bottom, it says "Copyright 2009 - HK Programming."

##### **6.7.1 Dual Password Generic Security**

It is possible to add a second password to the generic logon form. To do this, edit file hkdblogon.asp and change this line:

```
const Adminsecondpassword="mysecondpassword"
```

The advantage to this is that any the hacker would need to know the name of the logon file, the admin userid, the encrypted secret word and the second password.

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**6.8 What to do if you cannot remember your secret word in generic version.**

Put back the secret word originally supplied by this software. The secret word is ADMIN. Then logon to administration. Generate a new secret word and update hkdbsecurity.asp with your new encrypted secret word.

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**6.9 Backup Location Security – All versions**

When a backup is taken it is written to a disk file. If it is written to a file accessible from the web, the file may be subject to hackers downloading it. We recommend the file path be not addressable from the web to prevent this.

For VP-ASP, the folder where the Access database is located is both write able and not accessible from the web on most web hosting companies. Sub folders to the database folder should also have the correct attributes.

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**6.10 Try the security yourself**

We recommend that you try to download a backup file yourself.

If it you can download any file created by this program, ask your web host to create a folder for you that is both write able but cannot be read from the web. Then change the hkdb\_config.asp file and put in the new path into config\_outputpath