

RACF Database Unload Utility with MS Access
Author: Charles P. Lehmann
Advisory IT Specialist
IBM Global Services, ITS, Switzerland
cleh@ch.ibm.com

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Change Date	Change Description
11/18/2005	Introduction of utility
25/11/2005	Corrected scrSQLS_cre.vbs for incorrect input handling. Last record type was skipped.
25/11/2005	Corrected scrMSAC_lod.vbs for problems with apostrophes in the input file.
20/01/2006	Corrected scrSQLS_cre.vbs for processing offset input. Corrected scrMSAC_lod.vbs for incorrect processing of variables
26/01/2006	Corrected scrMSAC_lod.vbs for incorrect field offset. Corrected scrMSAC_cle.vbs for incorrect field offset.
25/09/2007	Corrected scrMSAC_lod.vbs for handling of double-quotes in data field. Corrected scrMSAC_cle.vbs for handling of IRRHFSU text file.

Background

The RACF IRRDBU00 Database unload utility generates a text flat file which direct use provides a lookup on the database content.

However, in order to perform more powerful data-mining activities on the database's objects and resources, one has the choice to load the IRRDBU00 file into DB2, which is the official way.

The scripts provided in this package are just a way to load the text file into MS Access instead of DB2.

Although Access can not be compared with DB2 for its powerful query functions, it provides nevertheless, an easy way to lookup the content of the RACF database, using slightly similar SQL statements that would be used with DB2.

Additionally, another downloadable tool, IRRHFSU, generates an "IRRDBU00"-like output. This output can be loaded in an Access Database, just as any normal IRRDBU00 output.

The origin for the development of these scripts was to provide an easy tool for auditing personnel.

Package contents

The package contains :

- 1) This Readme file
- 2) A Zip file containing the scripts and the directory structure

Prerequisites

The scripts provided are based on VBScript and do not use tricky Windows features. They should work on most MS Windows based workstation. Nevertheless, the following should be checked:

- 1) The latest version of WSH should be installed. This is the case of Windows 2000 and Windows XP workstations. The latest version for most pre-Windows 2000 versions can be downloaded from Microsoft's website.
- 2) MS Office has to be installed on the workstation, since Access API objects are used to load the worksheets. ActiveX controls need to be installed with office. Therefore, any version from Office 2000 upward should do. For Office 97, the Developer Edition must be installed. Since APIs are installed with Office, MS Access is not mandatory.

Installation instructions

The only thing to do is to unpack the .zip file to a directory chosen at your convenience (do not forget to set the option for unpacking the files with their respective path). The following will be provided:

File Main.vbs

This is the main script that has to be run in order to create the Access Database loaded with the IRRDBU00 output.

Directory Columns

Placeholder for worksheet columns handling files.

Directory Headers

Placeholder for worksheet headers files.

Directory Irrdbu

Placeholder for IRRDBU00 source.

Directory Scripts

Directory containing scripts invoked from Main.vbs as well as a loading utility.

Directory Sql

Placeholder for RACDBULD source.

The directory structure and name should not be changed in any way. The provided scripts are based on subfolder names to perform successfully.

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Usage

Before the first use

Before the Access loading scripts can be used, several files that will be used later have to be defined. These are the files that will reside in the Columns and the Headers subfolders.

The files are created based on the RACDBULD sample from your system.

In order to define these files, do the following:

1. Download the SYS1.SAMPLIB(RACDBULD) file to the Sql subfolder. Its file extension must be sql (for example racdbuld.sql).

2. If you plan to use the IRRHFSU utility, insert the sample DB2 Load Statements (and not the DB2 Table Statements) that are provided with IRRHFSU in your racdbuld.sql file. Do not add them at the end of racdbuld.sql file but rather just before the statements for the AUTH IDs (e.g. before the INTO TABLE USER01.AUTH_IDS).
3. Run the script scrSQLS_cre.vbs that can be found in the Scripts subfolder.

You will get a certain number of files in the respective Headers and Columns subfolders.

In the Columns subfolder, you will find COL<number>.txt files. The <number> corresponds to the RACF IRRDBU00 record type. Each of these files contains two lines. The first one defines the columns widths of the record to be imported. The second one defines the usage of the respective column (9 means: don't care, 1 means: read with "General" column format).

In the Headers subfolder, you will find HDR<number>.txt files and one HDR_Tab_nam.txt file. The <number> corresponds to the RACF IRRDBU00 record type. The HDR<number>.txt files are containing the column headers that will be set on the first line of the worksheets. The

HDR_Tab_nam.txt file contains the worksheet name itself, corresponding to a record type number.

The scrSQLS_cre.vbs should only be run once. It must be re-run when an OS upgrade has led to RACF database template changes and thus, maybe to new record types.

Loading the IRRDBU00 output

Once that the header and column usage files have been created as of above, the following has to be done:

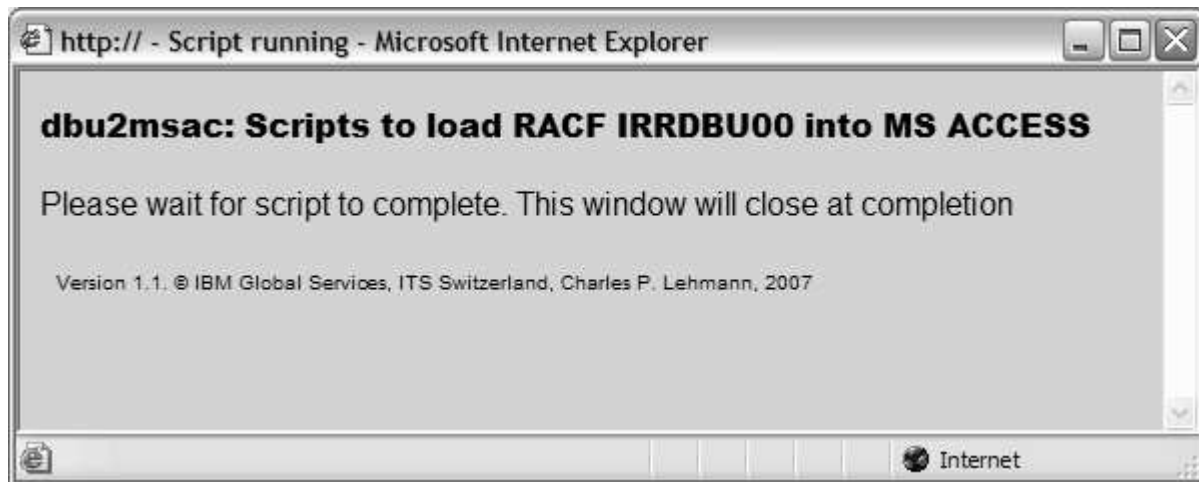
Download the IRRDBU00 output to the Irrdbu folder. The file extension must be txt (for example:

mysys_040311.txt). Only one IRRDBU00 output must exist at a time in the Irrdbu subfolder.

Run Main.vbs script.

If you plan to load IRRHFSU outputs, you should concatenate them with your IRRDBU00 output, creating only one text file. Alternatively, you can perform a run with IRRDBU00 data only and one with IRRHFSU data only, copying the Access Database between the two runs to another directory. Both databases could be merged afterwards.

The following Microsoft Internet Explorer panel will be displayed as long as the script is running:



This script will do the following (<irrdbyname> is taken from the IRRDBU00 txt filename in the Irrdbu subfolder):

- Delete all existing <irrdbyname>.<###> files existing in the Irrdbu subfolder
- Create <irrdbyname>.<###> files in the Irrdbu subfolder. These files are a split of the IRRDBU00 output. Each record type existing in the IRRDBU00 output will be copied in its respective <irrdbyname>.<###> file.
- Delete ALL existing Access databases in the directory where Main.vbs resides.
- Create a new <irrdbyname>.mdb database.
- Load the <irrdbyname>.mdb database from the <irrdbyname>.<###> files using the information provided in the files residing in Columns and Headers subfolders.

- Load the AUTH_IDS from the <irrdatabase>.0100 and <irrdatabase>.0200 files.
- Delete the default Sheet1 to Sheet2 worksheets.

Once that the script has been successfully processed, you will get a new Access database in the folder where Main.vbs resides. Since a later run of Main.vbs destroys the existing database, you must copy it to another folder if you want to keep track of changes made to the RACF database.

After an OS upgrade

Whenever the operating system (OS/390 or z/OS) has been upgraded, it is safer to download the SYS1.SAMPLIB(RACDBUILD) file once more to the Sql subfolder. Its file extension must be sql (for example racdbuld.sql). Running scrSQLS_cre.vbs again will delete all existing files in the Columns and Headers subfolder and re-build them.

If you have used IRRHFSU, do not forget to include the DB2 Load Statements from the IRRHFSU utility.