

# ACL Scripts for Beginners

Milan Shah

**September 29, 2009** 



	ACL Support Options			
Method	URL	Notes		
Self-Help/ Online	https://www.acl.com/supportcenter/search.aspx	Search the ACL Knowledge Base for a specific issue.		
Online	https://www.acl.com/supportcenter/ol/	Learn ACL Online		
Online	https://www.acl.com/supportcenter/forums/	Ask a question on the ACL User Forum.		
Online	https://www.acl.com/supportcenter/contact_support/support_reque_st.aspx	Send a message to the ACL Support Center.		
Telephone	https://www.acl.com/supportcenter/contact_support/global_support_contacts.aspx  604.669.4997	Call for ACL Telephone Support:  ■ Please be specific with your issue;  ■ provide a short data extract if possible; or  ■ use WebEx as below.		
WebEx/ Online	https://www.acl.com/supportcenter/kb/article.aspx?ID=5440	ACL WebEx Support		



### Verify

This procedure is used to identify data errors in the file or data. It should be performed on the character, numeric and date fields.

Step	Action	Menu Item	Notes
1.	Select	Data	
2.	Select	Verify	
3.	Select	Main	
4.	Choose	Field Name	
5.	Click	OK	

### Count

This procedure is used to assess the completeness of the data set that you are analyzing using ACL.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Count Records	
3.	Select	If	
4.	Double	Desired Field in	
	Click	Available Fields Box	
5.	Click	<> Button	
6.	Type	"0"	The Expression Box should now
			contain, "Desired_Field <> 0".
7.	Click	ОК	Ensure that you see "Expression is
			valid" in the information box.
8.	Click	OK	Closes information dialog box
9.	Click	OK	Runs the command in ACL



#### Total

This procedure is used to calculate a total on a field with a numeric value that can be used to compare to the control total in the data set.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Total Fields	
3.	Select	<b>Desired Field in Name</b>	
		Вох	
4.	Click	OK	

### Statistics

This procedure is used to compile statistics such as: range, positive, negative, zero, totals, absolute value and 5 highest and lowest values in the data set.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Statistical	
3.	Select	Statistics	
4.	Select	Main	
5.	Choose	Field Name	
6.	Select	<b>Desired Field in Name</b>	
		Вох	
7.	Select	More Tab	
8.	Enter	# of High/Low	Enter 10 for a Top Ten List
9.	Click	OK	



### **Stratify**

This procedure is used to count the number of records occurring into a specified number of even intervals, and provides totals by stratum for selected numeric fields.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Stratify	
3.	Choose	Field Name	
4.	Choose	Minimum	
5.	Choose	Maximum	
6.	Choose	Intervals	Select the number of intervals desired.
7.	Click	OK	

### Classify

This procedure is used to count the number of records for each unique value of a character field and computes a subtotal for the selected numeric fields for each of the unique values.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Classify	
3.	Choose	Field Name	
4.	Choose	Subtotal Fields	Optional
5.	Click	OK	



#### Summarize

This procedure is used to compile a record count and totals for numeric fields for each distinct value of key character fields in a sorted table.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Summarize	
3.	Choose	Field Name	
4.	Choose	Subtotal Fields	Optional
5.	Click	ОК	

#### **Cross-Tabulate**

This procedure is used to analyze character fields by reorganizing them in rows and columns. The cross-tabulate function counts the number of records in a table which:

- counts each row value within each column value,
- subtotals numeric fields for each row value within each column value, and
- totals the amounts for each column value.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Cross-Tabulate	
3.	Choose	Rows	
4.	Choose	Columns	
5.	Choose	Subtotal Fields	
6.	Choose	Include Count	Optional
7.	Click	OK	



#### **Profile**

This procedure is used to provide summary statistics on one or more numeric fields in a table. The profile function provides the following information for numeric fields:

- Total value,
- absolute value,
- minimum,
- maximum.

Step	Action	Menu Item	Notes
1.	Select	Analyze	
2.	Select	Statistical	
3.	Select	Profile	
4.	Choose	Profile Fields	
5.	Click	OK	

### Reporting

This procedure is used to design and print reports.

Step	Action	Menu Item	Notes
1.	Format		Format the view to suit your
			requirements.
2.	Design		Report Layout
3.	Select	Data	
4.	Select	Report	
5.	Select	Main	
6.	Enter	Header, Footer and	
		Other Information	
7.	Click	OK	



#### What is an ACL Script?

A script is a series of ACL commands that are stored as a unit in an ACL project. Scripts are useful to auditors because they can be run on demand or automatically.

#### Why should I use scripts?

Using scripts saves you and your company time and time is money. The auditor can focus on taking action using audit results instead of spending time preparing reports.

#### Ok, I'm sold, how to I create a basic script?

- A. Use the script recorder to capture a record of all actions performed in ACL;
- B. copy the relevant "code" from the log file and save it as a reusable script.

#### How do I learn to write my own scripts?

- 1. Take an ACL course that is taught by an ACL instructor;
- 2. read the script posts that are at ACL User Forums

(http://www.acl.com/supportcenter/forums/topicview.aspx?id=5) and teach yourself;

3. buy Fraud Toolkit for ACL or other books and use the pre-written scripts at your own risk.

Enough talk, let's start!



### Top 3 Report (1 of 2)

This ACL script opens a table, sorts it in descending order based on the frequency of occurrences based on the number of sales records and products a **Top 3 Report**.

Step	Action	Menu Item	Notes
1.	Import Data		Use the Data Definition Wizard
2.	Verify Data	Data/Verify	Select and VERIFY all fields to identify
	in all Fields		any format or data integrity issues.
3.	Create 5	File/New/Script	A_Source_Data
	New		B_Scripts
	Folders		C_Deliverables
			D_Logs
			Z_Temp_Tables
4.	Create	File/New/Script	Name it: Top_3_Clubs
	<b>New Script</b>		
5.	Script	Script Editor Window/	OPEN NYAUG_SFB
		Line 1	
6.	Script	Line 2	SET FOLDER /Z_Temp_Tables
7.	Script	Line 3	ACCEPT "Enter Rank Size:" TO
			RankCount1
8.	Script	Line 4	RankCount = Value(RankCount1,0)
9.	Script	Line 5	RankCount = RankCount+1
10.	Script	Line 6	SUMMARIZE ON Org_Name TO
			"OrgNameTemp1.FIL" OPEN IF Type =
			"Sale" PRESORT ISOLOCALE root

### Top 3 Report (2 of 2)

This ACL script opens a table, sorts it in descending order based on the frequency of occurrences based on the number of sales records and products a **Top 3 Report**.

Step	Action	Menu Item	Notes
11.	Script	Line 7	OPEN "OrgNameTemp1"
12.	Script	Line 8	INDEX ON COUNT D TO "ACLQSTMP"
			ISOLOCALE root
13.	Script	Line 9	SORT ON COUNT D TO
			"OrgNameTemp2" OPEN ISOLOCALE
			root
14.	Script	Line 10	OPEN "OrgNameTemp2"
<b>15.</b>	Script	Line 11	SET FOLDER /C_Deliverables
16.	Script	Line 12	EXTRACT RECORD TO
			"Top_%RankCount%_by_Org_Name"
			OPEN FIRST %Rankcount%
<b>17.</b>	Script	Line 13	OPEN
			"Top_%RankCount%_by_Org_Name"
18.	Script	Line 14	OPEN OrgNameTemp2
19.	Script	Line 15	OPEN
			Top_%RankCount%_by_Org_Name
20.	Script	Line 16	OPEN OrgNameTemp2
21.			OPEN
			Top_%RankCount%_by_Org_Name
22.			TOTAL FIELDS COUNT
23.			DEFINE Field Summary Computed
			Total1
24.	Script	Line 17	DEFINE Column Default_View
			Summary