Log Manager

Databases are full of information. Sometimes it is helpful to log certain aspects of the information manipulation (SELECTs, INSERTs, UPDATEs, DELETEs), to gain an insight what is really happening in a database. The IBExpert Log Manager can be found in the IBExpert Tools menu. This feature is unfortunately not included in the free IBExpert Personal Edition.

Select the database to be logged from the drop-down list of registered databases. When initially opened, the *Log Actions* page displays check options for logging INSERT, UPDATE and DELETE actions,

🚥 Log Manager							
Log Manager • 3 Employee_2_1 • 5							
Lughyse_2_1 y Table I U COUNTRY I CUSTOMER I DEPARTMENT I EMPLOYEE I EMPLOYEE I BE\$VERSION_HIS I JOB I PROJECT I SALARY_HISTORY I SALES I	Log Actions Log Data Options Block Log INSERT actions Log UPDATE actions Log DELETE actions Column EMP_NO FIRST_NAME LAST_NAME PHONE_EXT HIRE_DATE DEPT_NO JOB_CODE JOB_COUNTRY SALARY	Type SMALLINT VARCHAR(15) VARCHAR(20) VARCHAR(20) VARCHAR(4) TIMESTAMP CHAR(3) VARCHAR(5) SMALLINT VARCHAR(5) SMALLINT VARCHAR(15) NUMERIC(10,2)					

below which the selected table's fields and field data types are displayed. A log script can be generated for several tables simultaneously by selecting the required tables using the [Ctrl + Shift] keys. The logging options, for example which INSERT, UPDATE and DELETE actions on which tables, can be checked individually or alternatively, the Log Manager pull-down menu can be used to either *Prepare All Tables* or to *Unprepare All Tables*. Take into consideration however, that when all actions on all tables are to be logged, this could slow the database performance somewhat.

The data logging triggers templates can be altered as wished using the standard IBEBlock on the Block page (if you are using a pre-2009 version of IBExpert alterations can be made using the IBExpert Options menu item, General Templates / Data Logging Triggers).

Please note: all tables which are to be logged must be prepared for logging and committed, before any transactions can be logged! When new tables are added to a database, the log needs to be updated (simply select the transaction types which should be logged by double-clicking on the check boxes and compile).

Once the actions have been selected, the Log Actions page displays the SQL code:

Last update: 2023/10/02 02-ibexpert:02-08-ibexpert-tools-menu:log-manager http://ibexpert.com/docu/doku.php?id=02-ibexpert:02-08-ibexpert-tools-menu:log-manager 09:20

🕂 Log Manager										-OX
Log Manager 👻 📵 Em	ploye	e_2_1	- 3	3						
Table 🛆	1	U	D	Log Acti	Log Actions Log Data Options Block					
COUNTRY CUSTOMER				🖌 Log !	Log INSERT actions					
DEPARTMENT	ŏ			✓ Log !	✓ Log UPDATE actions					
EMPLOYEE	×	×	×	✓ Log I	DELETE actions					
EMPLOYEE_PROJ				Column		Туре			U	D
IBE\$TODO						- 77 -				
IBE\$VERSION_HIS				JOB_COD)E	VARCHAR(5)				
JOB .	×	×	×	JOB_GRA	\DE	SMALLINT				
PROJECT				JOB_COL	JNTRY	VARCHAR(15)				
PROJ_DEPT_BUD				JOB TITL	E	VARCHAR(25)				
SALARY_HISTORY	×	×	×	MIN SAL	ABY	NUMERIC(10,2)				
I SALES				MAX SAL		NUMERIC(10,2)				
					UIREMENT		1 SEGMENT SIZE 400			
								-	-	
				After Ins	ert After Update	After Delete				
				1 CREATE TRIGGER IBE\$JOB_AI FOR						
1				2	2 ACTIVE AFTER INSERT POSITION 32767					
1				3	as					
				4	4 declare variable tid integer;					
				5						
				6						
				7						
				8						
				<pre>9 values (:tid, 'JOB', 'I', 'NOW', user);</pre>						
				10						
				11	incert	the ibelies have (les tel	les id ken field ken			
				11 insert into ibeşlog keys (log_tables_id, key_field, key_value) 12 values (:tid, 'JOB_CODE', new_iob_code):						
Valmes (:tid. "HOR LOUK", new.ion code):										
,										- 10

which can be copied to clipboard, if wished, using the right-click SQL Editor Menu.

The *Log Data* page displays the new and old values:

📫 Log Manager					
Log Manager 🔹 🜖 Employee 🔹 🥰					
Table I U D Table I U D COUNTRY Image: Country Image: Country Image: Country CUSTOMER Image: Country Image: Country Image: Country Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Customer Image: Cu	Log Actions Log Data Options Block Cog Log to Script Start Date 07.04.2008 10:06:5 End Date 14.04.2008 10:06:5 Actions: 0 found Table PK Field Ty	Actions DELETE	Key fields values PK Field	Display all Type Description	Value

If a system error message appears when clicking on this page, stating that an IBExpert system table is missing, open any table from the DB Explorer and click on the Logging page in the Table Editor. You will then be automatically asked whether IBExpert should generate certain system tables. After confirming and committing, you should have no further problems!

On the *Log Data* page the following can be user-specified: *Start Date*, *End Date* (both with timestamp), individual or all users and individual or all *actions*. The specified log can also be logged to file if wished, by clicking on the *Log to Script* button, which produces a new window:

2023/10/05 18:15

3/4

🐝 Generate script from log data	×
File Name	
C:\FB3021\examples\LogToScript.sql	2
Options Script details	
Start of script	
1 set names NONE;	•
2	
	_
	<u>-</u>
	<u> </u>
End of script	
1 commit;	×
	-1
•	2
	- 70

where the *Script File Name* can be specified, and on the *Options* page, how often a COMMIT-command should be inserted. Finally the *Script Details* page enables the user to write his own *Start of Script* and *End of Script*.

This log file can even be used as a sort of replication. This is because, as opposed to the logging specified in the Database Registration, which only logs all IBExpert actions, the Log Manager logs all actions and operations on the database itself, including those of all users.

Back to the Log Manager Editor, the Options page:

Log Manager								
Log Manager •]] Employee_2_1 • 5								
Table 🛆 I	U	D	Log Actions Log Data Options Block					
COUNTRY C			Immediately compile after Prepare or Unprepare					
CUSTOMER C			Immediately complete arter Prepare of Onprepare					
DEPARTMENT			Autogrant privileges when compiling					
EMPLOYEE 🛛	×	×	n					
EMPLOYEE_PROJ								
IBE\$TODO								
IBE\$VERSION_HIS □								
🗔 JOB 🛛 🕅	×	×						
III PROJECT								
PROJ_DEPT_BUD								
SALARY_HISTORY		×						
III SALES								
	_	_						
1								

allows the user to specify the following options:

- Immediately compile after Prepare or Unprepare
- Autogrant privileges when compiling (generally this should be activated).

It is even possible to log trigger bodies based on the IBEBlock feature:

Last update: 2023/10/02 02-ibexpert:02-08-ibexpert-tools-menu:log-manager http://ibexpert.com/docu/doku.php?id=02-ibexpert:02-08-ibexpert-tools-menu:log-manager 09:20

								—
🕂 Log Manager								×
Log Manager 🔹 📵 Emp	ploye	e_2_1	- 4	3				
Table 🛆	1	U	D		in Direct			-
		_		Log Actions Log Data Opt				_
				Use default block	💣 🗵 🕨 🔢 🔂 🏅	😙 📷 C:\Dokumente und Einstellungen\Debi\Anw	endungsdate 🔀	7
DEPARTMENT	Н		Ы	1 /// DO NO	OT CHANGE INPUT/OUT	PUT PARAMETER NAMES ///		-
EMPLOYEE	×	×	×	2 execute ibel	block (
EMPLOYEE_PROJ				3 DatabasePr	cops variant con	ment 'Current database properties'	, 1	-
IBE\$TODO				4 Follow	ing database proper	ties available:		
IBE\$VERSION_HIS				5 Databas	seProps['Aias'] - a	lias of registered database		
JOB	×	×	×	6 Databas	seProps['ServerName	'] - server name of registered data	abase	
PROJECT				7 Databas	seProps['FileName']	- database file name		
BROJ_DEPT_BUD SALARY_HISTORY				8 Databas	seProps['ServerVers:	ion'] - server version		
SALARY_HISTORY	×	×		9 Databas		'] - SQL dialect of the database		
LEI SALLS			-	10 DataAction		ment 'Data action: 0 - INSERT, 1 -	- UPDATE,	
			1	11 TableName		mment <mark>'Table name'</mark> ,		
				12 TableNameH	Fmt variant con	mment 'Formatted table name (quoted	i if nece	-
				•				
				Parameters and Variables	Watches Last Statement	Breakpoints Messages Results		
				Name	Value	Туре	Watch 4	-
				DATABASEPROPS	null,'Employee_2_1','localho	. Variant		
				DATAACTION	0	SMALLINT		
				TABLENAME	'JOB'	Variant		
				TABLENAMEFMT	'JOB'	Variant		
				KEYFIELDS	'JOB_CODE', JOB_GRADE'	Variant		
				KEYFIELDSFMT	'JOB_CODE', JOB_GRADE'	Variant		
				LOGFIELDS	< NULL >	Variant		
				LOGFIELDSFMT	< NULL >	Variant		
				LOGFIELDSTYPES	< NULL >	Variant		
				LOGFIELDSLENGTHS	< NULL >	Variant		
				O TRIGGERBODY		Variant		
				O DONOTFORMAT	FALSE	BOOLEAN		
				CRLF	< NULL >	Variant		-1
				ACTINSEBT	< NULL >	Variant		

This has replaced the Data Logging Triggers page in the IBExpert Options menu item, General Templates.

From: http://ibexpert.com/docu/ - **IBExpert**

Permanent link: http://ibexpert.com/docu/doku.php?id=02-ibexpert:02-08-ibexpert-tools-menu:log-manager

Last update: 2023/10/02 09:20

