

# **Reports** Framework NET Genium



netgenium.com



# Content

1	Rep	oorts	5
1	.1	Database table	6
1	.2	Edit form	7
1	.3	View page	
1	.4	Button	9
1	.5	Other	10
	1.5.1	1 Database tables (COUNT (*))	10
	1.5.2	2 Database tables (MAX (ID))	11
	1.5.3	3 Database tables (SELECT *)	12
	1.5.4	4 Database tables (Locks)	13
	1.5.5	5 Indexes	14
	1.5.6	5 Indexes (dm_db_index_physical_stats)	19
	1.5.7	7 Indexes (dm_db_index_usage_stats)	20
	1.5.8	3 Indexes (dm_db_index_usage_stats)	21
	1.5.9	9 Full-text languages	22
	1.5.1	10 Full-text catalogues	23
	1.5.1	11 Full-text indexes	24
	1.5.1	12 Full-text columns	25
	1.5.1	13 Database queries	26
	1.5.1	14 Database queries (Templates)	27
	1.5.1	15 Database queries (Unused Joins)	29
	1.5.1	16 Database queries (LEFT JOIN + Condition)	
	1.5.1	17 Database queries (total_worker_time)	31
	1.5.1	18 Database queries (total_rows)	
	1.5.1	19 Database queries (execution_count)	
	1.5.2	20 Database queries (average_worker_time)	
	1.5.2	21 Database queries (average_rows)	
	1.5.2	22 Database queries (max_worker_time)	
	1.5.2	23 dm_exec_query_stats (total_worker_time)	
	1.5.2	24 dm_exec_query_stats (execution_count)	
	1.5.2	25 dm_exec_query_stats (average_worker_time)	
	1.5.2	26 dm_exec_query_stats (max_worker_time)	



1.5.27	Scripts (total_worker_time)	34
1.5.28	Scripts (execution_count)	
1.5.29	Scripts (average_worker_time)	34
1.5.30	Scripts (max_worker_time)	34
1.5.31	View pages (Export)	35
1.5.32	View pages (total_worker_time)	
1.5.33	View pages without postbacks (total_worker_time)	
1.5.34	View pages (execution_count)	
1.5.35	Landing pages without postbacks (execution_count)	
1.5.36	View pages (average_worker_time)	
1.5.37	Non-posting pages (average_worker_time)	
1.5.38	View pages (max_worker_time)	
1.5.39	Non-posting pages (max_worker_time)	
1.5.40	Edit forms (Export)	
1.5.41	Edit forms (total_worker_time)	
1.5.42	Edit forms without postbacks (total_worker_time)	
1.5.43	Edit forms (execution_count)	
1.5.44	Edit forms without postbacks (execution_count)	
1.5.45	Edit forms (average_worker_time)	
1.5.46	Edit forms without postbacks (average_worker_time)	
1.5.47	Edit forms (max_worker_time)	
1.5.48	Edit forms without postbacks (max_worker_time)	
1.5.49	Controls (Templates)	41
1.5.50	Controls (JavaScript + Insufficient Rights)	42
1.5.51	Controls (Read-only + Event)	43
1.5.52	Controls (Data type mismatch)	44
1.5.53	Controls (Picker + form_Update)	45
1.5.54	External functions	46
1.5.55	External functions (Rights defined)	47
1.5.56	External functions (total_worker_time)	48
1.5.57	External functions (execution_count)	48
1.5.58	External functions (average_worker_time)	48
1.5.59	External functions (max_worker_time)	48
1.5.60	Names to be translate	49



1.5.61	Dictionary (Export)	50
1.5.62	Dictionary (Import)	51
1.5.63	Rights (Applications)	
1.5.64	Rights (Edit forms)	53
1.5.65	Rights (View pages)	54
1.5.66	Rights (Controls)	55
1.5.67	Rights (User groups)	56
1.5.68	Rights (Rights groups)	57
1.5.69	Database model (SQL)	58
1.5.70	Database model (MS Access)	65
1.5.71	Database model (MS Access 2003)	65
1.5.72	Database model – complete (SQL)	68
1.5.73	Database model – complete (MS Access)	69
1.5.74	Database model – complete (MS Access 2003)	69
1.5.75	NET Genium database model (SQL)	70
1.5.76	NET Genium database model (MS Access)	70
1.5.77	NET Genium database model (MS Access 2003)	70
1.5.78	Logs	71
1.5.79	DomLib	72
1.5.80	NGDPH + jsngdph	73
1.5.81	Headers	74
1.5.82	Server variables	75
1.5.83	MAC	76
1.5.84	Sessions	77
1.5.85	Connections (netgenium)	78
1.5.86	Connections	78
1.5.87	Running queries (netgenium)	78
1.5.88	Running queries	78
1.5.89	FbConnection.ClearPool	79



# 1 Reports

	Database table	mon\$attachments 🗸
lietgeman	Edit form	1 / susers 🗸
A Home page	View page	1 / Users 🗸
	Button	11 / New group 🗸
NET Genium	Other	Database tables (COUNT(*))
🗄 🛨 Až 🦳 🏟 🕞 🕓 🜆		
New license key request		Print Report
Restart		
☆ Home page ▼		
★ Favorites ▼		
🔅 My Settings 🔹		
© 2021 NetGenium		

• Reports are available for users with administrator privileges.

#### Printing

- Button for printing the currently displayed report from a web browser.
- The report can also be called up using the "CTRL + P" key.

#### Report

• Button to open the currently displayed report on a new web browser tab.



# 1.1 Database table

- This report shows the contents of the selected database table from the drop-down list, compiled using the SQL query "SELECT \* FROM ng\_ ORDER BY id".
- The drop-down list contains a list of all database tables in the database.
- The table title also serves as a link to open the associated edit form on a new web browser tab.

Dat	3/3					
id	system	pform	pid	userid	name	description
1	True	0	0		Administrators	
2	True	0	0		Users	
999	True	0	0		External Users	



# 1.2 Edit form

- This report shows the details of the selected edit form from the drop-down list.
- The report consists of the metadata of the edit form stored in the "stables" table, as well as a list of all its controls read from the "scolumns" table.
- The drop-down list contains a list of all edit forms in the application.
- The table title also serves as a link to open the edit form on a new web browser tab.
- In the edit form metadata table, a pencil icon appears in the first and last columns to change or delete the edit form settings.
- In the table listing the controls, a pencil icon appears in the first and last columns to change or delete the control's settings.

Ec	Edit form "Settings / Settings / User"														
	id	system	sortid	арр	name	dbna	me	ind	expid	indexp	id2	indexco	lumns	inde	xco
1	1	True	1000	1	User	susers		0	0						
Co	Controls														
	id	system	sortid	form	name	е	nar	ne2	dbna	ime	typ	e	valida	tion	sy
1	3	False	1000	1							Title				
/	4	True	1000	1	Full name	e			fullna	ame	Tex	«tВох	String	I	
1	5	True	1000	1	Surn	Surname			sum	ame	Tex	кtВох	String	I	
1	6	True	1000	1	Nam	e			nam	e	Tex	сtBox	String		



# 1.3 View page

- This report shows the details of the selected view page from the drop-down list.
- The report consists of the view page metadata stored in the "sviewpages" table, as well as a list of all its controls retrieved from the "sviewfields" table.
- The drop-down list contains a list of all view pages in the application.
- The table title also serves as a link to open the view page on a new web browser tab.
- In the preview page metadata table, a pencil icon appears in the first and last columns to change or delete the preview page settings.
- In the table listing the controls, a pencil icon appears in the first and last columns to change or delete the control's settings.

Vi	View page "Settings / Settings / Users"														
	id	system	sortid	арр	categ	ory	name	type	gotourl	form	backview	page			
1	1	True	1	1	0		Users	0		6	1				
Controls															
	id	system	viewp	age	sortid	typ	е	name	symbol	width	height	oncli			
1	63	False	1		1000	Dat	taGrid	User							
1	64	False	1		1000	Space									
/	65	False	1		1000	But	ton	New record							



#### 1.4 Button

- This report shows the details of the selected button from the drop-down list.
- The report consists of button metadata stored in the "sviewfields" table.
- The drop-down list lists all the buttons located on the view pages across the entire application.
- The table title also serves as a link to open the view page on the new web browser tab in which the button is located.
- In the button metadata table, a pencil icon appears in the first and last columns to change or delete control settings.

<u>B</u> (	Button "Settings / Settings / Rights groups / New group"														
	id	system	viewpage	sortid	type	name	symbol	width	heig						
1	11	False	3	1000	Button	New group									



# 1.5 Other

# 1.5.1 Database tables (COUNT (\*))

- This report displays a list of all database tables and views in the database, along with the number of records stored in each database table or view.
- The report is sorted by the number of records in descending order.
- Database tables, which are used to store user settings for controls or statistics, contain a larger icon for deleting all data in the database table.
- Database tables, which are used to store the history of records (\_history), contain a smaller icon designed to delete data older than 6 months in the database table.

Database tables (COUN	<b>T(*))</b> 11	6 / 116
TABLE	COUNT(*) -	
sngef_stats	228	×
scolumns	139	
sviewpages_stats	76	×
squerybuilder_stats	52	×
stables_stats	41	×
susers_vfc	32	×
susers_vf	29	×
sngscript_processing	23	
sviewfields	21	
sinvalidlogins	19	××
squerybuilder	14	



# 1.5.2 Database tables (MAX (ID))

- This report displays a list of all database tables in the database, along with the maximum value of the primary key. In the case of the "Firebird" database server, the report also shows the value of the generator associated with the database table, which should have the same value as the current maximum value of the primary key for a consistent database.
- The report is sorted by the maximum value of the primary key in descending order.

Database tables (MAX(	<b>ID))</b> 11	.6 / 116
TABLE	MAX(ID) 🗸	GEN_ID
sngef_stats	1842	1842
susergroups	999	1000
scolumns	981	981
susers_vfc	720	720
squerybuilder_stats	611	611
sviewfields	515	515
sviewpages_stats	488	488
sviewfields_rights_view	482	N/A
stables_stats	477	477
squerybuilder	454	454





## 1.5.3 Database tables (SELECT \*)

- This report displays a list of SQL queries in the form "SELECT \* FROM ng\_", compiled from database tables associated with all edit forms across the entire application.
- SQL queries are displayed in groups according to the applications in which the associated edit forms are located. Above each group, the name of the application group and the application to which the SQL queries belong is displayed in the comment.

Database tables (SELECT *) 1 / 1	
SQL	
// Settings / Settings	
SELECT * FROM sholiday SELECT * FROM ng_book3 SELECT * FROM sinvalidlogins SELECT * FROM slayout SELECT * FROM srightsgroups SELECT * FROM sstatistics SELECT * FROM sstatistics2 SELECT * FROM sstatistics3 SELECT * FROM ssynchro SELECT * FROM susers	

12/79



#### 1.5.4 Database tables (Locks)

- This report shows a list of all active locks with the possibility of their immediate release.
- The report consists of the locks of the edit forms stored in the "stables\_lock" table, as well as the locks of the currently running scripts stored in the "sngscript\_processing" table.
- Edit form locks are used to calculate the value of "TextBox" controls with an integer data type and the "Max+1" function enabled, as well as for data synchronization.
- Script locks are used for the "PROTECTSCRIPT()" server function.

Edit forms (stables_lock) 0 / 0										
	Edit form Date User									
No records found										
Scripts (sngscript_processing) 0 / 0										
	Location	Name	Cont	rol	Nan	ne				
No records found										

The lock must be released manually when it is evident that an anomaly has occurred on the application or database server and the lock has not been released correctly, which is provided by NET Genium itself by default. Users cannot then save pending records in edit forms that contain "MAX+1 textboxes" and receive the following message:

Zp	oráva z w	ebové stránky	83
	<u>^</u>	NET Genium čeká na dokončení transakce, která byla zahájena v 09:25 uživatelem BostikJ. Pokuste se prosím záznam uložit později. Pokud potíže přetrvají, obraťte se na správce systému.	
		ОК	

- An incorrect database lock release can occur in the following situations, and this release must be performed manually:
- Both the application and the database server may be running low on system resources. A detailed description of this issue is provided in a separate "Troubleshooting" guide.
- The network connection between the application and database server may break, which may be indicated, among other things, by the following message in the "Errors.log" file: "This SqlTransaction has completed; it is no longer usable. "



#### 1.5.5 Indexes

- This report shows an analysis of the indexes of the database tables associated with all edit forms in the application.
- Each report record also serves as a link to open the settings of that edit form or control.
- When dealing with database performance optimization, it is important to follow the basic rule that every column that occurs in the join conditions on either the left or right side of the condition must be indexed. All other joins can be turned on/off only after some time of the application, when the database is gradually filled with data. Over time, the need to set up indexes changes, primarily according to the growing number of records in each database table, and consequently according to the way this data is read.
- Gradual indexing on/off must be based on the basic nature of indexes indexing a given column only makes sense if the value of the column is evaluated using the operator "equals", "is defined" or "is not defined".

Indexes	
Application group "Home page"	
Application group "Settings"	
Application "Settings"	
Edit form ID 10 "Invalid login"	
DatePicker (Date)	
□ TextBox (IP address)	
TextBox (Login name)	
TextBox (Password)	
Edit form ID 3 "Rights group"	
TextBox (Rights group)	
RichTextBox (Description)	
Edit form ID 7 "Statistics"	
TextBox (View page)	
TextBox (User)	INDEX, pid
TextBox (Date)	

#### LEGEND

- JC QueryBuilder Join Condition
- C QueryBuilder Condition (EqualTo, IsNotDefined, IsInQuery)
- AC AutoSum Condition (EqualTo, IsNotDefined)
- F Filter



• Enabling/disabling indexes in the properties of the edit form is performed on the "Administration" tab.

General	Other	Help	Editing rights	Rights of ch	ild objects	Administration	
	Identifie	er #sin	validlogins#	Col	rect Correct a	11	
<ul> <li>Read/write data from the database</li> <li>Read data from the database table</li> <li>Select command</li> </ul>					e table using e using a vie	a memory optimized w	table
Index 1 ● (None) ○ PID ○ PFORM + PID Index 2 ● (None) ○ (Custom)							
C# / Jav	aScript	Statis	tics Loggi	ng		Save	Delete

• Enabling/disabling indexes in the control properties is performed on the "Administration" tab.

General	Default valu	ie Events	Help	Filter	Rights	Administration		
	Identifier Index	#date_# #sinvalidlogin	s#.#date	e_# ′ along wit	th the follo	Correct		
Other Curren the Chan	nt value in e database ge type to	TextBox 🗸	Chang	e		Save		
Statistic	5					Sa	ave	Delete



#### 🖉 Examples:

- If the index is not set on the column on which it should be set from the essence of the join, three exclamation points are given for the control, along with the abbreviation "JC" (QueryBuilder Join Condition) and the frequency of use of the control in the join conditions. The frequency with which the control is used plays a role in deciding whether to turn on the index. If the column is used in joint conditions only once or generally in a minimal amount,
  - the index may be unnecessary due to the number of records in the referenced table, it will only take up space in the database, and data loading speed will not help,
  - $\circ~$  or it may be an error, and the column is incorrect in the join conditions.

Edit form ID 1 "User"	
TextBox (Full name)	
TextBox (Surname)	
TextBox (Name)	
TextBox (Title)	
TextBox (Login name)	
TextBox (Password)	
ComboBox (Language)	
TextBox (Windows Account)	
TextBox (Email)	
TextBox (M-Password)	
ForeignKey (Rights group)	[!!! JC:1x]
Edit form ID 2 "User group"	
TextBox (User group)	
RichTextBox (Description)	

- If an index is set on the column, the word "INDEX" is displayed for that control.
  - In the image below, the column is not used in any join or condition.
  - Indexes in database tables from the "Settings" application have their justification, because index analysis takes into account only the application logic resulting from the settings of individual applications, but does not take into account SQL queries that run in the background using internal algorithms NET Genium.
  - Likewise, SQL queries that run third-party tools on the database are not taken into account.



	dit form ID 6 " <b>Bank holiday</b> "	
C	□ TextBox (Holiday name)	
C	DatePicker (Date)	INDEX
[	CheckBox (Part-day)	

• If the control shows the word "INDEX" and there is another column or columns from the same table next to the comma, it is a federated index, and that column is indexed at the same time as another column or with several other columns.

Edit form ID 9 "Statistics 3"	
TextBox (View page)	
TextBox (User)	INDEX, pid
□ TextBox (Session)	

• If the control is abbreviated as "JC" (QueryBuilder Join Condition), the column is used in join conditions. The colon is followed by the frequency of use of the column in these joints.

Edit form ID 1 " <b>User</b> "	
TextBox (Full name)	
TextBox (Surname)	
TextBox (Name)	
TextBox (Title)	
TextBox (Login name)	
TextBox (Password)	
ComboBox (Language)	[C:1x]
TextBox (Windows Account)	
TextBox (Email)	
TextBox (M-Password)	
ForeignKey (Rights group)	INDEX [JC:1x]
Edit form ID 2 "User group"	



• If the control is abbreviated as "C" (QueryBuilder Condition), the column is used in database query conditions with the "equals", "defined", or "not defined" operator. The colon indicates the frequency of use of the column in these conditions.

Edit form ID 1 " <b>User</b> "
TextBox (Full name)
TextBox (Surname)
TextBox (Name)
TextBox (Title)
TextBox (Login name)
TextBox (Password)
ComboBox (Language) [C:1x]
TextBox (Windows Account)

- If the control is abbreviated as "AC" (AutoSum Condition) in square brackets, the column is used in "AutoSum" control conditions to evaluate the number, sum, maximum or minimum value, or average. After the colon is the frequency of use of the column in these autosums.
- If the control is abbreviated "F" (Filter) in square brackets, the given column is used as a filter for view tables, calendars, graphs, etc.



# 1.5.6 Indexes (dm\_db\_index\_physical\_stats)

- For database server "MS SQL Server"
- This report shows a list of index fragmentation of edit forms or database controls.
- Each report record also serves as a link to open the settings of that edit form or control.
- The program "SqlBackup.exe/rebuilindexes" or "SqlBackup.exe/reorganizeindexes" is used to defragment the indexes. A detailed description of the "SqlBackup.exe" program is given in the separate "Utilities" manual.

Indexes (dm_db_index_physical_stats) 123 / 12					
TABLE	INDEX	avg_fragmentation_in_percent -			
ng_verejnaip	ng_povolitrozsah	99,64			
ng_pridatodebratage	ng_guid	99,14			
ng_pridatodebratage	ng_idagenda	96,99			
ng_zkopirovatip	ng_idipadresa	95,65			
ng_ais	ng_idodebratagendu	92,86			
ng_zadost	ng_guid	92,31			
ng_platneprihlaseni	ng_prihlasovacijmeno	90,48			
ng_pridatodebratage	ng_pguid	89,42			
ng_odebratcertifika	ng_pguid	88,89			
ng_odebratip	ng_pguid	85,71			
ng_aktivita	ng_pguid	83,33			
ng_pridatodebratage	pid	83,33			
ng_zmenaudaju	ng_guid	83,33			
ng_aktivita	ng_guid	75			
ng_ipais	ng_idais	75			



#### 1.5.7 Indexes (dm\_db\_index\_usage\_stats)

#### Sor database server "MS SQL Server"

- This report shows a list of index usage by the database server.
  - o user\_seeks global index search frequency using the "SEEK" operation
  - o user\_scans global frequency of index searches using the "SCAN" operation
  - o user\_lookups global index search frequency using the "LOOKUP" operation
  - o user\_updates global index update frequency
- Each report record also serves as a link to open the settings of that edit form or control.
- Indexes that have zero in the "user\_seeks", "user\_scans", and "user\_lookups" columns should be optimized or deleted completely because "SQL Server" does not use them to speed up database queries and only updates them (if the value is "user\_updates"). "Greater than zero).

Indexes (uni_ub_index_usage_stats)							
TABLE 🔺	INDEX	user_seeks	user_scans	user_lookups	user_updates		
ng_agendyrpp	ng_kodregistrujicihoovm	0	1	0	0		
ng_ais	ng_idodebratagendu	0	5	0	0		
ng_ais	ng_idspravce	2	0	0	0		
ng_certifikat	ng_idais	7	0	0	0		
ng_certifikatvzados	ng_pguid	7	0	0	0		
ng_ipais	ng_idais	2	0	0	0		

#### Indexes (dm\_db\_index\_usage\_stats)



#### 1.5.8 Indexes (dm\_db\_index\_usage\_stats)

#### Sor database server "MS SQL Server"

- This report displays a list of unused indexes by the database server.
  - o user\_seeks global index search frequency using the "SEEK" operation
  - o user\_scans global frequency of index searches using the "SCAN" operation
  - o user\_lookups global index search frequency using the "LOOKUP" operation
  - user\_updates global index update frequency
- Each report record also serves as a link to open the settings of that edit form or control.
- Indexes that have zero in the "user\_seeks", "user\_scans", and "user\_lookups" columns should be optimized or deleted completely because "SQL Server" does not use them to speed up database queries and only updates them (if the value is "user\_updates"). "Greater than zero).

Unused indexes					
TABLE 🔺	INDEX	user_seeks	user_scans	user_lookups	user_updates
ng_platneprihlaseni	ng_prihlasovacijmeno	0	0	0	4





# 1.5.9 Full-text languages

- For database server "MS SQL Server"
- This report shows a list of all full-text languages.

Fullt	text languages 53 / 53
lcid	name
5124	Chinese (Macao SAR)
4100	Chinese (Singapore)
3098	Serbian (Cyrillic)
3082	Spanish
3076	Chinese (Hong Kong SAR, PRC)
2074	Serbian (Latin)
2070	Portuguese
2057	British English



# 1.5.10Full-text catalogues

- For database server "MS SQL Server"
- This report shows a list of all full-text catalogues.

Fulltext catalog	ues							0 / 0
fulltext_catalog_id	name	path	is_default	is_accent_sensitivity_on	data_space_id	file_id	principal_id	is_importing
No records found								





#### 1.5.11Full-text indexes

- For database server "MS SQL Server"
- This report displays a list of all full-text indexes.

#### Fulltext indexes

object\_id unique\_index\_id fulltext\_catalog\_id is\_enabled change\_tracking\_state change\_tracking\_state\_desc has\_crawl\_completed crawl\_type

No records found



0/0

## 1.5.12Full-text columns

- For database server "MS SQL Server"
- This report lists all full-text columns.

#### Fulltext columns

 TABLE\_OWNER
 TABLE\_ID
 TABLE\_NAME
 FULLTEXT\_COLUMN\_NAME
 FULLTEXT\_COLID
 FULLTEXT\_BLOBTP\_COLNAME
 FULLTEXT\_BLOBTP\_COLID
 FULLTEXT\_LANGUAGE

 No records found



#### 1.5.13Database queries

- This report lists all database queries across the entire application created in the database query designer.
- The database query table displays information about the control to which the database query is associated, and the first column displays a pencil icon to change the settings of the associated control.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Database queries 7											
	#	Location	Name	Control	Name	Туре					
1	1	Edit form	Settings / Settings / User	ForeignKey	Rights group	Values					
1	2	Edit form	Settings / Settings / Layout	DataGrid	Layout	Data source					
1	3	View page	Settings / Settings / Users	DataGrid	User	Data source					
1	4	View page	Settings / Settings / User groups	DataGrid	User groups	Data source					
1	5	View page	Settings / Settings / Rights groups	DataGrid	Rights groups	Data source					
1	6	View page	Settings / Settings / Bank holidays	DataGrid	Bank holidays	Data source					
1	7	View page	Settings / Settings / Layout	DataGrid	Layout	Data source					



#### 1.5.14Database queries (Templates)

• This report displays a list of all database queries that are marked as templates – they have the template name filled in the database query settings on the "Other" tab.

General	Conditions	Joins	Other				
Temp	late name Notes	Users			]		
Load	l only first	~					
Remo with	ve records duplicate	~					
	Options	ngef(NE	TGenium.Dat	aTable)			
		if (args[0] { DataTable int form : }	== "Q456" 8 e data = (Dat = Parser.ToInt	& args[1] == aTable)conn.Co t32(args[1]);	"66") ontainer2[args[0]];		
Logging						Save	Delete

- The database query table displays information about the control to which the database query is associated, and the first column displays a pencil icon to change the settings of the associated control.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Da	atal	base querie	s (Templates)				1/1
	#	Location	Name	Control	Name	Туре	Expression
1	1	View page	Finance / Issued invoices / Invoices	DataGrid	Invoices	Data source	Users

• When creating a new database query, all available templates are available in the "Templates" drop-down list on the "General" tab. After selecting a template, all parameters of the database query will be automatically pre-filled with data from the selected template.



General	Conditions	Joins	Other				
Databa	ase table F	inance	✓ Issu	ied invoices 🗸 Issued invoi	ice item 🛩	] ~	
	Options	) Aggrega	te query				
Templates 🗸	Show quer	у				Save	Delete
Templates Users							



#### 1.5.15Database queries (Unused Joins)

- This report lists all database queries that join database tables, but then do not use those tables for anything:
  - the columns of these tables do not appear in the conditions, aggregation columns, or database query headers
  - $\circ$  the columns of these tables do not appear in the columns of the lookup table or in the details.

U	nus	ed joins					1/1
	#	Location	Name	Control	Name	Туре	Expression
1	1	Edit form	Settings / Settings / Layout	DataGrid	Layout	Data source	INNER JOIN Rights group



#### 1.5.16Database queries (LEFT JOIN + Condition)

- This report displays a list of all database queries that join database tables using LEFT JOIN, and at the same time contain a condition for the value of one of the columns of the accepted table using the set of operators "equals", "does not equal", etc. The only operator that is excluded from this set is the "undefined" operator. This operator is important in the case of LEFT JOIN because it filters all records for which the JOIN operation could not be satisfied under the specified conditions.
- It is advisable to check the database queries that appear in this report and, if necessary, replace them with INNER JOIN in order to optimize the loading speed of the database query. INNER JOIN processing is always faster than LEFT JOIN.

Da	atal	base querie	s (LEFT JOIN + Condition)				1/1
	#	Location	Name	Control	Name	Туре	Expression
1	1	View page	Finance / Issued invoices / Invoices	DataGrid	Invoices	Data source	Condition



- 1.5.17Database queries (total\_worker\_time)
- 1.5.18Database queries (total\_rows)
- 1.5.19Database queries (execution\_count)
- 1.5.20Database queries (average\_worker\_time)
- 1.5.21Database queries (average\_rows)

#### 1.5.22Database queries (max\_worker\_time)

- This report shows database query call statistics created in the database query designer, sorted in descending
  order
  - o total\_worker\_time total query processing time by the database server,
  - total\_rows the total number of records returned by the query,
  - execution\_count number of query executions,
  - o average\_worker\_time average query processing time by the database server,
  - o average\_rows the average number of records returned by the query,
  - o max\_worker\_time maximum query processing time by the database server.
- This report is available only if database logging is enabled in the NET Genium settings and there is at least one database query call record. A detailed description of NET Genium settings is given in the separate "NET Genium Settings" manual.
- The database query table displays information about the control to which the database query is associated, and the first column displays a pencil icon to change the settings of the associated control.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

D	Database queries 17/12/2021 10:11 - ??/?? (total_worker_time)         5 / 5													
	#	Location	Name	Control	Name	Туре	Logging	total_time -	total_rows	exec_count	avg_time	avg_rows	max_time	last_execution_time
1	1	View page	Settings / Settings / Rights groups	DataGrid	Rights groups	Data source		18	30	8	2	3	3	06/01/2022 10:11:03
1	2	Edit form	Settings / Settings / Layout	DataGrid	Layout	Data source		16	2	8	2	0	2	17/12/2021 10:57:47

- Using the "..." link in the "Logging" column, it is possible to display a detailed report on the new web browser tab with individual records of database query calls and data on
  - o the date and time the query was started,
  - o the user who initiated the query
  - query processing time in milliseconds,
  - the number of records returned, and
  - specific SQL query.

L	ogging					8/8
#	Date	User	Time	Time [ms]	Count	Database query
1	06/01/2022 10:11:03	Administrator	0.002 seconds	2	3	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC
2	06/01/2022 10:10:51	Administrator	0.003 seconds	3	3	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC
3	06/01/2022 10:09:55	Administrator	0.002 seconds	2	4	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC
4	17/12/2021 11:10:44	Administrator	0.002 seconds	2	4	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC
5	17/12/2021 11:08:05	Administrator	0.002 seconds	2	4	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC
6	17/12/2021 11:06:58	Administrator	0.002 seconds	2	4	SELECT srightsgroups.id id, srightsgroups.name c23, srightsgroups.description c25 FROM srightsgroups ORDER BY srightsgroups.name ASC, srightsgroups.id ASC



• The number of records is limited to 100 by default. This number can be manually increased or decreased by changing the "maxrows" parameter in the report URL.

🍥 Database query "Settings / Settin 🗙

m/martin-sevcik/(S(wrwhkglgmeoy4kfy343ttmyv))/History2.aspx?query=4&mintime=0&maxrows=100

+





#### 1.5.23dm\_exec\_query\_stats (total\_worker\_time)

- 1.5.24dm\_exec\_query\_stats (execution\_count)
- 1.5.25dm\_exec\_query\_stats (average\_worker\_time)
- 1.5.26dm\_exec\_query\_stats (max\_worker\_time)
- For database server "MS SQL Server"
- This report shows call statistics for the longest-running database queries, sorted in descending order
  - o total\_worker\_time total query processing time by the database server,
  - execution\_count number of query executions,
  - o average\_worker\_time average query processing time by the database server,
  - max\_worker\_time maximum query processing time by the database server.

dn	n_exec_query_stats (average_worker_time)							100 / 100
#	SQL	execution_count	total_logical_reads	total_logical_writes	total_worker_time	average_worker_time -	min_worker_time	max_worker_time
1	SELECT db_id() AS database_id, o.[type] AS object_type, i.[type] AS index_type, p. [data_compression], COUNT_BIG(DISTINCT p.[object_id]) AS NumTables, COUNT_BIG(DISTINCT CAST(p.[object_id]) AS VARCHAR(30)) + 'I + CAST(p.[index_id] AS VARCHAR(10))) AS NumIndexes, ISNULL(px.[IsPartitioned], 0) AS IsPartitioned, II[frpx.[IsPartitioned] = 1, COUNT_BIG(1), 0) NumPartitions, SUM(p[rows]) NumRows FROM sys.partitions p INNER JOIN sys.objects o ON o.[object_id] = p.[object_id] INNER JOIN sys.indexes i ON i.[object_id] = p.[object_id] AND i.[index_id] = p.[index_id] OUTER APPLY (SELECT x.[object_id], 1AS [IsPartitioned] FROM sys.partitions x WHERE x.[object_id] = p.[object_id] GROUP by x.[object_id] HAVING MAX(x.partition_number) > 1) px WHERE o.[type] NOT IN ('S', IT') GROUP BY o.[type], j.[type], p. [data_compression], px.[IsPartitioned]	1	30553	1	273637	273637	273637	273637
2	SELECT db_id() AS database_id, o.[type] AS object_type, i.[type] AS index_type, p. [data_compression], COUNT_BIG(DISTINCT p.[object.id]) AS NumTables, COUNT_BIG(DISTINCT CAST(p.[object.id]) AS VARCHAR(30)) + 1' + CAST(p.[index_id] AS VARCHAR(10))) AS NumIndexes, ISNULL(pr.[IsPartitioned], o) AS IsPartitioned, IIF(px.[IsPartitioned] = 1, COUNT_BIG(1), o) NumPartitions, SUM(p.[rows]) NumRows FROM sys.partitions p INNER JOIN sys.objects o ON o.[object.id] p.[object.id] INNER JOIN sys.indexes i ON i.[object.id] = p.[object.id] AND i.[index_id] = p.[index_id] OUTER APPLY (SELECT x.[object.id], 1 AS [IsPartitioned] FROM sys.partitions x WHERE x.[object.id] = p.[object.id] GROUP by x.[object.id] HAVING MAX(x.partition_number) > 1) px WHERE o.[type] NOT IN ('S', 'IT') GROUP BY o.[type], j.[type], p. [data_compression], px.[IsPartitioned]	1	30420	0	251518	251518	251518	251518
3	SELECT db_id() AS database_id, c.system_type_id, c.user_type_id, c.is_sparse, c.is_column_set, c.is_filestream, c.encryption_type, CASE WHEN o.object_id IS NOT NULL THEN 1 ELSE 0 END AS is_user, COUNT_BIG(*) AS [ColCount], CASE WHEN c.collation_name IS NULL THEN CONVERT(VARCHAR(128), SERVERPROPERTY(Collation)) ELSE c.collation_name END AS collation_name, AVG(cmax_length) AS aug_max_length FROM sys.columns, c WITH (NOLOCK) LEFT OUTER JOIN sys.objects o WITH (NOLOCK) ON o.object_id = c.object_id AND o.type = 'U' GROUP BY c.system_type_id, c.user_type_id, c.is_sparse, c.is_column_set, c.encryption_type, c.is_filestream, CASE WHEN o.object_id IS NOT NULL THEN 1 ELSE 0 END_CASE WHEN c.collation_name IS NULL THEN CONVERT(VARCHAR(128), CENVEDNOTERTY/Collation_DELSE OND	1	207	0	248508	248508	248508	248508



- 1.5.27Scripts (total\_worker\_time)
- 1.5.28Scripts (execution\_count)
- 1.5.29Scripts (average\_worker\_time)
- 1.5.30Scripts (max\_worker\_time)
- This report shows the execution statistics of server-side scripts created in the script designer, sorted in descending order
  - total\_worker\_time total script processing time,
  - execution\_count number of script executions,
  - average\_worker\_time average script processing time,
  - max\_worker\_time maximum script processing time.
- This report is only available if database logging is enabled in the NET Genium settings and there is at least one script execution record. A detailed description of NET Genium settings is given in the separate "NET Genium Settings" manual.
- The script table displays information about the edit form or control that the script is associated with, and the first column displays a pencil icon to change the definition of the script.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

S	Scripts 14/12/2021 14:05 - ??/??/???? (max_worker_time) 12 / 12											
	#	Location	Name	Control	Name	Logging	total_time	exec_count	avg_time	max_time 🗸	last_execution_time	
1	1	Edit form	Settings / Settings / Layout	Script	OnBeforeSave		0	1	0	0	14/12/2021 14:05:56	
1	2	Edit form	Settings / Settings / Layout	Script	OnAfterSave		0	1	0	0	14/12/2021 14:05:56	

- Using the "..." link in the "Logging" column, it is possible to display a detailed report with individual script execution records and data on the new web browser tab.
  - o date and time of script execution,
  - o the user who ran the script and
  - script processing time in milliseconds.

Logging							
#	Date	User	Time	Time [ms]			
1	14/12/2021 14:05:56	Administrator	0 seconds	0			

• The number of records is limited to 100 by default. This number can be manually increased or decreased by changing the "maxrows" parameter in the report URL.

Script "" × +

m/martin-sevcik/(S(zyqangtuxsid5121larn5bpk))/History2.aspx?script=36\_0&mintime=0&maxrows=100



# 1.5.31View pages (Export)

• This report compiles a word document in which all view pages are listed, including their application groups, applications and categories, together with the help of the given view page.

Settings Settings Users User groups Rights groups Bank holidays Layout







- 1.5.32View pages (total\_worker\_time)
- 1.5.33View pages without postbacks (total\_worker\_time)
- 1.5.34View pages (execution\_count)
- 1.5.35Landing pages without postbacks (execution\_count)
- 1.5.36View pages (average\_worker\_time)
- 1.5.37Non-posting pages (average\_worker\_time)
- 1.5.38View pages (max\_worker\_time)
- 1.5.39Non-posting pages (max\_worker\_time)
- This report shows pageview statistics, sorted in descending order
  - total\_worker\_time total processing time of the view page,
  - execution\_count number of views of the view page,
  - $\circ$  ~ average\_worker\_time average processing time of the view page,
  - $\circ \quad$  max\_worker\_time maximum processing time of the view page.
- This report is only available if logging to the database is enabled in the NET Genium settings and there is at least one view page view record. A detailed description of NET Genium settings is given in the separate "NET Genium Settings" manual.
- In the preview page table, a pencil icon appears in the first column to change the settings for this preview page.
- The name of the view page also serves as a link to open the given view page in a new tab of the web browser.

View pages 17/12/2021 10:11 - ??/??/??? (total_worker_time)									
	#	Name	Logging	total_time 🗸	exec_count	avg_time	max_time	last_execution_time	
1	1	Settings / Settings / Users		2345	8	293	1953	06/01/2022 10:12:44	
1	2	Settings / Settings / Rights groups		2096	8	262	1688	06/01/2022 10:11:03	

- Using the "..." link in the "Logging" column, it is possible to display a detailed report on individual web browser tabs with individual records of view page views and data on
  - the date and time the view page was displayed,
  - the user who viewed the view page
  - view page processing time in milliseconds; and
  - information on whether this is the first load of the view page or its update (postback).


Lo	Logging									
#	Date	User	Time	Time [ms]	PostBack					
1	20/02/2022 15:15:47	Administrator	0.031 seconds	31	x					
2	18/02/2022 11:09:39	Administrator	0.031 seconds	31						
3	18/02/2022 11:05:17	Administrator	0.047 seconds	47						
4	18/02/2022 11:04:46	Administrator	0.031 seconds	31						
5	18/02/2022 10:49:08	Administrator	0.047 seconds	47						
6	18/02/2022 10:48:42	Administrator	0.031 seconds	31						
7	18/02/2022 10:47:53	Administrator	0.063 seconds	63						
8	18/02/2022 10:47:08	Administrator	0.031 seconds	31						

- By default, the minimum view page processing time is set to 0 milliseconds, so all view page display records are displayed, including those that took 0 milliseconds to process. This minimum time can be increased or decreased by changing the "mintime" parameter in the report URL.
- The number of records is limited to 100 by default. This number can be manually increased or decreased by changing the "maxrows" parameter in the report URL.

Settings / Settings / U × +

m/martin-sevcik/(S(wrwhkglgmeoy4kfy343ttmyv))/History2.aspx?viewpage=1&mintime=0&maxrows=100



# 1.5.40Edit forms (Export)

- This report compiles a word document in which all edit forms, including their application groups, applications and categories, are listed, together with the help of the given edit form, and
  - with all its database controls,
  - with RichText controls labeled "Report Help", and
  - with other controls that have completed help.
- Each control in the report contains the following data:
  - o control name,
  - o control type,
  - o control identifier,
  - o control data type,
  - o control help, if filled in and
  - o control note, if filled.

## Settings

## Settings

User (susers)

Full name	TextBox	fullname	varchar(150)				
Surname	TextBox	surname	varchar(50)				
Name	TextBox	name	varchar(50)				
Title	TextBox	title	varchar(50)				
* Login name	TextBox	loginname	varchar(50)				
* •	TextBox	password	varchar(250)				
Password	#passwordhelp#						
* Language	ComboBox	Ing	varchar(2)				
Windows Account	TextBox	account	varchar(50)				
Email	TextBox	email	varchar(50)				
M-Password	TextBox	md5	varchar(250)				
Rights group	ForeignKey	rightsgroup	int				





- 1.5.41Edit forms (total\_worker\_time)
- 1.5.42Edit forms without postbacks (total\_worker\_time)
- 1.5.43Edit forms (execution\_count)
- 1.5.44Edit forms without postbacks (execution\_count)
- 1.5.45Edit forms (average\_worker\_time)
- 1.5.46Edit forms without postbacks (average\_worker\_time)
- 1.5.47Edit forms (max\_worker\_time)
- 1.5.48Edit forms without postbacks (max\_worker\_time)
- This report shows the display statistics of the edit forms, sorted in descending order
  - total\_worker\_time total processing time of the edit form,
  - execution\_count number of edit form views,
  - average\_worker\_time average processing time of the edit form,
  - max\_worker\_time maximum processing time of the edit form.
  - This report is only available if database logging is enabled in the NET Genium settings and there is at least one edit form view record. A detailed description of NET Genium settings is given in the separate "NET Genium Settings" manual.
- In the table with edit forms, a pencil icon is displayed in the first column, which is used to change the settings of this edit form.
- The name of the edit form also serves as a link to open the given edit form on a new tab of the web browser.

Edit forms 17/12/2021 10:11 - ??/??/??? (total_worker_time)         4/4										
	#	* Name Logging total_time - exec_count avg_time max_time last_ex								
1	1	Settings / Settings / Layout		1110	11	100	141	17/12/2021 10:57:47		

- Using the "..." link in the "Logging" column, it is possible to display a detailed report on the new web browser tab with individual records of the display of edit forms and data on
  - o the date and time the display of the edit form,
  - the user who viewed the edit form,
  - o edit form processing time in milliseconds; and
  - o information on whether this is the first loading of the edit form or its updating (postback).



Lo	Logging 6.								
#	Date	User	Time	Time [ms]	PostBack				
1	18/02/2022 11:13:27	Administrator	0.078 seconds	78	x				
2	18/02/2022 11:11:50	Administrator	0.063 seconds	63					
3	18/02/2022 11:11:41	Administrator	0.063 seconds	63					
4	18/02/2022 11:10:26	Administrator	0.047 seconds	47					
5	18/02/2022 11:10:13	Administrator	0.063 seconds	63					
6	18/02/2022 11:09:46	Administrator	0.109 seconds	109					
7	01/02/2022 17:01:18	Administrator	0.063 seconds	63					
8	01/02/2022 14:19:44	Administrator	0.063 seconds	63					

- The minimum display time for processing the edit form is set to 0 milliseconds by default, so all display records of edit forms are displayed, including those whose processing took 0 milliseconds. This minimum time can be increased or decreased by changing the "mintime" parameter in the report URL.
- The number of records is limited to 100 by default. This number can be manually increased or decreased by changing the "maxrows" parameter in the report URL.

+

🍥 Edit form "Settings / Settings / La 🗙

m/martin-sevcik/(S(wrwhkglgmeoy4kfy343ttmyv))/History2.aspx?form=65&mintime=0atmaxrows=100



# 1.5.49Controls (Templates)

• This report shows a list of all controls that are marked as templates – they have the template name filled in the control settings on the "Administration" tab.

General	View table	Details	Search	Rights	Administration		
Template name		Invoice					
	Location	Invoices 🗸	]				
Other							
Chan	ge type to	Chart 🗸	Change				
					Save	Save to all users	Delete

- In the control table, a pencil icon appears in the first column to change control settings.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Controls (Templates)									
	#	Location	Name	Control	Name	Expression			
1	1	View page	Finance / Issued invoices / Invoices	DataGrid	Invoices	Invoice			

- Templates support the following controls:
  - o DataGrid
  - LiteDataGrid
  - Picker
- When creating a new control, all available templates are available in the "Templates" drop-down list on the "General" tab. After selecting a template, all parameters of the control will be automatically pre-filled with data from the selected template.
- If we are creating a control on a view page, only control templates from view pages that have the same source table set in the database query ("SELECT \* FROM ng\_sourcetable") are available.
- If we create a control in an edit form, only control templates from edit forms that have the same source table set in the database query ("SELECT \* FROM ng\_sourcetable") are available.



# 1.5.50Controls (JavaScript + Insufficient Rights)

- This report shows a list of all controls that are accessed using javascript, but the control itself has different rights settings than javascript.
- This discrepancy may be in the edit form end with an exception because the target user does not have to have permission on the control itself, but has the right to javascript. Javascript then refers to a control that is not rendered in the edit form.
- In the control table, a pencil icon appears in the first column to change control settings.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Controls (JavaScript + Insufficient rights)								
	#	Location	Name	Control	Name	Туре	Expression	
1	1	Edit form	Finance / Issued invoices / Issued invoices	JavaScript	JavaScript	JavaScript	<pre>let x = 'invoice'; control_GetValue(#ng_invoicenumber# !!!, x);</pre>	





# 1.5.51Controls (Read-only + Event)

- This report lists all controls that are set to "Read Only" and also contain one of the "OnBlur", "OnChange", "OnClick" or "OnFocus" javascript events. Modern web browsers do not trigger these javascript events for these controls.
- This mismatch can cause inconsistencies in the edit form data, because controls that are set to "Read Only" can be assigned a value using, for example, a pickup or javascript. The picker automatically fires an "OnChange" event on the control, but the "OnChange" event does not fire.
- In the control table, a pencil icon appears in the first column to change control settings.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Co	Controls (Read-only + Event) 1/1									
	#	Location	Name	Control	Name	Туре	Expression			
1	1	Edit form	Finance / Issued invoices / Issued invoices	TextBox	Invoice number	OnChange	alert('test');			





## 1.5.52Controls (Data type mismatch)

- This report lists all database controls for which NET Genium registers a different data type than the column associated with that control in the database actually has.
- This mismatch can be caused by changing the data type of the column directly in the database, for example using "Microsoft SQL Server Management Studio".

Controls (Data type mismatch)								
	#	TABLE	COLUMN	DB	NG			
1	1	susers	fullname	varchar(200)	varchar(150)			



# 1.5.53Controls (Picker + form\_Update)

- This report displays a list of all database controls that are part of one of the pickers and for which it may be necessary to include a call to the javascript function "form\_DisableUpdate" in the "onchange" event.
- These are the following controls for which NET Genium automatically updates the form after changing their value with the picker:
  - Inserting a value into a ComboBox, ListBox, Radio or ForeignKey control if the inserted value does not appear in the list of values of the dropdown or bullet list,
  - o Inserting a value into a File or Image control
- And at the same time, it is a situation where one of the control elements during value picking causes the form to be updated using the javascript function "form\_Update" or "bt\_Click". Such an update will not be done because earlier the form will be automatically updated by NET Genium itself.
- The solution to this situation is to call the javascript function "form\_DisableUpdate" in the "onchange" event of one of the picked elements, ideally on the first control element that is part of the picker.

C	Controls (Picker + form_Update)											
	#	Location	Name	Control	Name	Туре	Expression					
1	1	Edit form	Human Resources / Time sheets / Task time sheet	TextBox	Description	OnChange -> Type (ForeignKey)						
1	2	Edit form	Finance / Outgoing invoices / Advance invoice	TextBox	Create copy of	OnChange -> Code type (ComboBox) Payment type (ComboBox) Business unit (ComboBox) To account (ForeignKey) Contry (ComboBox) Country (ComboBox) Country (ComboBox) Currency (ComboBox) Language version (ComboBox)	<pre>setTimeout(function() { #ng_vytvoritkopiiz#.value = "; }, 2000);</pre>					
-	3	Edit form	Finance / Incoming invoices / Advance invoice	TextBox	Create copy of	OnChange -> • Code type (ComboBox) • Business unit (ComboBox) • From account (ForeignKey) • Centre (ComboBox) • Country (ComboBox) • Pay (Radio) • Currency (ComboBox)	<pre>setTimeout(function() { #ng_vytvoritkopiiz#.value = "; }, 2000);</pre>					
1	4	Edit form	Help / E-learning / Test	TextBox	Create copy of	OnChange -> Session (ComboBox)	bt_Click('copy');					
1	5	Edit form	Finance / Outgoing invoices / Outgoing invoice	TextBox	Create copy of	OnChange -> Code type (ComboBox) Payment type (ComboBox) Business unit (ComboBox) To account (ForeignKey) Centre (ComboBox) Account coding (ComboBox) Country (ComboBox) Currency (ComboBox) Language version (ComboBox)	bt_Click('copy');					



# 1.5.54External functions

- This report displays a list of external function calls across the entire application.
- In the control table, a pencil icon appears in the first column to change control settings.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Ð	External functions										
	Script	Location	Name	Control	Name	Line	Туре	Expression			
1	11	View page	Settings / Settings / Rights groups / New group	Button	New group	1	Comment	ngef(Acitivity_Delete)			
1	1/OBS	Edit form	Settings / Settings / User	Script	OnBeforeSave	1	Comment	ngef(Address_Save)			
1	1/OBD	Edit form	Settings / Settings / User	Script	OnBeforeDelete	1	Comment	ngef(User_delete)			



# 1.5.55External functions (Rights defined)

- This report displays a list of external function calls from controls that have rights to at least one user group or users.
- In the control table, a pencil icon appears in the first column to change control settings.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

Ð	External functions										
	Script	Location	Name	Control	Name	Line	Туре	Expression			
1	72/OBD	Edit form	CRM / Address book / Address	Script	OnBeforeDelete	1	Comment	ngef(Adresa_Delete)			
1	72/OBS	Edit form	CRM / Address book / Address	Script	OnBeforeSave	9	Comment	ngef(Adresa_Save)			
1	33/9801	Edit form	CRM / Activities / Activity	Button	Send invitation + Save	4	Assign value	ngef(Aktivita_Attendees)			
1	33/OBD	Edit form	CRM / Activities / Activity	Script	OnBeforeDelete	2	Comment	ngef(Aktivita_Delete)			



- 1.5.56External functions (total\_worker\_time)
- 1.5.57External functions (execution\_count)
- 1.5.58External functions (average\_worker\_time)
- 1.5.59External functions (max\_worker\_time)

## • This report shows external function execution statistics, sorted in descending order

- o total\_worker\_time total processing time of the external function,
- execution\_count number of executions of external function,
- $\circ \quad \text{average\_worker\_time-average processing time of external function,}$
- max\_worker\_time average processing time of the external function.
- This report is available only if logging to the database is enabled in the NET Genium settings and there is at least one record of the execution of the external function. A detailed description of NET Genium settings is given in the separate "NET Genium Settings" manual.
- The external functions table displays information about the script or control to which the external function is associated, and the first column displays a pencil icon to change the definition of that script or control.
- The name of the view page or edit form also serves as a link to open the view page or edit form on a new tab in the web browser.

E	external functions 17/12/2	2021 10:0	07 - ??/??/??	??? (total_w	orker_tim	ie)	6/6
#	Name	Logging	total_time 🗸	exec_count	avg_time	max_time	last_execution_time
1	NETGenium.OnAfterDelete		0	2	0	0	06/01/2022 10:10:50
2	NETGenium.OnAfterOpen		0	19	0	0	06/01/2022 10:10:56

- Using the "..." link in the "Logging" column, it is possible to display a detailed report with individual script execution records and data on the new web browser tab.
  - o the date and time of the start of the external function,
  - o the user who started the external function a
  - o external function processing time in milliseconds.

L	ogging			2/2
#	Date	User	Time	Time [ms]
1	06/01/2022 10:10:50	Administrator	0 seconds	0
2	17/12/2021 11:12:20	Administrator	0 seconds	0

• The number of records is limited to 100 by default. This number can be manually increased or decreased by changing the "maxrows" parameter in the report URL.

Sexternal function "NETGenium.Or 🗙 🕂

m/martin-sevcik/(S(wrwhkglgmeoy4kfy343ttmyv))/History2.aspx?ngef=NETGenium.OnAfterDelete&mintime=0&maxrows=100







# 1.5.61 Dictionary (Export)

- This report compiles an Excel file with the names of all:
  - o application groups,
  - $\circ$  applications,
  - $\circ$  categories,
  - o view pages,
  - o view page controls,
  - o edit forms,
  - $\circ$  edit form controls,
  - o conditions (QueryBuilder),
  - columns + filters (QueryBuilder),
  - headers (QueryBuilder),
  - scripts and conditions (script).







# 1.5.62Dictionary (Import)

- This tool allows you to re-import an Excel file that was created using a dictionary export, see previous chapter. The import will update the names of all:
  - o application groups,
  - o applications,
  - o categories,
  - o view pages,
  - view page controls,
  - edit forms,
  - o edit form controls,
  - conditions (QueryBuilder),
  - columns + filters (QueryBuilder),
  - headers (QueryBuilder),
  - scripts and conditions (script).

## Dictionary (Import)

Default language	en 🛩
Select file	Browse



# 1.5.63Rights (Applications)

- This report displays a list of all application groups, applications, edit forms and view pages, including the set rights.
- The name of the application group, application, edit form and view page also serves as a link to open the settings of the object, ideally to change the rights settings.

#### **Rights (Applications)**

Application group "Ho	me page" Users, Anonymous
Application group "Set	tings" No rights defined
Application "Settin	No rights defined
Edit forms	
Invalid logi	n No rights defined
Rights group	No rights defined
Statistics	No rights defined
Statistics 2	No rights defined
Statistics 3	No rights defined
Bank holida	ay No rights defined
Synchronis	ation No rights defined
User	No rights defined
User group	No rights defined
Layout	No rights defined
View pages	
Users	No rights defined
User group	s No rights defined
Rights group	No rights defined
Bank holida	ays No rights defined
Layout	No rights defined



# 1.5.64Rights (Edit forms)

- This report displays a list of all application groups, applications and edit forms, including set rights.
- The name of the application group, application and edit form also serves as a link to open the settings of the object, ideally to change the rights settings.

Rights (Edit forms)	
Application group "Home page"	Users, Anonymous
Application group "Settings"	No rights defined
Application "Settings"	No rights defined
Edit forms	
Invalid login (sinvalidlogins ID 10)	No rights defined
<ul> <li>Rights group (srightsgroups ID 3)</li> </ul>	No rights defined
Statistics (sstatistics ID 7)	No rights defined
Statistics 2 (sstatistics2 ID 8)	No rights defined
Statistics 3 (sstatistics3 ID 9)	No rights defined
Bank holiday (sholiday ID 6)	No rights defined
Synchronisation (ssynchro ID 4)	No rights defined
User (susers ID 1)	No rights defined
User group (susergroups ID 2)	No rights defined
Layout (slayout ID 5)	No rights defined

#### User groups

- Administrators
- External Users
- Users



# 1.5.65Rights (View pages)

- This report displays a list of all application groups, applications and view pages, including the set rights.
- The name of the application group, application and view page also serves as a link to open the settings of the object, ideally to change the rights settings.





# 1.5.66Rights (Controls)

- This report displays a list of all application groups, applications, edit forms and view pages, including controls and set rights.
- The name of the application group, application, edit form, view page and control also serves as a link to open the settings of the object, ideally to change the rights settings.

Ri	ghts (Cont	rols)	
	Application	group "Home page"	Users, Anonymous
	Application	group "Settings"	No rights defined
	Applica	ation " <b>Settings</b> "	No rights defined
	🗖 Ed	it forms	
	8	Edit form ID 10 "Invalid login"	No rights defined
		□ Title (Invalid login)	No rights defined
		DatePicker (Date)	No rights defined
		□ Space	No rights defined
		□ TextBox (IP address)	No rights defined
		TextBox (Login name)	No rights defined
		TextBox (Password)	No rights defined
		□ Space	No rights defined
	8	Edit form ID 3 "Rights group"	No rights defined
		□ Title (Invalid login)	No rights defined
		□ TextBox (Rights group)	No rights defined
		□ Space	No rights defined
		RichTextBox (Description)	No rights defined
		□ Space	No rights defined
	8	Edit form ID 7 "Statistics"	No rights defined
		□ Title (Statistics)	No rights defined





# 1.5.67Rights (User groups)

• This report displays a list of all user groups and their associated users.

Ri	ghts (User gro	ups)
	Administrators	
	External Users	
	Users	Administrator





# 1.5.68Rights (Rights groups)

• This report displays a list of all permission groups and the user groups and users assigned to them.

#### Rights (Rights groups)

- □ Right group 1 Administrators, External Users, Users
- Right group 2
- Rights group



## 1.5.69Database model (SQL)

- This report shows a list of database commands in the MS SQL Server syntax, which can be used to create a new database with the same structure as the NET Genium database, and the use of which is important exclusively for the visualization of the ER diagram. Only database tables associated with edit forms that are linked to other tables and columns representing primary or foreign keys are included in the list of database commands. A list of these commands is also offered for download in a "sql" file.
- It is not possible to compile an ER diagram from the NET Genium database itself, because NET Genium does not use sessions and registers foreign keys as an ordinary "Integer" field with an index enabled. Another difference compared to the NET Genium database itself are the names of individual tables and columns. In the database model, table names will be compiled from the edit form name and its identifier in parentheses (for example, "Cash Document (ng\_pnp)"), and column names by analogy from the control name and its identifier in parentheses (for example, "Order number (ng\_idorder)) "). The procedure for creating an ER diagram in MS SQL Server Management Studio is as follows:
- 1. Open MS SQL Management Studio and log in to the server

Solution1 - Microsoft SQL Server Management Studio				= U X
File Edit View Debug Tools Window Help				
🛅 = 🗃 = 💕 🛃 🎒 🔔 New Query 🛅 📸 📸 🖓 🖓 🖓 🖉 🖉 - 🔍 - 💭 = 🖏 🚧 🔌 🕨		- 2	- 🗠 🕾 🏷 💽 - 🖕	
Object Explorer				Properties 👻 💷 >
	Connect to Server		×	
	Microsoft*			
	SQL Sei	ver 2012		
	Server type:	Database Engine		
	Server name:	HONZA-PC		
	A thertication:	Windows Asthantication		
	Autrenucation.	Windows Addresidation	-	
	User name:	HONZA-PC Jan		
	Password:			
		Remember password		
	Connec	t Cancel Help Options >:	>	
Ready				





#### 2. Create an empty database – click on the field "New Database..."

🍢 Solution1 - Microsoft	SQL Server Management Studio
File Edit View Debu	ig Tools Window Help
i 🛅 • 🔤 • 📂 📕 🧯	। 🔔 New Query 📑 📸 📸 🕹 🕹 🛍 🖄 🖛 🖓 🗸 🕫 🖉
Object Explorer Connect * 랲 랲 프	▼ # × ▼ 2 3 Server 11.0 2100 - HO
Database	New Database
<ul> <li>i ⊆ Security</li> <li>i ⊆ Server Ob</li> <li>i ⊆ Replicatio</li> <li>i ⊆ Managen</li> </ul>	Attach Restore Database Restore Files and Filegroups Deploy Data-tier Application Import Data-tier Application Start PowerShell
	Reports  Refresh

3. Select "Database Model (SQL)" from the "Other" drop-down list and have SQL statements generated

#### Reports

Database table	mon\$attachments 🗸	
Edit form	1 / susers V	
View page	1 / Users V	
Button	11 / New group 🗸	
Other	Database model (SQL)	
	Print Report	
Database model (S	<b>SQL)</b> 6	/ 6

#### SQL

CREATE TABLE [User (susers)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, [Rights group (rightsgroup)] int NULL) ON [PRIMARY]

CREATE TABLE [Rights group (srightsgroups)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, [Rights group (name)] int NULL) ON [PRIMARY] CREATE TABLE [Issued invoices (ng\_issuedinvoices)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY) ON [PRIMARY]



## 4. Copy commands ("CTRL + C")

Database model (SQL)	6/6
SQL	
CREATE TABLE [User (susers)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, [Rights group (rightsgroup)] int NULL) ON [PRIMARY]	
CREATE TABLE [Rights group (srightsgroups)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, [Rights group (name)] int NULL) ON [PR	IMARY]

CREATE TABLE [Issued invoices (ng\_issuedinvoices)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY) ON [PRIMARY]

5. In MS SQL Server Management Studio, right-click on the newly created database and select "New Query"

File       Edit       View       Debug       Tools       Window       Help         Image: Ima
:
Object Explorer
<ul> <li>HONZA-PC (SQL Server 11.0.2100 - HO</li> <li>Databases</li> <li>System Databases</li> <li>netgenic</li> <li>New Database</li> <li>Security</li> <li>Server Objet</li> <li>New Query</li> <li>Replication</li> <li>Script Database as →</li> <li>Tasks →</li> <li>Policies →</li> <li>Facets</li> </ul>
Reports  Rename Delete Refresh Properties



#### Paste the statements ("CTRL + V") into the newly opened "SQLQuery.sql" window 6.

💺 SQLQuery2.sql - HONZA-PC.netgenium (HOI	IZA-PC/Jan (54))* - Microsoft SQL Server Management Studio		- ø ×
File Edit View Query Project Debug 1	pols Window Help		
🗄 🛅 🕶 🗁 🚅 🛃 🥥 🔔 New Query  🔒	22 12 12 14 12 14 14 14 14 14 14 14 14 14 14 14 14 14		
: 🐨 🙀 🔤 netgenium 🔹 🕴	xecute → Debug = ✓ 認慮日間 20 備値(目目2) 律律(名。		
Object Explorer 🔹 म 🗙	SQLQuery2:sql - HONZA-PC\Jan (54))* ×	Properties	<b>-</b> † ×
Connect 🕶 🛃 🗮 🍸 🖬 👔 🔬	CREATE TABLE [Uisivate] (suscers)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(18) NULL, pform int NULL, pid int NULL, userid int NULL, [Celé # Calle IIIisivate] (suscers)] (id int NULL protection of the system varchar(18) NULL pform int NULL, pid int NULL, userid int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL, pid int NULL, userid int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL protection of the system varchar(18) NULL pform int NULL pform int NULL protection of the system varchar(18) NULL pform int NULL	Current connection pa	rameters 🔹
🖃 🚺 HONZA-PC (SQL Server 11.0.2100 - HO	(REATE TABLE [Synchronizate (synchron)] (id int NOT NULL DENTITY (1. 1) PRIMARY KY, system varchar(10) NULL, oform int NULL, oid int NULL, userid int NULL,	824 🗉	
🖃 🦢 Databases	(CREATE TABLE [Vihled (slayout)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL, [Jméno	✓ Apprenate Status	
🗉 🧰 System Databases	CREATE TABLE [Ståtni svåtek (sholiday)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL,	Connection failur	
🕀 📋 netgenium	CREATE TABLE [Statistika (sstatistics)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pid int NULL, pid int NULL, userid int NULL,	Flansed time	
Security	CREATE TABLE [Statistika 2 (sstatistics2)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar[10] NULL, prom int NULL, userid int NU	Finish time	
Server Objects	CREATE TABLE [Statisticks] (statisticks)] (if int NOT NULL IDENTITY (i, 1) PRIMARY KEY, system Varchar(id) NOLE, promint NOLE, pia int NOLE, useria interno	Name	HONZA-PC
E      Keplication	CREATE TABLE [Nastaveni serveru Active Directory (ng nastaveniad)] (id int NO NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid	Rows returned (	
i initiagement	CREATE TABLE [Záznam o synchronizaci s Active Directory (ng_logad)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pi	Start time	
	CREATE TABLE [Záznam o provedení naplánované úlohy (ng_loguloha)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid	State (	Inen
	(REATE TABLE [Povolená IP adresa (ng povolenajp]] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, prórm int NULL, pid int NULL, serid	✓ Connection	spen
	CREATE TABLE [Vyoana Taktura (ng rv)] (10 Int NUI NULL IDENTITY (I, 1) PRIMARY KEY, SYSTEM VARCHAR[10] NULL, PTOTM INT NULL, USERIA INT NULL PRIMARY KEY, SYSTEM VARCHAR[10] NULL, PTOTM INT NULL, USERIA	Connection name H	HONZA-PC (HONZA-P
	(REATE TABLE [Value as following (m)] (id int NOT NOLE IDENTITY (i) ) TREAT WARK KY, system varchar(10) NULL, pion int	<ul> <li>Connection Details</li> </ul>	
	CREATE TABLE [Pokladni doklad (ng_pnp)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL,	Connection elaps	
	CREATE TABLE [Zakázka (ng_zakazka)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL, [Vy	Connection finish	
	(REATE TABLE [Objednávka (ng_objednavka)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL userid int NUL	Connection rows (	
	CREATE TABLE [RekLamace (ng_rekLamace)] (1d int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, prorm int NULL, userid int NULL, userid int NULL, (Refirst TABLE (Description)) (1d int NULL) (1d) int NULL (1d) in	Connection start t	
	CREATE TABLE [Acce (ng acce)] (id int NULL DENTITY (1. 1) PRIMARY KEY, system variant(1.), John th NULL, point in NULL, subrid int NULL, size accessing a straight of the system variant (1.) PRIMARY KEY accessinght of the system variant (1.) PRIMA	Connection state (	Dnen
	CREATE TABLE [NepFitomnost (ng_nepritomnost)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int	Display name	HONZA-PC
	CREATE TABLE [Muj termin (ng_mujtermin)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL	Login name H	HONZA-PC\Jan
	CREATE TABLE [Žádost o schválení nepřítomnosti (ng_zosn)] (id int NOT NULL IDENTITY (1, 1) PRINARY KEY, system varchar(10) NULL, pid int NULL pid int NULL	Server name	IONZA-PC
	CREATE TABLE [Bankovni vypis (ng Dankovnivypis)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, promi int NULL, pid int NULL, userid	Server version 1	1.0.2100
	CREATE TABLE [Dohndni zztah (ng combehyztah)] (di int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, ndi nit NULL, userid i	Session Tracing ID	
	CREATE TABLE [Kontakt (ng_crmkontakt)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL,	SPID	i4
	CREATE TABLE [Aktivita (ng_crmaktivita)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL		
	CREATE TABLE [Dokument (ng_crmdokument)] (id int NOT NULL IDENTITY (1, 1) PRIMARY KEY, system varchar(10) NULL, pform int NULL, pid int NULL, userid int NULL		
	(REATE TABLE [Kra] (ng_crmkra])] (11 int NOT NULL IDENTITY (1, 1) PRIMAY KEY, system varchar(10) NULL, priorm int NULL, pid int NULL, useria int NULL, Kraj		
• •	CREATE TRUE [DUVECYA (Ng_CHROUVECYA]] (AA ATE NOT NOLE ADENTATI (A, A) FRAMMA KET, SYSTEM VARCHAR(AØ) HOLE, DIOTMI ATE HOLE, DIA ATE HOLE, USETA ATE HOLE,		

#### 7. Press the "Execute" button

٥ 🗏 SQLQuery2.sql - HONZA-PC.netgenium (HONZA-PC\Jan (54))\* - Microsoft SQL Server Management Studic File Edit View Query Project Debug Tools Window Help • 🔍 🕾 🏷 🖬 • 📮 🛅 🕶 📨 🗃 🛃 🥥 🔔 New Query 📑 🏤 🏤 🏠 🐇 🔤 🛍 🔊 🔹 🖓 🗸 🔍 1 - | f Execute → Debug = ✓ 📅 😐 📰 🗐 🗐 🦉 🎱 🚍 😫 🎼 🚛 雲 🙀 🛛 netgenium SQLQuery2.sql - H...ONZA-PC\Jan (54))\* 🗙 bject Explorer Connect 🕶 🛃 🜉 🔳 🍸 🛃 🍕 ÷ Current connection parameters 🗉 🐻 HONZA-PC (SQL Server 11.0.2100 - H 21 🗉 🖃 🚞 Databases 🗉 🧰 System Databases Connection failur System Data
 System Data
 Security
 Security
 Server Objects Elapsed time Finish time Name HONZA-PC Replication Management Rows returned 0 Start time State Oper Connection name HONZA-PC (HON7A Connection elaps Connection finish Connection rows 0 Connection start t Connection state Oper 
 Connection state
 Open

 Display name
 HONZA-PC

 Login name
 HONZA-PC/Jan

 Server name
 HONZA-PC

 Server version
 11.0.2100
 Session Tracing ID 54 SPID

×



## 8. Right-click on "Database Diagrams" and select "New Database Diagram" from the menu

🐺 SQLQuery2.sql - HONZA-PC.netgenium (HONZA-PC\Jan (54))\* - Microsoft SQL Server Management Studio

File Edit View Project Debug To	iols Window Help			
🗄 🚰 🕶 🗉 🗧 🚰 🛃 🧾 📜 New Que	ry 🔓 🏤 🏭 👗 🖉 - ビー 🦊 - 🖳 🖓 🗛 🕨 🚽			
। 💷 🗽   netgenium 🕞	] 🕴 Execute 🕨 Debug 💻 ✓ 💔 🗿 🗐 📅 🖷 🌆 🍓 🎱 🔲 🚍 😫 ≢ 🛱 💂			
Object Explorer 🔹	₽ × SQLQuery2.sql - HONZA-PC\Jan (54))* ×			
Connect 🕶 🛃 🛃 🔲 🍸 🛃 🍒	□CREATE TABLE [Uživatel (susers)] (id int NOT NULL IDENTITY (1, 1) PRIMAR			
🖃 🚮 HONZA-PC (SQL Server 11.0.2100	CREATE TABLE [Uživatelská skupina (susergroups)] (id int NOT NULL IDENTI			
🖃 🚞 Databases	CREATE TABLE [Synchronizace (ssynchro)] (id int NOT NULL IDENTITY (1, 1)			
🗉 🚞 System Databases	(REATE TABLE [Vinted (Slayout)] (id int NOT NULL IDENTITY (1, 1) FRIMAR			
🖃 间 netgenium	CREATE TABLE [Statistika (sstatistics)] (id int NOT NULL IDENTITY (1, 1)			
🕀 📄 Database Diagrams	CREATE TABLE [Statistika 2 (sstatistics2)] (id int NOT NULL IDENTITY (1,			
🖃 🧰 Tables	New Database Diagram [Statistika 3 (sstatistics3)] (id int NOT NULL IDENTITY (1,			
🕀 🚞 System Table	Install Diagram Support [Neplatné přihlášení (sinvalidlogins)] (id int NOT NULL IDE			
🕀 🚞 FileTables	Nastaveni serveru Active Directory (ng_nastaveniad)] (id i			
🕀 🧾 dbo.Adresa (r	Záznam o provedení naplánované úlohy (ng loguloha)] (id ir			
🕀 🔝 dbo.Adresa (r	Reports   Povolená IP adresa (ng_povolenaip)] (id int NOT NULL IDENT			
🕀 🔝 dbo.Adresa K	Vydaná faktura (ng_fv)] (id int NOT NULL IDENTITY (1, 1) P			
🕀 🔝 dbo.Akce (ng	Refresh [Položka vydané faktury (ng_polfv)] (id int NOT NULL IDENTI			
	rm: CREATE TABLE [Vydaná zálohová faktura (ng_fzv)] (id int NOT NULL IDENTIT			
doo.Aktivita na webu     CREATE TABLE [POkladni doklad (ng_pnp)] (id int NOT NULL IDENTITY (1, 1)     DRATE TABLE [POkladni doklad (ng_pnp)] (id int NOT NULL IDENTITY (1, 1)				
Obo AktivitaSync (ng)     CREATE TABLE (26biednávka (ng obiednavka)) (10 Int NUL IDENTITY (1, 1) PRI     CREATE TABLE (26biednávka (ng obiednavka)) (10 int NUL IDENTITY (1, 1)				
🕀 🔝 dbo.Bankovní účet	(n CREATE TABLE [Reklamace (ng reklamace)] (id int NOT NULL IDENTITY (1, 1)			

9. Select the tables you want to include in the new diagram and press the "Add" button

🙀 HONZA-PC.netgenium - Diagram_0 - Microsoft SQL Server Management Studio		
File Edit View Query Project Debug Tools Window Help		
: 🛅 = 🗁 = 💕 🛃 🗿 🔔 New Query 📑 📸 📸 🏠 🐇 🔤 🖏 🥑 = 🔍 - 🚑 = 🖳 🧖 🕨	- · · · · · · · · · · · · · · · · · · ·	- 🛛 🖓 🎌 💽 - 📮
: 酒 钿 양 [ 跃 · / 編   》 alb   Table View •   ゐ   뽃 首   圓 면 면 면   100% • -   여 있		
Object Explorer · 무 × HONZA-PC.netgenium - Diagram_0 × SQLQuery2.sql - H	ONZA-PC\Jan (54))*	
Connect * 2 2 2 3 3 HONZA-PC (SQL Server 11.0.2100 - 1 ^ Databases Tables Tables Tables Database Diagrams Tables Database Diagrams Database Diagrams Databa	Add Table ?	×
doo.Akce (ng. akce)     doo.Akce (ng. akce)     doo.Aktivita na webu     doo.Bankovní úřet (n     doo.Cena tisku (ng.ce)     doo.Cena tisku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     dob.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Ceratiku (ng.ce)     doo.Detová práva (n     doo.Detová práva (n     doo.Detová práva (n     doo.Dokument FileU;     dob.Dokument FileU;     dob.Dovlená na rok	Tables         Adresa (ng_runandresa)         Adresa (ng_runandresa)         Adresa Kontakt (ng_runak)         Akce (ng_akce)         Aktivita (ng_runaktivita)         Aktivita (ng_runaktivita)         Aktivita (ng_runaktivita)         Aktivita (ng_runaktivita)         Bankovni účet (ng_bankovniucet)         Bankovni účet (ng_bankovnivpis)         Bilance (ng_bilance)         Cena dle rozměrů (ng_cenarozmer)         Cena tistu (ng_cenarozmer)         Refresh       Add	



#### 10. Press the "Close" button















# 1.5.70Database model (MS Access)

## 1.5.71Database model (MS Access 2003)

- This report is used to create a new database in MS Access format with the same structure as the NET Genium database, and its use is important exclusively for the visualization of the ER diagram. The newly created database includes only those database tables associated with edit forms that are linked to other tables and columns representing primary or foreign keys. The created database is offered for download and at the same time all commands that created the new database are displayed.
- It is not possible to compile an ER diagram from the NET Genium database itself, because NET Genium does not use sessions and registers foreign keys as an ordinary "Integer" field with an index enabled. Another difference compared to the NET Genium database itself are the names of individual tables and columns. In the database model, table names will be compiled from the edit form name and its identifier in parentheses (for example, "Cash Document (ng\_pnp)"), and column names by analogy from the control name and its identifier in parentheses (for example, "Order number (ng\_idcontract))").
- MS Access has certain limitations that can lead to database creation errors. These limits are related, for example, to the number of indexes set on the table. The user can identify the errors when the word "ERROR" highlighted in red appears on one of the displayed commands and the cause of the error occurs.

ALTER TABLE [Hromadné zpracování (ng\_crmzprac0)] ADD FOREIGN KEY ([NabídkaZakázka (ng\_idzakazky])) REFERENCES [Zakázka (ng\_zakazka)](id) ERROR Operace se nezdařila. Existuje přiliš mnoho indexů pro tabulku Zakázka (ng\_zakazka). Odstraňte některé indexy této tabulky a zkuste operaci opakovat. ALTER TABLE [Příslušenství (ng\_prislusenství)] ADD FOREIGN KEY ([Příslušenství (ng\_prislusenství)]) REFERENCES [Produkt (ng\_produkt)](id) ALTER TABLE [Nákupní košík (ng\_nakupnikosik)] ADD FOREIGN KEY ([Príslušenství (ng\_produkt)]) REFERENCES [Produkt (ng\_produkt)](id)

- The item "Database model (MS Access)" makes sense to use only for smaller databases. If errors occur in the MS Access syntax when generating the database intended for visualizing the ER diagram, it is necessary to proceed to the generation of SQL statements that are intended for MS SQL Server (item "Database model – (SQL)").
- The procedure for creating an ER diagram in MS Access is as follows:
- 1. Select "Database model (MS Access)" from the "Other" drop-down list and have the database generated.

## Reports

Database table       mon\$attachments       ✓         Edit form       1 / susers       ✓         View page       1 / Users       ✓         Button       11 / New group       ✓         Other       Database model (MS Access)       ✓		Print	Report			
Database table       mon\$attachments       ✓         Edit form       1 / susers       ✓         View page       1 / Users       ✓         Button       11 / New group       ✓	Other	Database mode	I (MS Access)		~	~
Database table     mon\$attachments     ✓       Edit form     1 / susers     ✓       View page     1 / Users     ✓	Button	11 / New group	<b>~</b>			_
Database table     mon\$attachments     ✓       Edit form     1 / susers     ✓	View page	1 / Users	<ul><li>✓</li></ul>			
Database table mon\$attachments ~	Edit form	1 / susers	~	] 🗸		
	Database table	mon\$attachmer	nts 🗸	~		



## 2. Download the "accdb" file to your computer

	netgeniu Prosím o <sub>Zavřít</sub>	um.accdb čekejte	(376 kB)			Ţ
🐴 neto	jenium (1).accdb	^			Zobrazit vše	×

#### 3. Open the downloaded database with the "accdb" extension in MS Access

<b>↓</b> >	Te	nto počítač 🔸 Stažené soubory
	^	Název
dr dr		∨ Dnes (1)
oub 🖈		netgenium

## 4. Select the "Database Tools" tab and the "Session" option

SOUBOR DOM	1Ů VYTVOŘEI	NÍ EXTERNÍ DA	TA DATABÁZOVÉ NÁSTRO	JE		
Zkomprimovat a opravit databázi	Visual Spustit Basic makro	Relace Závislosti objektů	<ul> <li>Dokumentace databáze</li> <li>Analýza výkonu</li> <li>Analýza tabulky</li> </ul>	Databáze SharePoint aplikace Access	Doplňky	
Nástroje	Makro	Relace	Analyzovat	Přesunout data	Doplňky	
Všechny c	biekt 💿	«				
Hedat	Jereini					
Taballar	A					
	d >					
Adresa (ng	_crmadresa)					
🛄 Adresa Kontakt (ng_crmak)						
Export (ng_	export)					
IPPBX CDR (ng ippbxcdr)						
Kontakt (no						
Krai (ng. cm						
🖽 Neplatné p	rihlaseni (sinvalidl.					
Dbec (ng_c	Dbec (ng_crmobec)					
	A					



#### 5. MS Access displays the ER diagram







## 1.5.72Database model – complete (SQL)

• This report shows a list of database commands in the MS SQL Server syntax, which can be used to create a new database with the same structure as the NET Genium database, and the use of which is important exclusively for the visualization of the ER diagram. The list of database commands includes all database tables associated with the edit forms, and all their columns. The procedure for creating an ER diagram in MS SQL Server Management Studio is described in detail in the chapter 1.5.69.



# 1.5.73Database model – complete (MS Access) 1.5.74Database model – complete (MS Access 2003)

• This report is used to create a new database in MS Access format with the same structure as the NET Genium database, and its use is important exclusively for the visualization of the ER diagram. The newly generated database includes all database tables associated with the edit forms, and all their columns. The procedure for creating an ER diagram in MS Access is described in detail in the chapter 1.5.70.





## 1.5.75NET Genium database model (SQL)

• This report shows a list of database commands in the MS SQL Server syntax, which can be used to create a new database with the same structure as the NET Genium database, and the use of which is important exclusively for the visualization of the ER diagram. The list of database commands includes all system tables (in NET Genium it is not possible to access these tables via edit forms), and all their columns.

# 1.5.76NET Genium database model (MS Access)1.5.77NET Genium database model (MS Access 2003)

• This report is used to create a new database in MS Access format with the same structure as the NET Genium database, and its use is important exclusively for the visualization of the ER diagram. The newly generated database includes all system tables (in NET Genium it is not possible to access these tables via edit forms) and all their columns.





## 1.5.78Logs

- This report displays a list of all log files with the "log" extension located in the "Logs" directory, with the option to download or delete them.
- A detailed description of the log files is given in the separate "Administrator's Guide".

Logs				
Name	Size	Created on	Modified on	
Auth-2021-12.log	684 b	12/12/2021 15:49	13/12/2021 17:49	×
System.log	2,36 kB	11/07/2021 08:55	12/12/2021 15:49	×
Version.log	276 b	05/10/2021 20:45	12/12/2021 15:49	×



# 1.5.79DomLib

- This report shows the result of the "DomLib" analysis based on the "Request.UserAgent" value.
- "DomLib" analysis is used to identify the client's web browser.

DomLib	17 / 17
Кеу	Value
DomLib.UserAgent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/83.0.4103.116 Safari/537.36
CSS	NETGenium_Chrome.css
DomLib.MobileDevice	False
DomLib.Edge	False
DomLib.IE	False
DomLib.IE11	False
DomLib.IE10	False
DomLib.IE9	False
DomLib.IE8	False
DomLib.IE7	False
DomLib.IE56	False
DomLib.IE56789	False
DomLib.CE	False
DomLib.Chrome	True/83
DomLib.Firefox	False
DomLib.Safari	False
DomLib.Mac	False


# 1.5.80NGDPH + jsngdph

- This report shows in the left column a list of VAT rates used by the server function "NGDPH" and the javascript function "jsngdph", and in the right column a list of VAT rates published on the website "https://euvatrates.com/rates.json".
- The differences between the rates are shown in red.

NGDPH + jsngdph	30 / 30
NET Genium	https://euvatrates.com/rates.json
AT: 20;10;13	AT: 20;10;13
BE: 21;12;6	BE: 21;12;6
BG: 20;9	BG: 20;9
CY: 19;9;5	CY: 19;9;5
CZ: 21;15;10	CZ: 21;15;10
DE: 19;7	DE: 19;7
DK: 25	DK: 25
EE: 20;9	EE: 20;9
EL: 24;13;6	EL: 24;13;6
ES: 21;10;4	ES: 21;10;4
FI: 24;14;10	FI: 24;14;10
FR: 20;10;5,5;2,1	FR: 20;10;5,5;2,1
GB: 20;5	GB: 20;5
GR: 24;13;6	GR: 24;13;6
HR: 25;13;5	HR: 25;13;5
HU: 27;18;5	HU: 27;18;5
IE: 23;13,5;9;4,8	IE: 23;13,5;9;4,8
IT: 22;10;4	IT: 22;10;4
LT: 21;9;5	LT: 21;9;5
LU: 17;8;3	LU: 17;14;8;3





#### 1.5.81Headers

• This report displays the contents of the "Request.Headers", "Request.Cookies", "Request.ClientCertificate" and "Response.Headers" collections.

Request Headers						
Кеу	Value					
Cache-Control	max-age=0					
Connection	keep-alive					
Content-Length	173					
Content-Type	application/x-www-form-urlencoded					
Accept	text/html, application/xhtml+xml, application/xml; q=0.9, image/webp, image/apng, */*; q=0.8, application/signed-exchange; v=b3; q=0.9, image/apng, */*; q=0.9,					
Accept-Encoding	gzip, deflate, br					
Accept-Language	cs-CZ,cs;q=0.9,en;q=0.8,de;q=0.7,pt;q=0.6,fr;q=0.5					

Request Certificates 0 / 0

Key Value

No records found

Response Headers	5 / 5
Кеу	Value
Cache-Control	no-store, no-cache, must-revalidate
X-Frame-Options	sameorigin
X-XSS-Protection	0
X-Content-Type-Options	nosniff



# 1.5.82Server variables

• This report shows the contents of the "Request.ServerVariables" collection.

QUERY_STRING	
REMOTE_ADDR	::1
REMOTE_HOST	::1
REMOTE_PORT	54583
REQUEST_METHOD	POST
SCRIPT_NAME	/netgenium/Reports.aspx
SERVER_NAME	localhost
SERVER_PORT	80
SERVER_PORT_SECURE	0
SERVER_PROTOCOL	HTTP/1.1
SERVER_SOFTWARE	Microsoft-IIS/10.0
URL	/netgenium/Reports.aspx
HTTP_CACHE_CONTROL	max-age=0
HTTP_CONNECTION	keep-alive
HTTP_CONTENT_LENGTH	172
HTTP_CONTENT_TYPE	application/x-www-form-urlencoded
HTTP_ACCEPT	text/html,application/xhtml+xml,application/xml;q=0.9
HTTP_ACCEPT_ENCODING	gzip, deflate, br
HTTP_ACCEPT_LANGUAGE	cs-CZ,cs;q=0.9,en;q=0.8,de;q=0.7,pt;q=0.6,fr;q=0.5



# 1.5.83MAC

- This report shows a list of all devices that have an assigned MAC address, as well as MAC addresses stored in the "license.txt" file.
- Use this report to identify license key issues.

MAC (34-48 )			17 / 17
Collection	MAC	Description	IP Enabled
Win32_NetworkAdapterConfiguration	84-	Killer(R) Wi-Fi 6 AX1650w 160MHz Wireless Network Adapter (200D2W)	False
Win32_NetworkAdapterConfiguration	84-	Microsoft Wi-Fi Direct Virtual Adapter	False
Win32_NetworkAdapterConfiguration	84-	Bluetooth Device (Personal Area Network)	False
Win32_NetworkAdapterConfiguration	86-	Microsoft Wi-Fi Direct Virtual Adapter	False
Win32_NetworkAdapterConfiguration	44-	WAN Miniport (IP)	False
Win32_NetworkAdapterConfiguration	48-	WAN Miniport (IPv6)	False
Win32_NetworkAdapterConfiguration	4C-	WAN Miniport (Network Monitor)	False
Win32_NetworkAdapterConfiguration	34-	Realtek USB GbE Family Controller #2	True
Win32_NetworkAdapter	84-	Killer(R) Wi-Fi 6 AX1650w 160MHz Wireless Network Adapter (200D2W)	-
Win32_NetworkAdapter	84-	Microsoft Wi-Fi Direct Virtual Adapter	-
Win32_NetworkAdapter	84-	Bluetooth Device (Personal Area Network)	-
Win32_NetworkAdapter	86-	Microsoft Wi-Fi Direct Virtual Adapter #2	-
Win32_NetworkAdapter	44-	WAN Miniport (IP)	-
Win32_NetworkAdapter	48-	WAN Miniport (IPv6)	-
Win32_NetworkAdapter	4C-	WAN Miniport (Network Monitor)	-
Win32_NetworkAdapter	34-	Realtek USB GbE Family Controller #2	-
License.txt	84-		



# 1.5.84Sessions

• This report shows a list of all active sessions.

Sessions						1/1
SessionID	User	Full name	IP address	Created	Activity	First page
nnky01zmmuicf32qx2ldedmx	Administrator	Administrator	78.44.246.75	06/01/2022 09:02:26	06/01/2022 09:02:30	https://dev.netgenium.com/martin-sevcik/default.aspx





# 1.5.85Connections (netgenium)

• This report shows a list of all active connections to the "netgenium" database with the "kill" option of the given connection.

sp_	who (net	genium)						1/1
spid	status	hostname	cmd	connect_time	last_read	last_write	SQL	
56	runnable	MICHAL	SELECT	03.11.2020 09:25:39	03.11.2020 09:26:28	03.11.2020 09:26:28	SELECT c.session_id spid, c.connect_time, c.last_read, c.last_write, d.text FROM sys.dm_exec_connections c CROSS APPLY sys.dm_exec_sql_text(c.most_recent_sql_handle) d ORDER BY c.connect_time	×

# 1.5.86Connections

- For database server "MSSQL"
- This report shows a list of all active connections to all databases with the option to "kill" the connection.

sp_	who						5	5 / 56
spid	status	hostname	cmd	connect_time	last_read	last_write	SQL	
1	background		XTP_CKPT_AGENT					×
2	background		LOG WRITER					×
3	background		RECOVERY WRITER					×
4	background		LAZY WRITER					×
5	background		SIGNAL HANDLER					×
6	background		LOCK MONITOR					×
7	background		XIO_LEASE_RENEWA					×
8	background		XIO_RETRY_WORKER					×
9	background		RESOURCE MONITOR					×
10	background		XE DISPATCHER					×
11	background		XE TIMER					×
12	background		BRKR TASK					×
13	sleeping		TASK MANAGER					×
14	sleeping		TASK MANAGER					×
15	background		TRACE QUEUE TASK					×
16	background		RECEIVE					×
17	background		UNKNOWN TOKEN					×

# 1.5.87Running queries (netgenium)

• This report displays a list of all currently processed database queries in the "netgenium" database with the "kill" option of the given query and displays a table with Running scripts.

#### 1.5.88Running queries

- For database server "MSSQL"
- This report displays a list of all currently processed database queries in all databases with the option to "kill" the given query and displays a table with Running scripts.



#### 1.5.89FbConnection.ClearPool

- For the "Firebird" database server
- This command updates the cache memory of all Firebird database processes and threads.
- Each time the database structure is changed (adding a new column, renaming a column, changing a column data type, deleting a column), NET Genium will try to synchronize the new database structure in all processes or threads by running the "FbConnection.ClearPool" command. In fact, this means that all currently open connections to the database are closed and the "connection pool" is emptied. If any of these connections are actively in use at the same time, the "FbConnection.ClearPool" command will fail and the error message "Update Firebird metadata cache failed" will be displayed. Please run FbConnection.ClearPool manually.". This error message does not limit the administrator who initiated the database structure change. Its thread has changed structure, so its thread is already out of sync. Only other users could see error messages such as "Column not found in database" and so on. Usually, you just have to wait a while for other users' threads to sync. If this does not happen for a long time and it is necessary to solve the situation urgently, it is possible to run the "FbConnection.ClearPool" command manually directly from NET Genium tools.