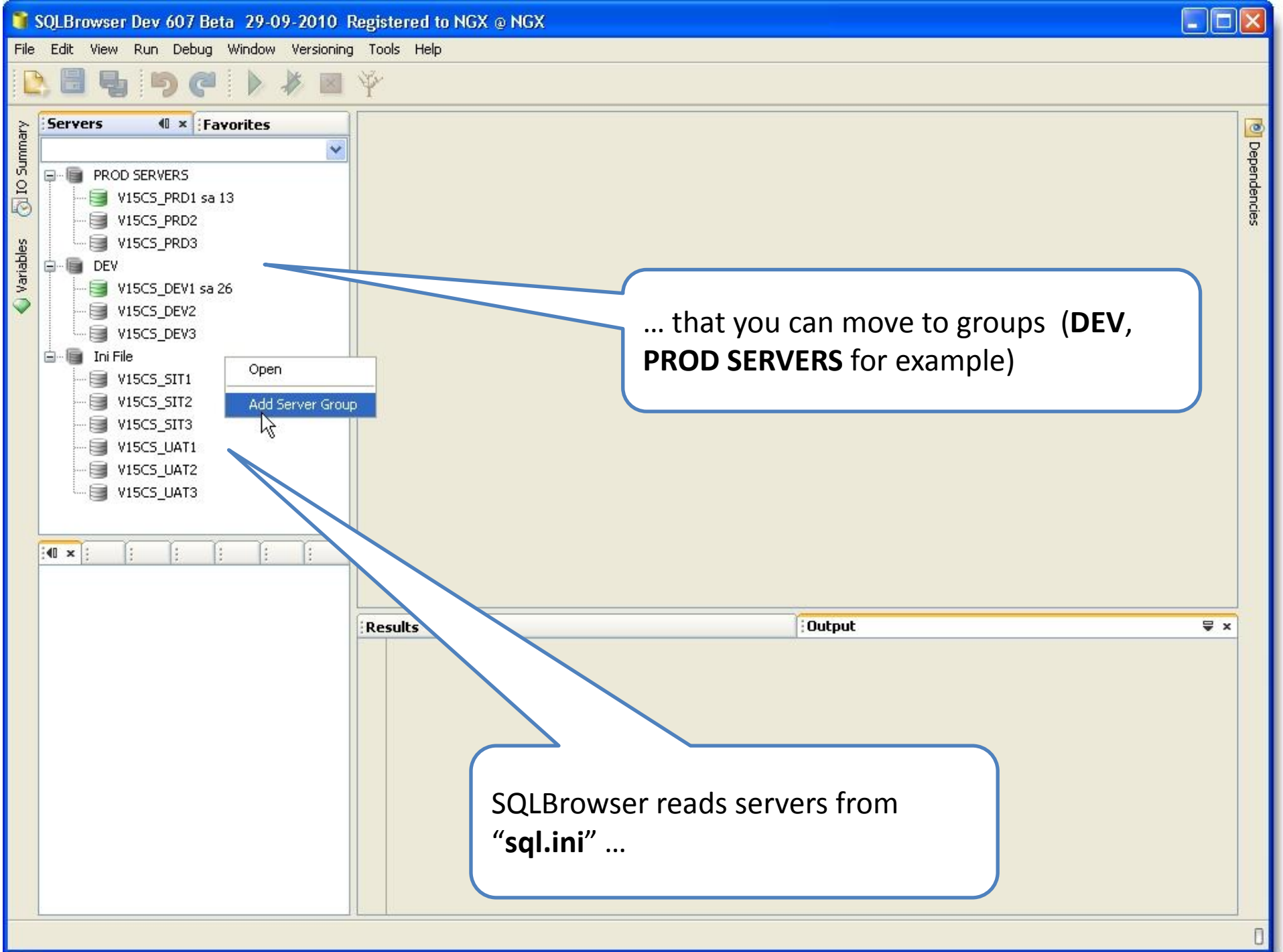




Screen Shots

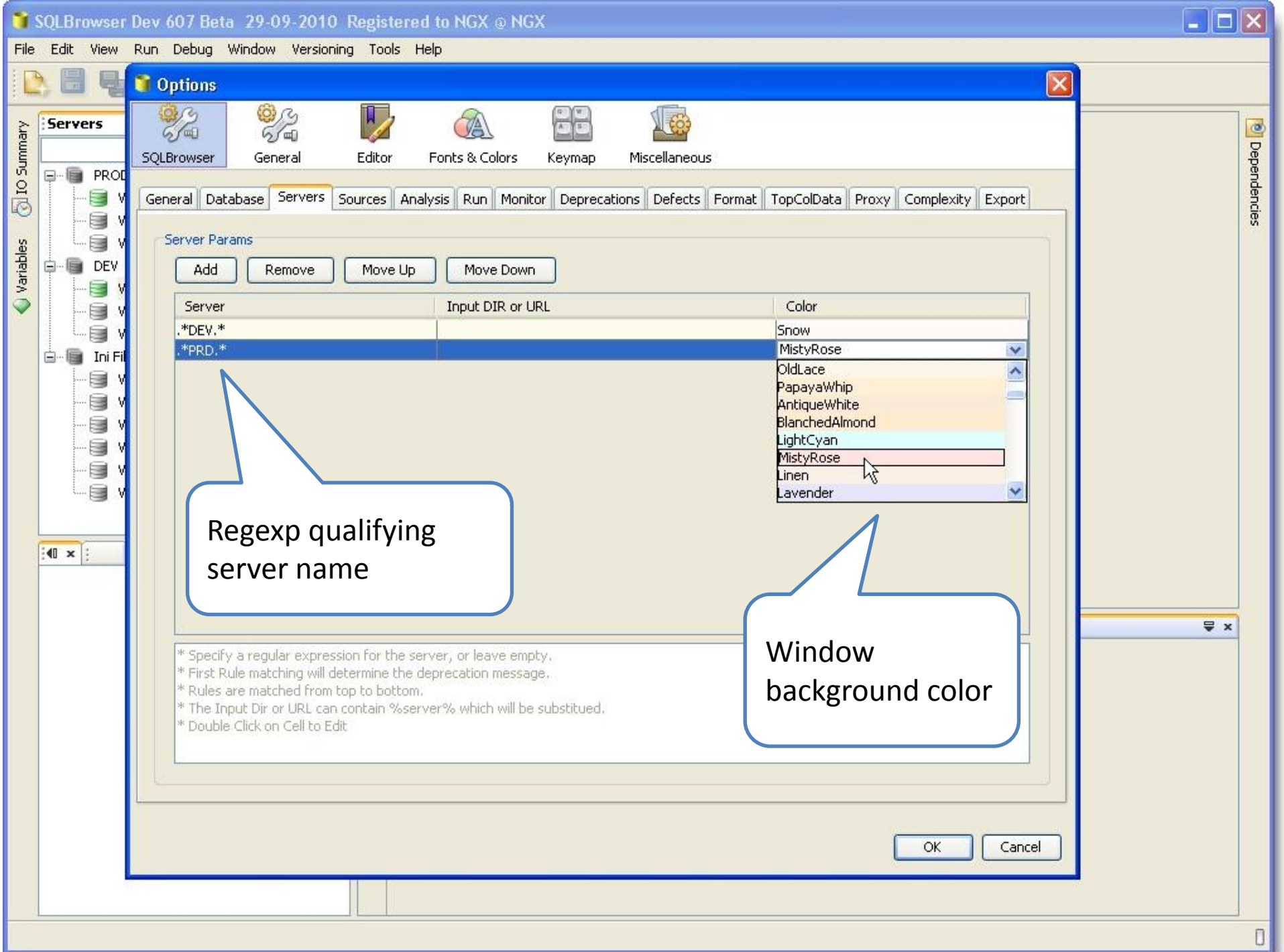
# sql.ini File, Servers

- SQLBrowser reads an sql.ini file
- Servers can be organised in groups
- A color can be assigned to servers. It will be used as the windows background color



... that you can move to groups (**DEV**, **PROD SERVERS** for example)

SQLBrowser reads servers from  
"sql.ini" ...



# Objects Window

- 2 tabs:
- By database, alphabetical order
- Global view, lookup by name (recommended approach when you know what you look for - faster)



**Servers**

- PROD SERVERS
  - V15CS\_PRD1 sa 20
  - V15CS\_PRD2
  - V15CS\_PRD3
- DEV
  - V15CS\_DEV1 sa 26
  - V15CS\_DEV2
  - V15CS\_DEV3
- Ini File
  - V15CS\_SIT1
  - V15CS\_SIT2
  - V15CS\_SIT3
  - V15CS\_UAT1
  - V15CS\_UAT2
  - V15CS\_UAT3

**V15CS\_PRD1** x temp6230115964282473846.sql x megaload.sql x megadump.sql x temp53...

Databases Objects Logins Roles

Reload ☒ Proc ☒ Table ☒ View ☒ Trig ☐ Func ☒ Rule ☒ Def Analyze Extract Source

A	B	T	Creation Date	Extra Info	Permissions	Logi...
master						
sybsystemdb						
sybsystemprocs						
tempdb						
unipubs2						
	sales	T	30 sept. 2010 19:32...	30 r, 2 KB, AP, Stats 0 hr	guest:DDSTIRFTRNUUST, p...	
	salesdetail	T	30 sept. 2010 19:32...	116 r, 14 KB, AP, Stats 0 hr	guest:DDSTIRFTRNUUST, p...	
	storeid_proc	P	30 sept. 2010 19:32...		public: E	
	storename_proc	P	30 sept. 2010 19:32...		public: E	
	stores	T	30 sept. 2010 19:32...	7 r, 2 KB, AP	guest:DDSTIRFTRNUUST, p...	
	sysalternates	T	12 avr. 2008 20:27:18	4 KB, DR		
	sysattributes	T	12 avr. 2008 20:27:18			
	syscolumns	T	12 avr. 2008 20:27:18	0 r, 4 KB, DR		
	syscomments	T	12 avr. 2008 20:27:18	0 r, 4 KB, DR		
	sysconstraints	T	12 avr. 2008 20:27:18	0 r, 6 KB, DR		
	sysdepends	T	12 avr. 2008 20:27:18	0 r, 4 KB, DR		
	sysencryptkeys	T	12 avr. 2008 20:27:18	0 r, 4 KB, DR		
	sysgams	T	12 avr. 2008 20:27:18	0 r, 0 B, AP		
	sysindexes	T	12 avr. 2008 20:27:18	0 r, 20 KB, DR		
	sysjars	T	12 avr. 2008 20:27:18	0 r, 6 KB, DR		
	syskeys	T	12 avr. 2008 20:27:18	32 r, 4 KB, DR	public:S	
	syslogs	T	12 avr. 2008 20:27:18	64 r, 16 KB, AP	public:S	
	sysobjects	T	12 avr. 2008 20:27:18	30 r, 16 KB, DR	public:S, sso_role:S	

Current Server: V15CS\_PRD1

Tab 1: Databases Alphabetical order

**Search Results**

- All Results
- IOs & Plans
- Raw Messages
  - Batch 3 0,203s
    - Creating the "unipubs2" database
    - CREATE DATABASE: all Database 'unipubs2' is
  - Batch 5 0,390s
    - Database option 'trunc log on chkpt' turned ON for database 'unipubs2'.
    - Running CHECKPOINT on database 'unipubs2' for option 'trunc log on chkpt' to take effect.
    - 0 rows updated
  - Batch 8 0,500s

**Results**

All Results 19:33:13.828 - 35,797s. , 9 Update Counts, 36 Messages. [SHOWPLAN,STATISTICS,TIME]

5 Messages

Text

Creating the "unipubs2" database  
 CREATE DATABASE: allocating 1536 logical pages (3.0 megabytes) on disk 'master'.  
 Database 'unipubs2' is now online.  
 Database option 'trunc log on chkpt' turned ON for database 'unipubs2'.  
 Running CHECKPOINT on database 'unipubs2' for option 'trunc log on chkpt' to take effect.

0 row(s) updated



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File Edit View Run Debug Window Versioning Tools Help

Servers Favorites

PROD SERVERS

- V15CS\_PRD1 sa 20
- V15CS\_PRD2
- V15CS\_PRD3

DEV

- V15CS\_DEV1 sa 26
- V15CS\_DEV2
- V15CS\_DEV3

Ini File

- V15CS\_SIT1
- V15CS\_SIT2
- V15CS\_SIT3
- V15CS\_UAT1
- V15CS\_UAT2
- V15CS\_UAT3

V15CS\_PRD1 x temp6230115964282473846.sql x megaload.sql x megadump.sql x temp53...

Databases Objects Logins Roles

Reload ☒ Proc ☒ Table ☒ View ☒ Trig ☐ Func ☒ Rule ☒ Def ☒ Analyze ☐ Extract ☐ Source

Find: exe| 14 ☐ Reg Exp ☐ Match Case

Database	Name	T	Creation Date	Extra Info	Permissions	Logname
master	sysindexes	T	12 avr. 2008 20:27:18	58 r, 38 KB, DR	public:S	
sybsystemdb	sysindexes	T	12 avr. 2008 20:27:18	27 r, 24 KB, DR	public:S	
sybsystemprocs	sp_addclass	P	12 avr. 2008 20:28:30			
sybsystemprocs	sp_bindex	P	12 avr. 2008 20:28:30			
sybsystemprocs	sp_clearse	P	12 avr. 2008 20:28:30	AnyMode	public: E	
sybsystemprocs	sp_dropexcl	P	12 avr. 2008 20:28:31			
sybsystemprocs	sp_exec_SQL	P	12 avr. 2008 20:28:31			
sybsystemprocs	sp_setpsxe	P	12 avr. 2008 20:28:31			
sybsystemprocs	sp_showexcl	P	12 avr. 2008 20:28:31			
sybsystemprocs	sp_showpsxe	P	12 avr. 2008 20:28:31			
sybsystemprocs	sp_unindexcl	P	12 avr. 2008 20:28:31			
sybsystemprocs	sysindexes	T	12 avr. 2008 20:28:31			
tempdb	sysindexes	T	12 avr. 2008 20:28:31			
unipubs2	sysindexes	T	12 avr. 2008 20:28:31			

Search Results

All Results

IOs & Plans

Raw Messages

Batch 3 0,203s

- Creating the "unipubs"
- CREATE DATABASE: all
- Database 'unipubs2' is

Batch 5 0,390s

- Database option 'trunc
- Running CHECKPOINT
- 0 rows updated

Batch 8 0,500s

Results

All Results

19:33:13.828 - 35,79

5 Messages

Text

Creating the "unipubs2"

CREATE DATABASE: a

Database 'unipubs2' is

Database option 'trunc

Running CHECKPOINT on

0 row(s) updated

Tab 2: Objects

- Quick search on all objects
- Type substring to show matching objects
- Activated by Ctrl-Shift-O.
- Up/Dn/Enter key allows mouseless operations for better productivity

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File Edit View Run Debug Versioning Window Tools Help

49,0/147,1MB

**Servers** Favorites

- PROD SERVERS
  - V15CS\_PRD1 sa 15
  - V15CS\_PRD2
  - V15CS\_PRD3
- DEV
  - V15CS\_DEV1 sa 19
  - V15CS\_DEV2
  - V15CS\_DEV3
- Ini File

**Databases** Objects Logins Roles

Reload ☒ Proc ☒ Table ☒ View ☒ Trig ☐ Func ☒ Rule ☒ De

Name	...	Creatio...	Extr...	Permi...	L...
sp_abort_xact	P	12 avr. 2...	AnyMode public: E		
sp_active roles	P	12 avr. 2...	AnyMode public: E		
sp_add_qpgr...	P	12 avr. 2...	AnyMode public: E		
sp_add_reso...	P	12 avr. 2...	AnyMode public: E		
sp_add_time...	P	12 avr. 2...	AnyMode public: E		
sp_addalias	P	12 avr. 2...	AnyMode public: E		
sp_addengine					
sp_addexcl...					
sp_addexten...					
sp_addexter...					
sp_addgroup					
sp_addlangu...					
sp_addlogin					
sp_addlog...					
sp_add...					
sp...					
remot...					
adsegme...					
addserver					
_addtablede					
sp_addthres...					

**Dependencies** Children - 1 Nodes, 13 Subnodes Parent

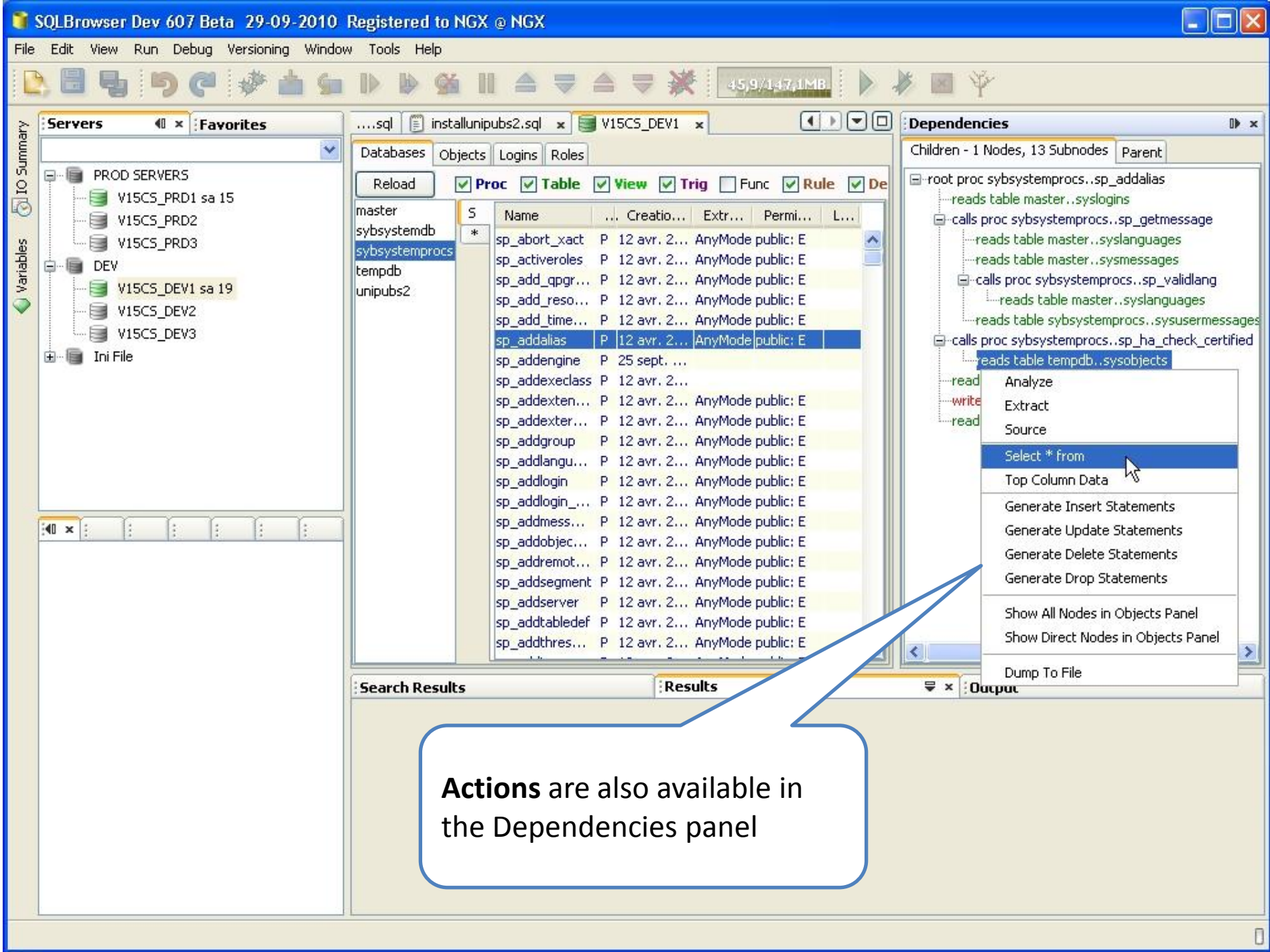
- root proc sybsystemprocs..sp\_addalias
  - reads table master..syslogins
  - calls proc sybsystemprocs..sp\_getmessage
    - reads table master..syslanguages
    - reads table master..sysmessages
  - calls proc sybsystemprocs..sp\_validlang
    - reads table master..syslanguages
  - reads table sybsystemprocs..sysusermessages
  - calls proc sybsystemprocs..sp\_ha\_check\_certified
    - reads table tempdb..sysobjects
  - reads table sybsystemprocs..sysalternates
  - writes table sybsystemprocs..sysalternates
  - reads table sybsystemprocs..sysusers

**Actions available on procs and tables**

- Analyze
- Extract
- Source
- Select \* from
- Top Column Data
- Generate Insert Statements
- Generate Update Statements
- Generate Delete Statements
- Generate Drop Statements
- ☒ Show Dependencies Automatically
- Add Objects To Dependency List
- Add Whole Database To Dependency List
- Clear Dependency List

**Dependencies of this object (Parent / Children) (read from Batch Analysis)**





**Actions** are also available in the Dependencies panel

# Actions on Objects

- **Analyze:** Analyze an object and its sub-procs. Allows to see defects, queries...
- **Extract:** Extracts the body of an object (not recommended for code maintenance!)
- **Source:** Opens the source file matching this object (recommended for code maintenance!)

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File Edit View Run Debug Versioning Window Tools Help

71,1/147,1MB

Servers Favorites

Results of **Analyze** on procedure **sp\_help**

- Yellow Screen (Read Only)
- All sub procs are parsed

Vars: Defects For This Proc (255)

- QJWI - Join/Sarg Without Index
- QJWI - Join/Sarg Without Index (sybsystemprocs)
- QJWI - Join/Sarg Without Index (sybsystemprocs..sp\_help:245)
- QTYP - Comparison type mismatch
- MEST - Empty String Acts as Single Space
- MTYP - Assignment type mismatch
- MTYP - Assignment type mismatch Assignment typ
- MTYP - Assignment type mismatch Assignment typ
- MTYP - Assignment type mismatch Assignment typ
- MTYP - Assignment type mismatch Assignment typ
- QDIS - Check correct use of 'select distinct'
- QISO - Set isolation level
- QJWT - Join/Sarg Without Index involving temp table
- QPIU - Join/Sarg with Partial Index Use

```
235      Nulls = s.allownulls,
236      Prec = s.prec,
237      Scale = s.scale,
238      Default_name = object_name(s.tdefault),
239      Rule_name = object_name(s.domain),
240      Access_Rule_name = object_name(s.accessrule),
241      Ident = s.ident
242  into #sphelp4rs
243  from systypes s, systypes st
244  where s.usertype = @typeid
245         and s.type = st.type
246         and st.name not in ('timestamp', 'sysname', 'longsysname', 'ncha
247         and st.usertype < 100
248  exec sp_autoformat @fulltabname = #sphelp4rs,
249
250      @selectlist = "Type_name, Storage_type,Length,Prec,Scale,Nulls,D
251  drop table #sphelp4rs
252
253  return (0)
254  end
255
256  /*
257
258
259  /*
260  ** Define
261  ** and 02
262  */
263
264  select @and_access = hextoint("0x1000000"),
265         @or_access = hextoint("0x4000000")
266  ...
```

The **Defects** tab shows for instance defects found on this proc and sub procs

245:33 INS

Search Results Results Output



General Database Servers Sources Analysis Run Monitor Deprecations Defects Format TopColData Proxy Complexity Export

### Source File Locator Params

Add

Remo

Move

Move D

Root Di

5 source

---

---

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Root Dir: D:\V15CS sources

Type

Serve

03

Na

Path

PROC

Product	Table
Product 1	Table 1
Product 2	Table 2
Product 3	Table 3
Product 4	Table 4
Product 5	Table 5
Product 6	Table 6
Product 7	Table 7
Product 8	Table 8
Product 9	Table 9
Product 10	Table 10
Product 11	Table 11
Product 12	Table 12
Product 13	Table 13
Product 14	Table 14
Product 15	Table 15
Product 16	Table 16
Product 17	Table 17
Product 18	Table 18
Product 19	Table 19
Product 20	Table 20
Product 21	Table 21
Product 22	Table 22
Product 23	Table 23
Product 24	Table 24
Product 25	Table 25
Product 26	Table 26
Product 27	Table 27
Product 28	Table 28
Product 29	Table 29
Product 30	Table 30
Product 31	Table 31
Product 32	Table 32
Product 33	Table 33
Product 34	Table 34
Product 35	Table 35
Product 36	Table 36
Product 37	Table 37
Product 38	Table 38
Product 39	Table 39
Product 40	Table 40
Product 41	Table 41
Product 42	Table 42
Product 43	Table 43
Product 44	Table 44
Product 45	Table 45
Product 46	Table 46
Product 47	Table 47
Product 48	Table 48
Product 49	Table 49
Product 50	Table 50
Product 51	Table 51
Product 52	Table 52
Product 53	Table 53
Product 54	Table 54
Product 55	Table 55
Product 56	Table 56
Product 57	Table 57
Product 58	Table 58
Product 59	Table 59
Product 60	Table 60
Product 61	Table 61
Product 62	Table 62
Product 63	Table 63
Product 64	Table 64
Product 65	Table 65
Product 66	Table 66
Product 67	Table 67
Product 68	Table 68
Product 69	Table 69
Product 70	Table 70
Product 71	Table 71
Product 72	Table 72
Product 73	Table 73
Product 74	Table 74
Product 75	Table 75
Product 76	Table 76
Product 77	Table 77
Product 78	Table 78
Product 79	Table 79
Product 80	Table 80
Product 81	Table 81
Product 82	Table 82
Product 83	Table 83
Product 84	Table 84
Product 85	Table 85
Product 86	Table 86
Product 87	Table 87
Product 88	Table 88
Product 89	Table 89
Product 90	Table 90
Product 91	Table 91
Product 92	Table 92
Product 93	Table 93
Product 94	Table 94
Product 95	Table 95
Product 96	Table 96
Product 97	Table 97
Product 98	Table 98
Product 99	Table 99
Product 100	Table 100

view

view  
winner

trigger  
function

function

rule

default
---------

**Source Option:**  
where to find the sources

## Path for objects qualifying the regexps

\* Specify a regular expression per field, or leave empty.

\* First Rule matching will determine the source path.

\* Rules are matched from top to bottom.

\* The Path can contain %root%, %server%, %db%, %owner% and %name% which will be substituted.

\* Double Click on Cell to Edit

OK

Cancel



# SQL Editor

- Coloration
- Auto Completion for names
- Auto Completion for joins
- Reformatting
- Commenting
- Inline Defects Analysis
- Abbreviations and Macros

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File Edit View Run Debug Versioning Window Tools Help

75,7/147,1MB

Servers Favorites

V15CS\_DEV1

sp\_help.sql

D:\V15CS sources\sybsystemprocs\sp\_help.sql

426 set Type = substring(Type, 1, 29) + "+"  
427 where xtype is not null  
428 and substring(Type, 29, 1) != " "  
  
/\* Handle National Characters \*/  
432 update #helptype  
433 set Length = Length / @@ncharsize  
434 where (rtype = 47 and utype = 24)  
435 or (rtype = 39 and utype = 25)  
  
/\* Handle unichar/univarchar \*/  
436 update #helptype  
437 set Length = Length / @@unicharsize  
438 where rtype in (select type from systypes  
439 where name in ('unichar', 'univarchar'))  
  
/\* Handle unsigned types by outputting user syntax \*/  
442 update #helptype  
443 set Type = "unsigned " +  
444 substring(Type, charindex("u", Type) + 1, 30)  
445 where utype in (44, 45, 46)  
  
/\*  
447 \*\* Construct the SQL query against #helptype. Be careful not to  
448 \*\* exceed 255 characters, or the string will get truncated.  
449 \*/  
450 select @sqltext = "Column\_name,Type, Length, Prec, Scale,Nulls,Defa  
451  
452  
453  
454 /\* Display the Object\_storage only if there are object columns. \*/  
455 if exists (select \* from #helptype  
456 where Object\_storage is not null)

433:21 INS

Vars Qu... Ob... Stack Trees Op...

- QTLO - Top-Level OR
- MBLI - Integer Value of Binary Literal is Platform Dependant
- MNER - No Error Check
- MUCO - Useless Code
- MUIN - Column created using implicit nullability
- MUTI - Update temptable with identity - 12.5.4 Regression
- QAFM - Var Assignment from potentially many rows
- QCRS - Conditional Result Set
- QIWC - Insert with not all columns specified
- QNAJ - Not using ANSI Join
- VUNU - Variable is never used
- VWRI - Variable is written to and not reused later
- MTRC - Metrics
  - MTRC - Metrics Overall Complexity: 881,3898 (master..sp\_help\_batch\_3:144)
  - MTRC - Metrics Comments Ratio: 28% (master..sp\_help\_batch\_3:144)

Search Results Results Output

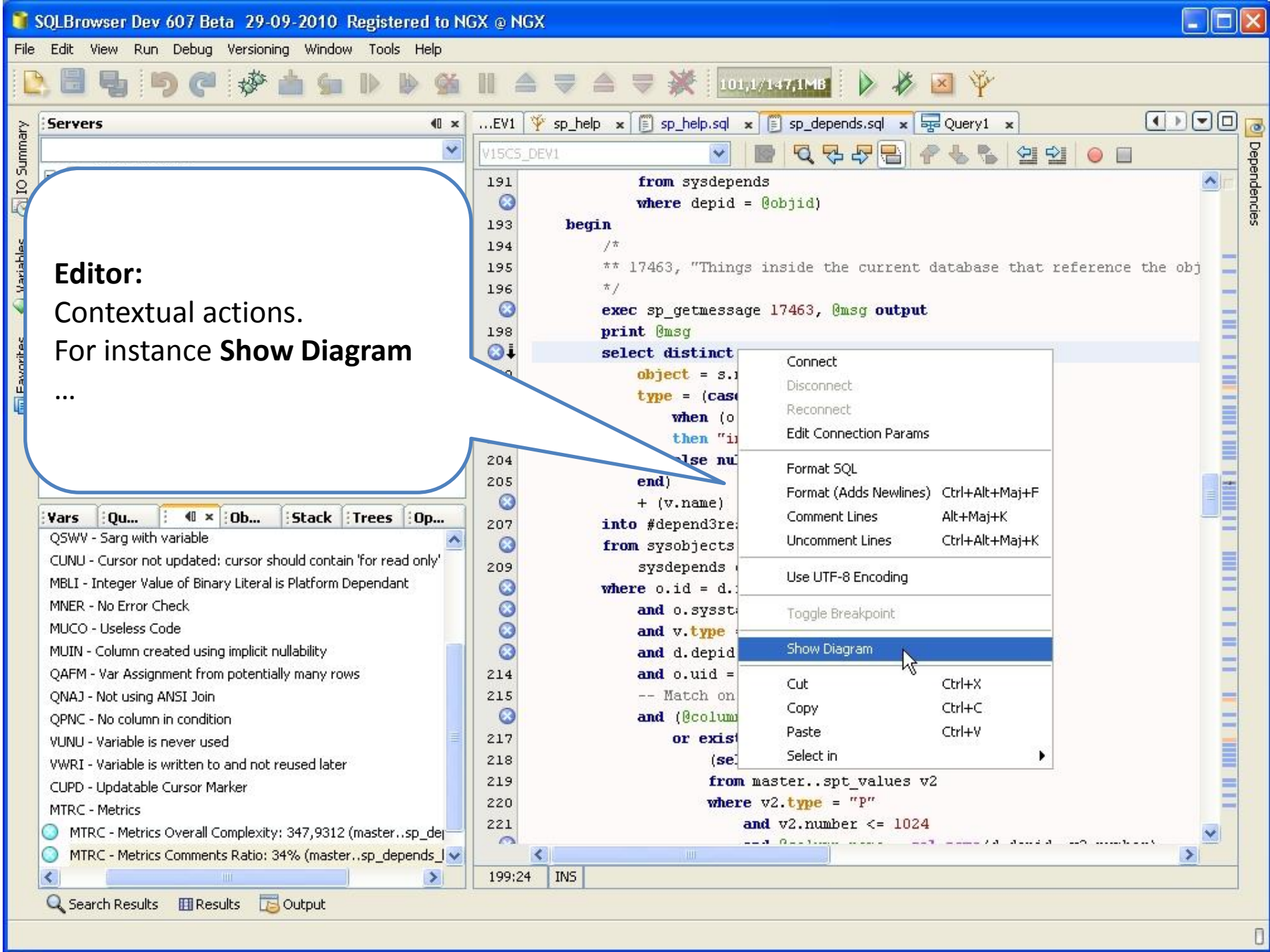
QJMI - Join/Sarg Without Index (master..sp\_help\_batch\_3:144)

Variables

Indices

TO Summary

Defects are parsed...



**Editor:**  
Contextual actions.  
For instance **Show Diagram**

...

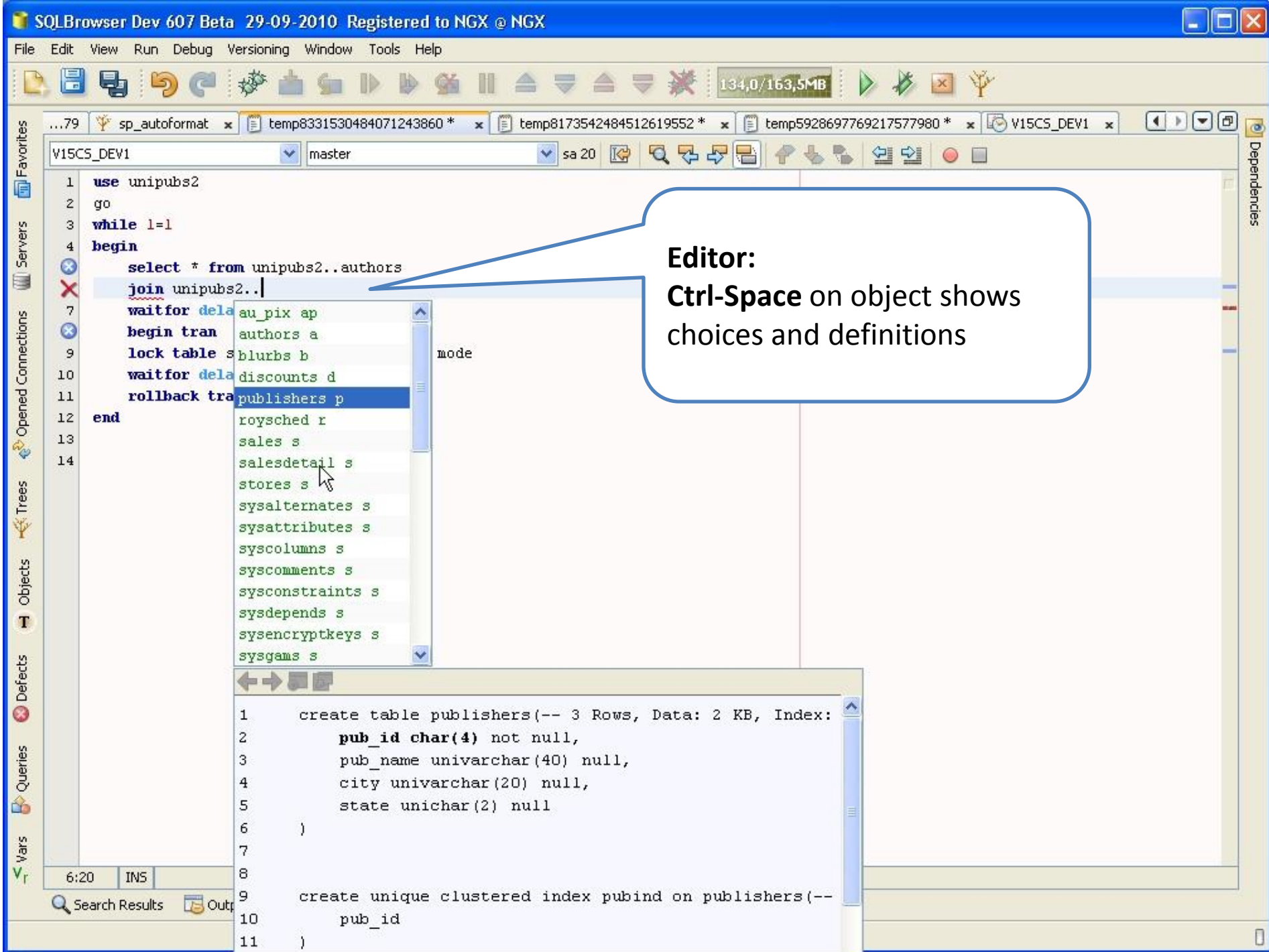


Shuffle Copy To Clipboard Save Layout Restore Layout

Objects Stack Trees Opened Connections Servers Variables IO Summary







**Editor:**  
**Ctrl-Space** on joins show  
possible joins...  
(read from **Batch Analysis**)

# Running Queries

- With possible options (showplan, fmtonly)
- Interruptible
- Colorized IO and plans
- Concurrent executions in multiple windows
- Various actions on Result-Sets

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File Edit View Run Debug Versioning Window Tools Help

116,8/147,1MB

116,8/147,1MB

116,8/147,1MB

Servers

PROD SERV

V15CS

V15CS

V15CS

DEV

V15CS

V15CS

V15CS

Ini File

...sql

V15CS\_DEV1

sp\_help

sp\_help.sql

sp\_depends.sql

Query1

temp5272330805183167979 \*

V15CS\_DEV1

sybsystemprocs

sa 23

1

select \* from sysobjects s

2

select \* from sysobjects s

3

join sybsystemprocs..syscolumns sl on s.id = sl.id

4

3:10

INS

Batch execution

Results

All Results

IOs & Plans

Raw Messages

Batch 1 0,094s

535 rows

1 000 of 1 981 rows

All Results

19:50:07.937 - 0,094s. 2 Result Sets. [SHOWPLAN,STATISTICS,TIME]

535 rows

name	id	uid	type	userstat	sysstat	indexdel	schemac
sysobjects	1	1 S		0	97	1	
sysindexes	2	1 S		0	97	0	
syscolumns	3	1 S		0	97	0	
systypes	4	1 S		0	97	1	
syslogs	8	1 S		0	1	0	
syspartitions				0	97	2	
sysgams				0	1	0	
systabstats				0	97	2	
sysprocedures				0	97	2	
syscomments				0	97	2	
syssegments				0	65	0	
sysprotects				0	97	2	
sysusers				0	97	4	
sysalternates							
sysdepends							
syskeys							

1 000 of 1 981 rows

name	id	uid	type	userstat	sysstat	indexdel	schemacnt
sysobjects	1	1 S		0	97	1	
sysobjects	1	1 S		0	97	1	
sysobjects	1	1 S		0	97	1	

Possible Actions

Search Results

Output



Favorites

- QPIU - Join/Sarg w
- MSTA - Use of Sta
- MTRC - Metrics
- MTRC - Metrics
- MTRC - Metrics

 Output


## Dependencies

V15CS DEV1 sybsystemprocs sa 23

3:10	INS
------	-----

## Results

 **All Results**

 IOs & Plans

### Raw Messages

Batch 1 0,094s

535 rows

1 000 of 1 981 rows

Page 10 of 10

## Colorized IOs

## IOs & Plans

## Summary

Summary	Count	Max	Total
Reads	3	682	1236
Elapsed Time	2	50	80
CPU Time	1	100	100
EXE Time	1	100	100

Summary By Table

Summary	Count	Max	Total
syscolumns	1	682	682
sysobjects	2	518	554

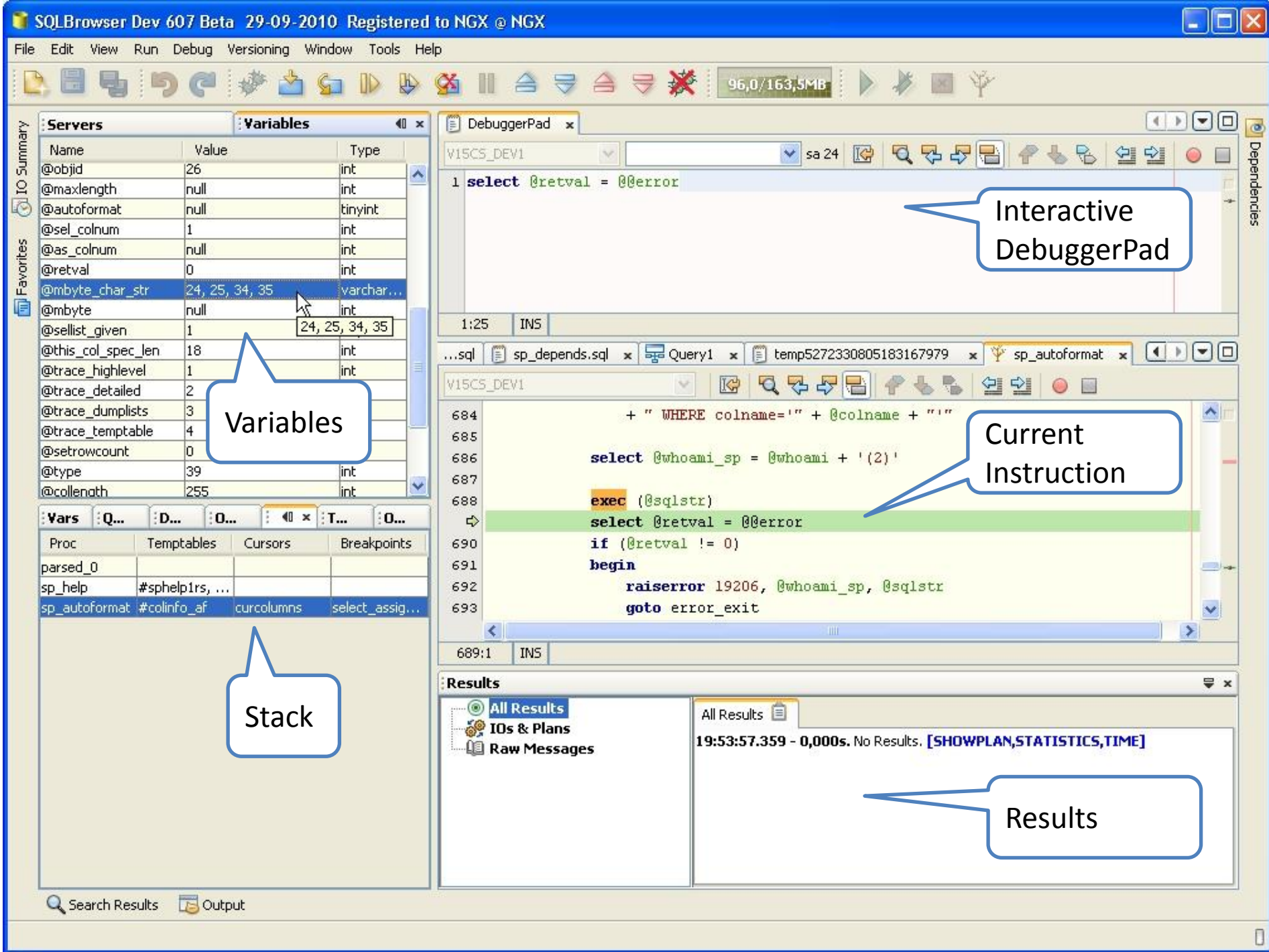
### IO & TIME Events

#	Proc	Total I/Os	Table	R	Scan	I/Os/Time
1	<batch>:0001	36	sysobjects	R	1	36
2	<batch>:0001	0		Elapsed Time	0	50
3	<batch>:0003	1200	sysobjects	R	1	518
4	<batch>:0003	1200	syscolumns	R	1	682
5	<batch>:0003	0		Exec Time	0	100
6	<batch>:0003	0		CPU Time	0	100
7	<batch>:0003	0		Elapsed Time	0	30

### Statements

# Debugger

- Step by Step
- Break Points
- Interruptible
- Inspection / Change of variables
- On the fly executions in the debugger pad  
(allows for tuning for instance)



# Data Analysis

- Simple function which shows most representative values in a table
- Allows to understand table content
- Interesting complement of select \*
- Spots useless columns



Mozilla Firefox

file:///D:/temp/sq...s\_sysobjects.html

Top Representative Values for **sybsystemprocs..sysobjects**  
535 Rows. Elapsed Time: 00:00:00.016

name longsysname(255)	id int	uid int	type char(2)	userstat smallint	sysstat smallint	indexdel smallint	schemacnt smallint	sysstat2 int	crdate datetime	expdate datetime	deltrig int	instrig int	updtrig int	sel int
Ignored	Other 96%	1 100%	P 91%	0 100%	4 83%	0 95%	0 100%	160 75%	Ignored	Ignored	0 100%	0 100%	0 100%	0 1
	1 0%		S 5%		-32700 9%	2 2%		128 8%						
	2 0%		XP 1%		97 3%	3 0%		134217888 6%						
	3 0%		U 1%		67 0%	1 0%		229376 3%						
	4 0%		V 0%		8289 0%	4 0%		8388768 2%						
	5 0%				1 0%			73728 1%						
	6 0%				65 0%			229888 0%						
	7 0%				2 0%			98304 0%						
	8 0%				81 0%			416 0%						
	9 0%				113 0%			74240 0%						
	10 0%				83 0%			73736 0%						
	11 0%													
	12 0%													
	13 0%													
	14 0%													
	15 0%													
	17 0%													
	16 0%													
	18 0%													
	23 0%													
	29 0%													
	28 0%													

Generated by SQLBrowser Dev 607 Beta 29-09-2010 for server V15CS\_DEV1 NGX400:5007 Adaptive Server Enterprise/15.0.2/EBF 14332/P/NT (IX86)/Windows  
2000/ase1502/2486/32-bit/OPT/Thu May 24 04:10:36 2007 on 30 sept. 2010

Analysis of **sysobjects**.

Values are shown by order of frequency

# Monitor

- Shows Active Processes
- Shows Locked Tables
- Shows Locked Processes

SQLBrowser Dev 607 Beta 29-09-2010 Registered to NGX @ NGX

File Edit View Run Debug Versioning Window Tools Help

Servers

PROD SERVERS

V15CS\_PRD1 sa 15

V15CS\_PRD2

V15CS\_PRD3

DEV

V15CS\_DEV1 sa 19

V15CS\_DEV2

V15CS\_DEV3

Ini File

...79

sp\_autoformat

Running...

Running...

Running...

Running...

V15CS\_DEV1

unipubs2

sa 18

142,1/163,5MB

3 while 1=1

4 begin

5 select \* from unipubs2..publishers p

6 join unipubs2..roysched r on 1=1

7 waitfor delay '00:00:01'

8 begin tran

9 lock table unipubs2..publishers in exclusive mode

10 waitfor delay '00:00:01'

11 rollback tran

12 end

2:3 INS

V15CS\_DEV1

Sleep 2

Reset Sort

Syst

Trace

175

history: 1 000

Clear 175

Dump

Pause

Id	Login	App Name	Client App	IOs	CPU	Mem	Stored Procedure	Command	Status	Blk	Sinc
16	sa	SQLBrowser	* This Monitor *	0	2	5		SELECT	running	0	
20	sa	SQLBrowser	Ngx (E 607)	0	22	13		LOCK TABLE	lock sleep	21	
18	sa	SQLBrowser	Ngx (E 607)	0	0	13		LOCK TABLE	lock sleep	21	
21	sa	SQLBrowser	Ngx (E 607)	0	0	13		WAITFOR	alarm sleep	0	
31	sa	SQLBrowser	Ngx (E 607)	0	0	13		SELECT	lock sleep	21	
19	sa	SQLBrowser	Ngx (N 607)	0	5	19		AWAITING COMMAND	recv sleep	0	
15	sa	SQLBrowser	Ngx (N 607)	0	0	2		AWAITING COMMAND	recv sleep	0	

spid

dbname

objectname

locktype

page

21 unipubs2 publishers null 0

Dependencies

Search Results

Output

Results

temp1123660635238454697: batch 2, Line 3, 100%

Historization

Most active processes or blocked

Locks

# Capture

- SQLBrowser can act as a gateway
- The application to trace connects to SQLBrowser which acts as a server
- Traffic is recorded
- Allows to see what an unknown application effectively sends
- (Sort of Ribo)



sqlcapture973469893871978754.t... \temp\sqlBrowserOutputDir) - GVIM2

Fichier Edition Outils Syntaxe Tampons Fenêtre Aide

1 /\* SQLBrowser Capture File Thu Sep 30 20:10:04 CEST 2010 \*/  
2  
3 /\*  
4 user name: sa  
5 app name: isql  
6 client host: NGX400  
7 host process: 5236  
8 TDS vers: 5.0.0.0  
9 LSB HI for Short: false  
10 LSB HI for Int: false  
11 \*/  
12  
13 /\* 20:10:08.296 \*/ select 12  
14 /\* 20:10:12.500 \*/ select \* from sysobjects  
15 /\* 20:10:31.890 \*/ exec sp\_sho  
16 /\* 20:10:37.625 \*/ exec sp\_who

<e973469893871978754.txt" [lecture-seule] 16L, 355C 1,1 Tout

Captured Client

Captured  
Statements

# Batch Analysis

- Analyze one or more databases
- Produces an HTML site with indented code
- Serves as a reference for developers
- Can be executed as part of a Windows Task
- Generates dependencies and schema (joins) used by interactive SLQBrowser sessions

file:///D:/temp/s...S\_DEV1/index.html



Batch Analysis Report

# SQLBrowser

www.sqlbrowser.com

Main index

SQLBrowser Dev 602 Beta 23-09-2010 Registered to NGX @ NGX

Date	Sun Sep 26 16:14:30 CEST 2010
Server Name	V15CS (NGX400:5007)
Server Version	Adaptive Server Enterprise/15.0.2/EBF 14332/P/NT (IX86)/Windows 2000/ase1502/2486/32-bit/OPT/Thu May 24 04:10:36 2007
Server Driver Version	jConnect (TM) for JDBC(TM)/6.05(Build 26564)/P/EBF16903/JDK14/Sun May 31 1:05:35 2009
Java Version	1.6.0_19
DB Analyzed	[sybsystemprocs]
Objects Count	1032
Objects CRDate	null
Defects Count	20953
Analysis Time	1 minutes (18 s)
Memory Used	32 MB

Database	Procs	Tables	Views	Triggers	Functions	Rules	Defaults	Unscanned	Size
master		43/108						81/124	20 MB
sybsystemdb		2/31						30/32	4 MB
sybsystemprocs	485/489	34/35	1					5/525	132 MB
tempdb		464/505						29/30	4 MB

Defects Found

## Defects

✖ QCAR - Cartesian product	54
✖ QBGB - Bad group by	32

file:///D:/temp/sq...r..sysdevices.html

database	table	created	links
master	sysdevices	12 avr. 08	Joins ColumnUsage Writes Propagation Dependencies

Table or Proc

```
1  create table sysdevices(-- 5 Rows, Data: 2 KB, Index: 2 KB
2      low int not null,
3      high int not null,
4      status smallint not null,
5      cntrltype smallint not null,
6      name sysname not null,
7      phynome varchar(127) not null,
8      mirrorname varchar(127) null,
9      vdevno int not null,
10     crdate datetime null,
11     resizedate datetime null,
12     status2 int not null
13 )
14
15 create unique clustered index csysdevices on sysdevices(-- 2 KB refcount: 93
16     name
17 )
18
19 alter table sysdevices lock datarows
20
21 Grant Select on sysdevices to public
22
```

## JOINS

From Columns	To Table	To Columns	Cnt	Cstr	Strength
[vdevno]	master..sysusages	[vdevno]	38	false	Simple Join
[status]	master..spt_values	[number]	20	false	Simple Join
[name]	tempdb..#spdevtab	[name]	45	false	Rev FK
[name]	master..spt_values	[name]	2	false	Rev FK
[vdevno]	tempdb..#spdbusages	[vdevno]	7	false	Simple Join
[vdevno]	tempdb..#spdevusedtab	[vdevno]	1	false	Simple Join

Other Information

## Estimated Index Usage



Mozilla Firefox

file:///D:/temp/sq...r.sysdevices.html

vdevno	sybsystemprocs..sp_addsegment sybsystemprocs..sp_ddlgen_database sybsystemprocs..sp_dropdevice sybsystemprocs..sp_dropsegment sybsystemprocs..sp_extendsegment sybsystemprocs..sp_helpdb sybsystemprocs..sp_helpdevice sybsystemprocs..sp_helplog sybsystemprocs..sp_helpsegment sybsystemprocs..sp_logdevice sybsystemprocs..sp_plan_dbccdb sybsystemprocs..sp_sysmon
status2	sybsystemprocs..sp_deviceattr sybsystemprocs..sp_helpdevice

COLUMN WRITES detailed

Column	Written With
low	sybsystemprocs..sp_addumpdevice.@_any_
high	sybsystemprocs..sp_addumpdevice.@_any_ sybsystemprocs..sp_addumpdevice.@tapesize
status	master..sysdevices.status master..sysdevices.status2 sybsystemprocs..sp_addumpdevice.@_any_ sybsystemprocs..sp_deviceattr.@_any_ sybsystemprocs..sp_diskdefault.@_any_
cntrltype	sybsystemprocs..sp_addumpdevice.@_any_
name	sybsystemprocs..sp_addumpdevice.@logicalname
phyname	sybsystemprocs..sp_addumpdevice.@physicalname
vdevno	sybsystemprocs..sp_addumpdevice.@_any_
status2	master..sysdevices.status master..sysdevices.status2 sybsystemprocs..sp_addumpdevice.@_any_ sybsystemprocs..sp_deviceattr.@_any_ sybsystemprocs..sp_diskdefault.@_any_

DATA PROPAGATION detailed

Data	Written To Columns
status	master..sysdevices.status
status	master..sysdevices.status2
status2	master..sysdevices.status
status2	master..sysdevices.status2

DEPENDENCIES

READERS AND WRITERS  
read by proc sybsystemprocs..sp\_addsegment  
written by proc sybsystemprocs..sp\_addumpdevice  
read by proc sybsystemprocs..sp\_addumpdevice  
read by proc sybsystemprocs..sp\_checknames  
read by proc sybsystemprocs..sp\_checkreswords  
read by proc sybsystemprocs..sp\_configure

Other Information

Dependencies

Rechercher :  Suivant Précédent Surligner tout ☐ Respecter la casse

# More Information

- Manual:  
<http://www.sqlbrowser.com/wiki/index.php/Manual>
- Batch Analysis example:  
<http://www.sqlbrowser.com/wikiHTML/sqlbhtml/index.html>
- Index of detected Defects:  
<http://www.sqlbrowser.com/wikiHTML/DetectedDefects/defectsALLIndex.php>

QCAR	6	✖	<a href="#">Cartesian product</a>	Performance
QFIB	6	✖	<a href="#">Force index with bad index</a>	Performance
QBGB	6	✖	<a href="#">Bad group by</a>	Misc
MBPA	6	✖	<a href="#">Not a parameter</a>	Misc
MTDS	6	✖	<a href="#">Too Many Database Switches</a>	Misc
V15B	6	✖	<a href="#">V15 Issue: RHS contains col involved in join on extra tables through complex expression</a>	Misc
QJWI	5	✖	<a href="#">Join/Sarg Without Index</a>	Performance
QCAS	4	✖	<a href="#">Cartesian product with single row</a>	Performance
QTYP	4	✖	<a href="#">Comparison type mismatch</a>	Performance
QCSC	4	✖	<a href="#">Costly 'select count()', use 'exists()'</a>	Performance
QFPU	4	✖	<a href="#">Unclosed Force plan</a>	Performance
MTYP	4	✖	<a href="#">Assignment type mismatch</a>	Misc
MBRV	4	✖	<a href="#">Bad return value [-1-99]</a>	Misc
TNOI	4	✖	<a href="#">Table with no index</a>	Misc
TNOU	4	✖	<a href="#">Table with no unique index</a>	Misc
MINU	4	✖	<a href="#">Unique Index with nullable columns</a>	Misc
QUDW	4	✖	<a href="#">Update or delete with no where clause</a>	Misc
Q121	4	✖	<a href="#">V12 Compat #1: Having containing outer join</a>	Misc
Q122	4	✖	<a href="#">V12 Compat #2: Correlated subquery with outer join</a>	Misc
Q123	4	✖	<a href="#">V12 Compat #3: Conjunct with inner table and join order independent table</a>	Misc
VOVR	4	✖	<a href="#">Variable is an input param and is overwritten</a>	Variable
VUWR	4	✖	<a href="#">Variable is an output param and is not written to</a>	Variable
VRUN	4	✖	<a href="#">Variable is read and not initialized</a>	Variable
QDIS	3	✖	<a href="#">Check correct use of 'select distinct'</a>	Performance
QFAP	3	✖	<a href="#">Force abstract plan</a>	Performance

QFID	3	<a href="#">✖ Force index</a>	Performance
QFPL	3	<a href="#">✖ Force plan</a>	Performance
QMTB	3	<a href="#">✖ From clause with many tables</a>	Performance
QJWT	3	<a href="#">✖ Join/Sarg Without Index involving temp table</a>	Performance
QPIU	3	<a href="#">✖ Join/Sarg with Partial Index Use</a>	Performance
QSWV	3	<a href="#">✖ Sarg with variable</a>	Performance
QISO	3	<a href="#">✖ Set isolation level</a>	Performance
QTLO	3	<a href="#">✖ Top-Level OR</a>	Performance
QUNI	3	<a href="#">✖ Use of 'union' vs 'union all'</a>	Performance
MNEJ	3	<a href="#">✖ 'Not Equal' join</a>	Misc
QAPT	3	<a href="#">✖ Access to Proxy Table</a>	Misc
MBLI	3	<a href="#">✖ Behavior of Binary Literal is Platform Dependant</a>	Misc
MLCH	3	<a href="#">✖ Char type with length&gt;30</a>	Misc
MUIN	3	<a href="#">✖ Column created using implicit nullability</a>	Misc
QCRS	3	<a href="#">✖ Conditional Result Set</a>	Misc
MTYU	3	<a href="#">✖ Could not resolve type</a>	Misc
CUNU	3	<a href="#">✖ Cursor not updated: cursor should contain 'for read only' clause</a>	Misc
CUUP	3	<a href="#">✖ Cursor updated: cursor should contain 'for update' clause</a>	Misc
CUSU	3	<a href="#">✖ Cursor updated through 'searched update': risk of halloween rows</a>	Misc
CSBI	3	<a href="#">✖ Cursor with 'Distinct/Union/GroupBy/OrderBy/Aggregate/SubQueries/Isolation' should contain 'insensitive' clause (V15)</a>	Misc
MDPR	3	<a href="#">✖ Deprecated item</a>	Misc
MGTP	3	<a href="#">✖ Grant to public</a>	Misc
QGWO	3	<a href="#">✖ Group by without order by</a>	Misc
MIIO	3	<a href="#">✖ Index overlap</a>	Misc
QIWC	3	<a href="#">✖ Insert with not all columns specified</a>	Misc



QPSC	3	✖	<a href="#">Join on same column</a>	Misc
NCER	3	✖	<a href="#">Naming Convention Error</a>	Misc
QPNC	3	✖	<a href="#">No column in condition</a>	Misc
MNER	3	✖	<a href="#">No Error Check:</a>	Misc
MNAC	3	✖	<a href="#">Not using ANSI 'is null'</a>	Misc
QNAJ	3	✖	<a href="#">Not using ANSI Join</a>	Misc
MDYN	3	✖	<a href="#">Proc uses Dynamic SQL but is not flagged with 'Dynamic Ownership Chain'</a>	Misc
QNC0	3	✖	<a href="#">Query with no column</a>	Misc
QRPR	3	✖	<a href="#">Repeated predicate</a>	Misc
QNAM	3	✖	<a href="#">Select expression has no name</a>	Misc
MUBC	3	✖	<a href="#">Unbalanced begin tran/commit tran</a>	Misc
MUUF	3	✖	<a href="#">Update/Delete with Useless From</a>	Misc
MUOT	3	✖	<a href="#">Updates outside transaction</a>	Misc
MUTI	3	✖	<a href="#">Update temptable with identity - 12.5.4 Regression</a>	Misc
MUCO	3	✖	<a href="#">Useless Code:</a>	Misc
QAFM	3	✖	<a href="#">Var Assignment from potentially many rows</a>	Misc
MZMB	3	✖	<a href="#">Zombie: use of non-existent object</a>	Misc
VUNU	3	✖	<a href="#">Variable is never used</a>	Variable
VWRI	3	✖	<a href="#">Variable is written to and not reused later</a>	Variable
MDYE	2	⊗	<a href="#">Dynamic exec</a>	Misc
MDYS	2	⊗	<a href="#">Dynamic SQL</a>	Misc
CRDO	2	⊗	<a href="#">Read only cursor</a>	Misc
CUPD	2	⊗	<a href="#">Updatable cursor</a>	Misc
MSTA	2	⊗	<a href="#">Use of star</a>	Misc
MTRC	2	⊗	<a href="#">Metrics</a>	Metrics