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# What's New In OpenText Gupta SQLBase 12.2

Features and Benefits of SQLBase 12.2

July, 2019 | Martin Teetz, Product Marketing Manager



# Agenda

- Features & benefits of SQLBase 12.2
  - ◆ Easy maintenance, SQL testing and data maintenance: Much enhanced SQLTalk Plus
  - ◆ SQL language enhancements
  - ◆ Cross platform .NET Core application support
  - ◆ New Server console
- SQLBase 12.2 demo
- Q&A

# Easy server maintenance, SQL testing and data maintenance: Much enhanced SQLTalk Plus

SQLBase 12.2



# SQLTalk Plus Overview

- **One place for all things SQLBase**
- **Server and database maintenance**
  - ◆ Task scheduling
  - ◆ Database auditing
  - ◆ Server, database and user statistics
  - ◆ Server process activity log
- **SQL testing and scripting**

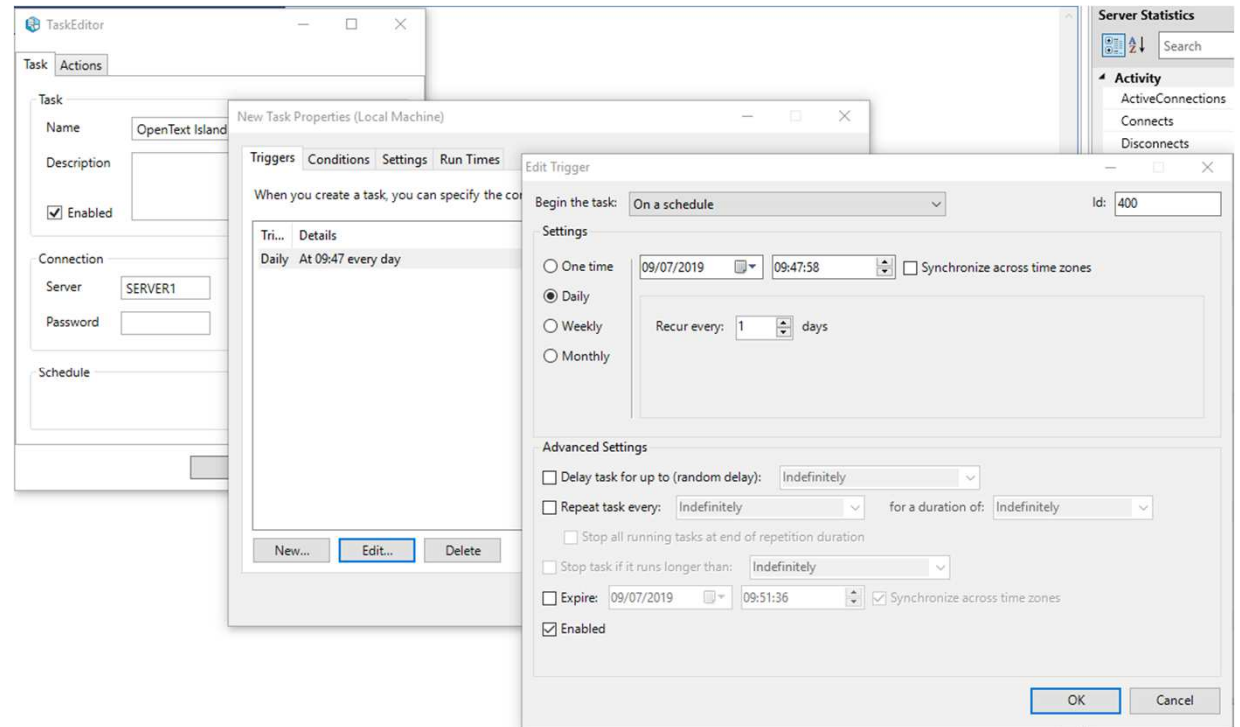
The screenshot displays the SQLTalk Plus application window. The main pane shows a table of company data with columns: COMPANY\_ID, COMPANY\_NAME, ADDRESS, CITY, STATE, ZIP, COUNTRY, PHONE, FAX, TERMS, LINE, and CORPORATE\_URL. The table contains 20 rows of data. The left pane shows the Server Explorer with a tree view of the database structure. The right pane shows the Properties window with tabs for Server Statistics, Activity, and Configuration.

COMPANY_ID	COMPANY_NAME	ADDRESS	CITY	STATE	ZIP	COUNTRY	PHONE	FAX	TERMS	LINE	CORPORATE_URL
101	Clothing Connoisseurs	8 Lombard Street	San Francisco	CA	94131	USA	415-555-1212	415-555-2424	Net 30	0	http://www.clothing...
102	Mauli Mu-Mus	1011 Likilike Lane	Honolulu	HI	99878	USA	808-555-1212	808-555-2424	Advance	0	http://www.mauimu...
103	Fashion Outlet	16 E. Pennsylvania A...	Washington	DC	01011	USA	215-555-1212	215-555-2424	Net 30	0	http://www.fashions...
104	Garcia Tiedye Barn	1965 Shakedown Str...	Sausalito	CA	94114	USA	707-555-1212	707-555-2424	Cash on delivery	0	http://www.garciaib...
105	Zanzibar Limited	36 Laibon Road	Dar es Salaam			Tanzania	255-51-66010	255-51-66701	Net 30	1	http://www.zanzibar...
106	Genevieve Casuals	1313 Minnow Motor...	Honolulu	HI	02178	USA	808-555-1212	808-555-2424	Advance	0	http://www.gcasuals...
107	Montana Activevear	2827 Arrowhead Way	Billings	MT	59100	USA	406-555-1212	406-555-2424	Net 30	0	http://www.activeve...
108	Michael's Big and Tall	46 Country Club Lane	Chicago	IL	60609	USA	312-555-1212	312-555-2424	Cash on delivery	0	http://www.bigandt...
109	Everyn Clothing	357 High Plains Road	Carmel	CA	94000	USA	408-555-1212	408-555-2424	Net 30	1	http://www.everyncl...
111	Betsy Ross American...	44 Flag St.	Boston	MA	02146	USA	617-555-1212	617-555-2424	Cash on delivery	0	http://www.american...
110	Anne's Attire	11111 Greenbriar	Houston	TX	77027	USA	713-555-1212	713-555-2424	Net 30	0	http://www.aattire.co...
113	Island Breeze	555 Date Palm Dr.	Fort Myers	FL	33919	USA	813-555-1212	813-555-2424	Advance	0	http://www.islandbre...
114	Tena Katoa Khakis	1000 Makara Rd	Kaori	Wellington	6004	New Zeland	64-4-999-9999	64-4-999-9990	Cash on delivery	1	http://www.tkk.com
118	Australia Clothing O...	542 Koala Drive	Perth	WA	2066	Australia	612-999-9999	612-999-9990	Cash on delivery	0	http://www.australia...
119	Amazon Apparel	30 Harbour Road	Kowloon		2569	Hong Kong	852-2-999-9999	852-2-999-9990	Advance	1	http://www.amazona...
120	Acapulco Ropa Tropi...	Insurgentes Sur #619...	Acapulco	DF	03100	Mexico	525-999-9999	525-999-9990	Cash on delivery	0	http://www.acapulco...



# SQLTalk Plus Task Scheduling

- Schedule and maintain database maintenance tasks
- Based on Windows Task Scheduler
- No SQLBase task service or task database needed





# SQLTalk Plus Database Auditing

- Detect performance bottlenecks, database issues and find solutions

SERVER1: Audit Options

Audit Types

<input checked="" type="checkbox"/>	Types	Description
<input checked="" type="checkbox"/>	Rejected logons	Records unsuccessful login attempts. Useful to s
<input checked="" type="checkbox"/>	Security violations	Tells you if a user tried to access data without p
<input checked="" type="checkbox"/>	Valid logons/logoffs	Records all valid logons, telling you when a user
<input checked="" type="checkbox"/>	Valid connects/disconnect	Records CONNECT and DISCONNECT statement
<input checked="" type="checkbox"/>	Database operations	Records CREATE DATABASE, DROP DATABASE, IF
<input checked="" type="checkbox"/>	Recovery operations	Records all ROLLBACK commands.
<input checked="" type="checkbox"/>	Backup/Restore operation	Records all BACKUP and RESTORE commands.
<input checked="" type="checkbox"/>	Deadlocks, timeouts	Records information about deadlocks and timeo
<input checked="" type="checkbox"/>	Table queries	Tells which users accessed which tables.
<input checked="" type="checkbox"/>	Table updates/inserts	Records database manipulation language comm
<input checked="" type="checkbox"/>	Connects/Disconnects per	Tells how long it takes users to connect to and c
<input checked="" type="checkbox"/>	SQL perf	Tells you how much time SQLBase takes to com
<input checked="" type="checkbox"/>	Transaction perf	Tells you when a transaction ended, and how lo

Output Directory:

Max Records:  Max Old Logs:

Start OK Cancel





# SQLTalk Plus Server, Database and User Statistics

- Server Information
  - ◆ Connections
  - ◆ Statistics
- Database Information
  - ◆ Cursors
  - ◆ Statistics
  - ◆ Processes
- Easy to switch between info windows
- Statistics are being displayed in the Properties sub-window

Properties

untitled - SERVER1/ISLAND (SYSADM)\*

Database	User name	Client name	Process	Cursor	Isolation Level	Status	Command Type
SERVER1		MTEETZ-01	4	4	RR	0	0
ISLAND	SYSADM	MTEETZ-01	5	5	R3	0	0
ISLAND	SYSADM	MTEETZ-01	6	6	R3	0	0
ISLAND	SYSADM	MTEETZ-01	6	7	R3	6	1
ISLAND	SYSADM	MTEETZ-01	6	8	R3	0	0
ISLAND	SYSADM	MTEETZ-01	6	9	R3	0	0
ISLAND	SYSADM	MTEETZ-01	6	10	R3	0	0
SERVER1		MTEETZ-01	7	11	RR	0	0
ISLAND	SYSADM	MTEETZ-01	8	12	R3	0	0

Connections - SERVER1 (localhost) X

untitled - SERVER1/ISLAND (SYSADM)\*

Client name	Process	Status	Prepare Time	Execute Time	Fetch Time	Output Message Size	Input Message Size	Last Active
MTEETZ-01	5	wait for	00:00:00	00:00:00	00:00:00	2000	1000	
MTEETZ-01	6	wait for	00:00:00	00:00:00	00:00:00	2000	1000	
MTEETZ-01	8	wait for	00:00:00	00:00:00	00:00:00	2000	1000	

Cursors - ISLAND

untitled - SERVER1/ISLAND (SYSADM)\*

Database	User name	Client name	Process	Cursor	Isolation Level	Status	Cost	Prepare Time	Execute Time	Fetch Time	Command Type	Row Count	Virtual Reads
ISLAND	SYSADM	MTEETZ-01	5	5	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0
ISLAND	SYSADM	MTEETZ-01	6	6	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0
ISLAND	SYSADM	MTEETZ-01	6	7	R3	6	50	00:00:00	00:00:00	00:00:00	1	0	0
ISLAND	SYSADM	MTEETZ-01	6	8	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0
ISLAND	SYSADM	MTEETZ-01	6	9	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0
ISLAND	SYSADM	MTEETZ-01	6	10	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0
ISLAND	SYSADM	MTEETZ-01	8	12	R3	0	0	00:00:00	00:00:00	00:00:00	0	0	0

Processes - ISLAND X



# Server Process Activity Log

- View server activity log from inside SQLTalk Plus
- No need to start Server Console to see what is going on at the server

The screenshot displays the SQLTalk Plus application window. The 'Process Activity' tab is active, showing a log of server events. The 'Server Explorer' on the left shows the 'ISLAND' database with various tables. The 'Grid Results' window at the bottom shows a table of employee data.

**Process Activity Log:**

```
05/28/19 15:35:01 > SELECT TBcreator, TBNAME, A.NAME, COLNO, COLTYPE, LENGTH, NULLS, SCALE, REMARKS, PKCOLSEQNUM, FKCOLSEQNUM FROM SYSADM.SYSCOLUMNS A LEFT OUTER JOIN SYSADM.SYSPKCONSTRAINTS B ON A.TBcreator=B.CREATOR AND A.TBNAME=B.NAME AND A.NAME=B.COLNAME) LEFT OUTER JOIN SYSADM.SYSEFKCONSTRAINTS C ON A.TBcreator=C.CREATOR AND A.TBNAME=C.NAME AND A.NAME=C.REFSCOLUMN WHERE TBNAME='CONTACT' AND TBcreator='SYSADM'
05/28/19 15:35:01 > cur=11 snm=2 cfl=1 fcd=3 [compile]
05/28/19 15:35:01 > err=0 epo=0 rbf=0
05/28/19 15:35:01 > cur=11 snm=2 cfl=1 fcd=4 [execute]
05/28/19 15:35:01 > err=0 epo=0 rbf=0
05/28/19 15:35:01 > cur=11 snm=2 cfl=1 fcd=5 [fetch]
05/28/19 15:35:01 > err=1 epo=0 rbf=0
05/28/19 15:35:01 > cur=11 snm=2 cfl=1 fcd=2 [disconnect]
05/28/19 15:35:01 > err=0 epo=0 rbf=0
05/28/19 15:35:14 > cur=4 snm=1 cfl=0 fcd=75 [get server parameter]
05/28/19 15:35:14 > get database parameter 1033
05/28/19 15:35:14 > err=0 epo=0 rbf=0
05/28/19 15:35:16 > cur=4 snm=1 cfl=0 fcd=85 [get database parameter]
05/28/19 15:35:16 > get parameter SQLPCUN (3047) - Current cursor user name
05/28/19 15:35:16 > err=1304 epo=0 rbf=0
05/28/19 15:35:16 > cur=4 snm=1 cfl=0 fcd=75 [get server parameter]
05/28/19 15:35:16 > get parameter SQLPCUN (3047) - Current cursor user name
05/28/19 15:35:16 > err=10841 epo=0 rbf=0
```

**Grid Results:**

EMPLOYEE_ID	LAST_NAME	DEPT_ID	FIRST_NAME	MI	EXTENSION	OFFICE_NO	DATE_HIRED	CURRENT_SALARY	LAST_NAME_I	FIRST_NAME_I
HPG	Geraldo	CSS	Helen	P	4116	6	10/07/1995	58080	G	H
SDJ	Jones	MIS	Sam	D	4117	7	17/04/1995	65560	J	S
SRS	Smith	MFG	Simon	R	4118	8	08/05/1995	53000	S	S
WLS	Suzuki	MKTG	William	L	4119	9	27/02/1995	54300	S	W
BAL	Liebowitz	MFG	Benjamin	A	4110	10	15/05/1995	43000	L	B
AHT	Anak	CSS	Tortuga	H	4102	3	12/05/1996	59500	A	T
BYG	Gena	FIN	Bernard	Y	4103	5	01/01/1997	78000	G	B



# Language enhancements and new functions

SQLBase 12.2



## Ifbool Value Selector Function

- Return a value based on the evaluation of a boolean expression
- @ifbool( Boolean expression, true value, false value)

```
SELECT group_val, @ifbool(COUNT(*) > 2, 'big', 'small')
FROM testif2
GROUP BY group_val;
```

```
SELECT group_val, @ifbool(@ifbool(COUNT(*) > 2, 'big', 'small') = 'big', 'true', 'false')
FROM testif2
GROUP BY group_val;
```

```
SELECT num_val, @ifbool(EXISTS (SELECT * FROM testif WHERE testif.num_val = testif2.num_val), 'true', 'false') FROM testif2;
SELECT num_val, @ifbool(testif2.num_val = any (SELECT num_val FROM testif), 'true', 'false') FROM testif2;
SELECT num_val, @ifbool(testif2.num_val <> ALL (SELECT num_val FROM testif), 'true', 'false') FROM testif2;
```



## Function to tell if a string is numeric

- @isnumeric(string)
- Returns 0 if not a number
- Returns 1 if a string is a number value

```
SELECT ch, @ISNUMERIC(ch), vch, @ISNUMERIC(vch), nch, @ISNUMERIC(nch),  
       nvch, @ISNUMERIC(nvch), DEC, @ISNUMERIC(DEC),flt, @ISNUMERIC(flt),  
       INT, @ISNUMERIC(INT), num, @ISNUMERIC(num), sint, @ISNUMERIC(sint),  
       dt, @ISNUMERIC(dt), dttm, @ISNUMERIC(dttm), tm, @ISNUMERIC(tm),  
       tstp, @ISNUMERIC(tstp), lvch, @ISNUMERIC(lvch)  
FROM sqlb2568_alltypes
```



## Limit and Offset

- Return a subset of the result set starting at <offset> for <limit> rows
- Limit <offset>,<limit>

```
SELECT * FROM COMPANY LIMIT 5,5
```



## Substring and mid for long datatype

- @substring and @mid functions now work with Long Varchar and Long Nvarchar data types



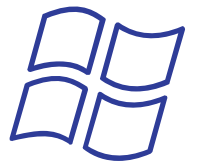
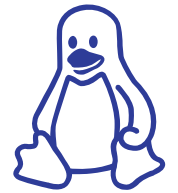
# .NET Standard Data Provider

SQLBase 12.2



## New .NET Standard Driver

- Works with all .NET implementations
  - ◆ .NET framework
  - ◆ .NET Core
- Access SQLBase from .NET Core applications
- .NET Core applications can run on Linux, macOS, and Windows
- For example ASP.NET Core Web applications



# New Server Console

SQLBase 12.2



# New Server Console

- Modern easy to use tab based interface
- Quickly switch between tabs to see what you are looking for
- Dock windows anywhere
- Free float windows

The screenshot displays the SQLBase - SERVER1 console interface. It features a main window with a menu bar (File, Server, Display, Pause, Level, Help) and a toolbar. The main area is divided into several docked windows:

- Process Activity**: A list of server commands and their execution status, such as "Set parameter SQLPAUT (3006) to 1", "Set parameter SQLPPCX (3003) to 1", and "select creator, name, type, system".
- System Activity**: A window showing system-level events and messages.
- Server Status**: A window displaying a table of server status information.

The **Server Status** window contains the following data:

CLIENT NAME	USER NAME	DATABASE	STATUS	TRANSPORT	CLIENT PID
MTEETZ-01	SYSADM	SQLBASE12TWO	IDLE	tcpv4	5924
MTEETZ-01	SYSADM	SBTASK	IDLE	tcpv4	5924
MTEETZ-01	SYSADM	ISLAND	IDLE	tcpv4	5924
MTEETZ-01		(SERVE	IDLE	tcpv4	5924



## SQLBase 12.2

- Live demo



# Q&A

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Thank you



#SQLBase #SQL #database



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