

performance-enhanced **laziness**



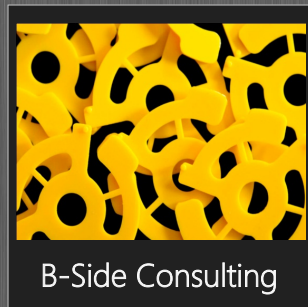
making you more attractive
without making you sweat.

Tim Ford

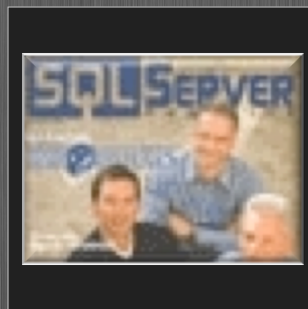
B-Side Consulting \ SQL Cruise

tim@sqlcruise.com

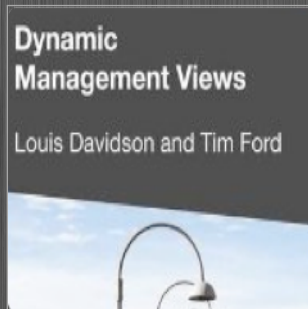
ABOUT ME



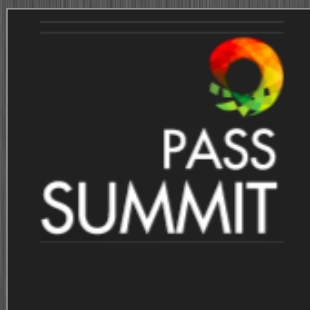
consulting



achievements

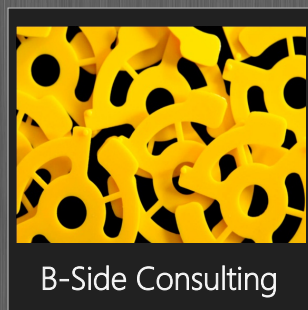


writing

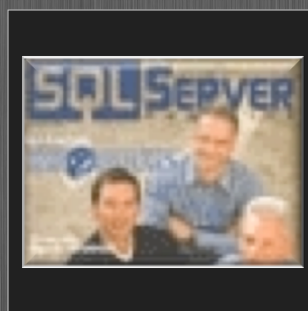


presenting

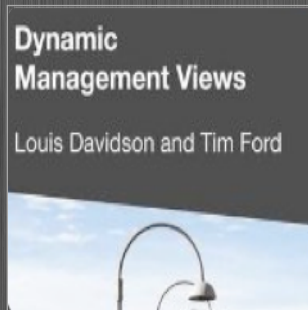
ABOUT ME



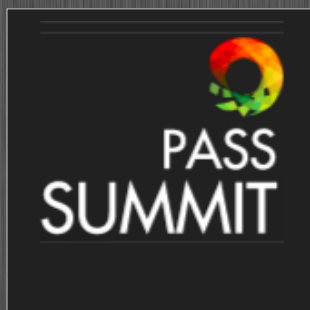
consulting



achievements



writing



presenting

LINKS

thesqlagentman.com/go/lazy_uk



maintenance solution
olahalengren.com

home-brewed tips & tricks
thesqlagentman.com

file io stats
andrewkelly.com

wait stats
glennallanberry.co

OBJECTIVES



ideas for proactive monitoring



automate & script repetitive tasks



use dmvs to watch performance

AGENDA



a good breakfast



routine exercise



performance

MY COFFEE REPORTS



new database report



database changes report



sql agent job failures report



backup failure reports

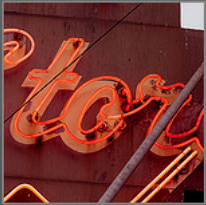


database file space report

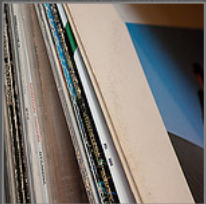
MY COFFEE REPORTS



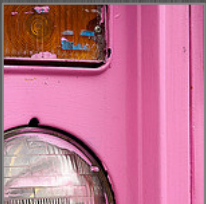
managed space report



wait statistics reporting



io load reporting



memory utilization reporting



server configuration reporting

NEW DATABASES

New Databases Report

Prepared Friday, September 07, 2012 3:14 PM

DBSQL134

DBSQL134_database_40

Created on 08/30/2012

Auto Close	Auto Shrink	Auto Create Stats	Auto Update Stats	Page Verify Option	Recovery Model	Database Owner	Collation Name	Compatibility Level
False	False	True	True	CHECKSUM	SIMPLE	--HIDDEN--	SQL_Latin1_General_CP1_CI_AS	100
Last Backup Dates		Last Database Backup: Sep 6 2012 5:50PM				Last Transaction Log Backup: No Backup		

DBSQL134

DBSQL134_database_41

Created on 09/04/2012

Auto Close	Auto Shrink	Auto Create Stats	Auto Update Stats	Page Verify Option	Recovery Model	Database Owner	Collation Name	Compatibility Level
False	False	True	True	CHECKSUM	SIMPLE	--HIDDEN--	SQL_Latin1_General_CP1_CI_AS	90
Last Backup Dates		Last Database Backup: No Backup				Last Transaction Log Backup: No Backup		

instance name
database
creation date
recovery model

critical configuration settings
database
database owner
last backup information

CORE DATABASE CHANGES REPORT

SQL Server Database Configuration Audit Report

Listing of Database Configuration Changes over Previous 24 Hours

Prepared Friday, September 07, 2012 3:13 PM

Server	Database Name	Audit Date	Change Log Entry
DBSQL132	DBSQL132_database_17	09/07/2012	new recovery_model_desc = FULL old recovery_model_desc = SIMPLE

instance name
database
audit date
change log history

added functionality:
click on database name
provides history of all changes

SQL AGENT JOB FAILURES

Failed SQL Agent Jobs

Prepared Friday, September 07, 2012 3:15 PM

Server and Job Names	Last Failed Run	Last Run Duration	Last Successful Run	Last Success Duration	Date Modified	Date Created
<u>DBSQL11 - 9.00.4060.00 - SP3</u>						
__DBCC USER_DATABASES	09/06/2012 07:11:00	00:49:57			07/16/2012	07/16/2012
<u>DBSQL60 - 10.0.5500.0 - SP3</u>						
syspolicy_purge_history	09/07/2012 02:00:00	00:01:05			03/07/2012	10/22/2010

instance name

instance patch level

job name

fail date and run duration

last success run date/duration

job modification date

job creation date

BACKUP FAILURES: DATABASE BACKUPS

SQL Server Database Backup Exception Report

Prepared Saturday, September 08, 2012 8:15 AM

Database Name	Latest DB Backup Date	Aging (Hrs.)	Recovery Model	Backup Notes
DBSQL133				
DBSQL133_database_10	9/6/2012 5:01:06 PM	39	FULL	
DBSQL133_database_13	9/6/2012 4:34:38 PM	40	SIMPLE	
DBSQL133_database_6	9/6/2012 8:03:42 PM	36	SIMPLE	

instance name
database
last backup date
recovery model

age of last good backup
color coding for importance
backup notes

BACKUP FAILURES: LOG BACKUPS

SQL Server Transaction Log Backup Exception Report

Prepared Saturday, September 08, 2012 8:15 AM

Database Name	Latest Log Backup Date	Aging (Hrs.)	Log File Size (Mb)	Backup Notes
DBSQL18				
IDBA	9/8/2012 6:00:01 AM	2	400	
DBSQL29				
IDBA	9/8/2012 6:00:01 AM	2	448	
DBSQL42				
DBSQL42_database_5	9/8/2012 6:00:02 AM	2	832	
IDBA	9/8/2012 6:00:01 AM	2	400	
DBSQL59				
DBSQL59_database_10	9/7/2012 11:50:00 PM	9	1,024	
DBSQL59_database_11	9/7/2012 11:50:01 PM	9	128	
DBSQL59_database_5	9/7/2012 11:50:01 PM	9	128	
DBSQL59_database_8	9/7/2012 11:50:00 PM	9	1,024	
DBSQL59_database_9	9/7/2012 11:50:00 PM	9	21,504	
DBSQL91				
DBSQL91_database_10	9/8/2012 6:10:00 AM	2	48	
DBSQL96				
DBSQL96_database_67	9/8/2012 4:05:00 AM	4	96	
DBSQL96_database_68	9/8/2012 4:05:01 AM	4	48	Only created to test upgrade. No need to backup.
DBSQL96_database_69	9/8/2012 4:05:01 AM	4	1,208	Only created to test upgrade. No need to backup.
DBSQL96_database_70	9/8/2012 4:05:01 AM	4	32	

instance & database names
last backup date
log file size (in mb)

backup aging (in hours)
backup notes

DATABASE FILE SPACE FORECASTING

Database File Space Report

Prepared Saturday, September 08, 2012 2:11 PM

Server	Database	Logical File Name	Physical File Name	File Type	Current File Size (mb)	Size Change (mb)	Current Used (mb)	Previous Used (mb)	Free Space (mb)	Free Space (%)	Drive Free Space (mb)
DBSQL01											
	DBSQL01_database_9	DBSQL01_database_9_data	D:\DBSQL01_database_9.mdf	Data	56320	0	55396	55269	924	1	345233
DBSQL06											
	DBSQL06_database_20	DBSQL06_database_20_data	C:\DBSQL06_database_20.mdf	Data	1800	0	1624	1578	176	9	12573
DBSQL38											
	DBSQL38_database_7	DBSQL38_database_7_data	C:\DBSQL38_database_7.mdf	Data	191488	0	187656	187629	3832	2	12362
DBSQL65											
	DBSQL65_database_11	DBSQL65_database_11_data	D:\DBSQL65_database_11.mdf	Data	4096	0	3920	3918	176	4	585750
	model	model_log	D:\model.ldf	Log	50	0	46	46	4	8	585750
	DBSQL65_database_5	DBSQL65_database_5_data	D:\DBSQL65_database_5.mdf	Data	30720	0	29919	29837	801	2	585750
DBSQL96											
	DBSQL96_database_43	DBSQL96_database_43_data	L:\DBSQL96_database_43.mdf	Data	10044	0	9207	9277	837	8	100359
	DBSQL96_database_113	DBSQL96_database_113_data	L:\DBSQL96_database_113.mdf	Data	1359	0	1356	1356	3	0	100359
DBSQL111											
	DBSQL111_database_21	DBSQL111_database_21_data	E:\DBSQL111_database_21.mdf	Data	128000	0	127293	127293	707	0	129586
	DBSQL111_database_7	DBSQL111_database_7_data	E:\DBSQL111_database_7.mdf	Data	133120	0	129347	129347	3773	2	129586
	DBSQL111_database_20	DBSQL111_database_20_data	E:\DBSQL111_database_20.mdf	Data	86016	0	84899	84899	1117	1	129586
	DBSQL111_database_14	DBSQL111_database_14_data	E:\DBSQL111_database_14.mdf	Data	71680	0	71025	71025	655	0	129586
	DBSQL111_database_8	DBSQL111_database_8_data	E:\DBSQL111_database_8.mdf	Data	86016	0	85791	85791	225	0	129586
DBSQL127											
	DBSQL127_database_89	DBSQL127_database_89_data	L:\DBSQL127_database_89.mdf	Data	6144	0	5624	5597	520	8	91408
DBSQL130											
	DBSQL130_database_34	DBSQL130_database_34_data	F:\DBSQL130_database_34.mdf	Data	25500	0	24939	24546	561	2	353771
	DBSQL130_database_8	DBSQL130_database_8_data	F:\DBSQL130_database_8.mdf	Data	1713	96	1688	1596	25	1	353771
DBSQL131											
	DBSQL131_database_8	DBSQL131_database_8_data	k:\DBSQL131_database_8.mdf	Data	133120	0	131549	131549	1571	1	334501
	DBSQL131_database_9	DBSQL131_database_9_data	k:\DBSQL131_database_9.mdf	Data	88064	0	86687	86687	1377	1	334501
DBSQL132											
	DBSQL132_database_10	DBSQL132_database_10_data	F:\DBSQL132_database_10.mdf	Data	16384	0	16008	15917	376	2	107198

server & database names
file name (logical & physical)
file type
file size (current v. previous)

space used
free space (mb & percent)
drive free space (mb)

DATABASE FILE SPACE FORECASTING - DETAIL

Database File Space Detail

Server Name DBSQL01
Database Name DBSQL01_database_9
Logical File Name DBSQL01_database_9_data
Physical File Name D:\DBSQL01_database_9.mdf

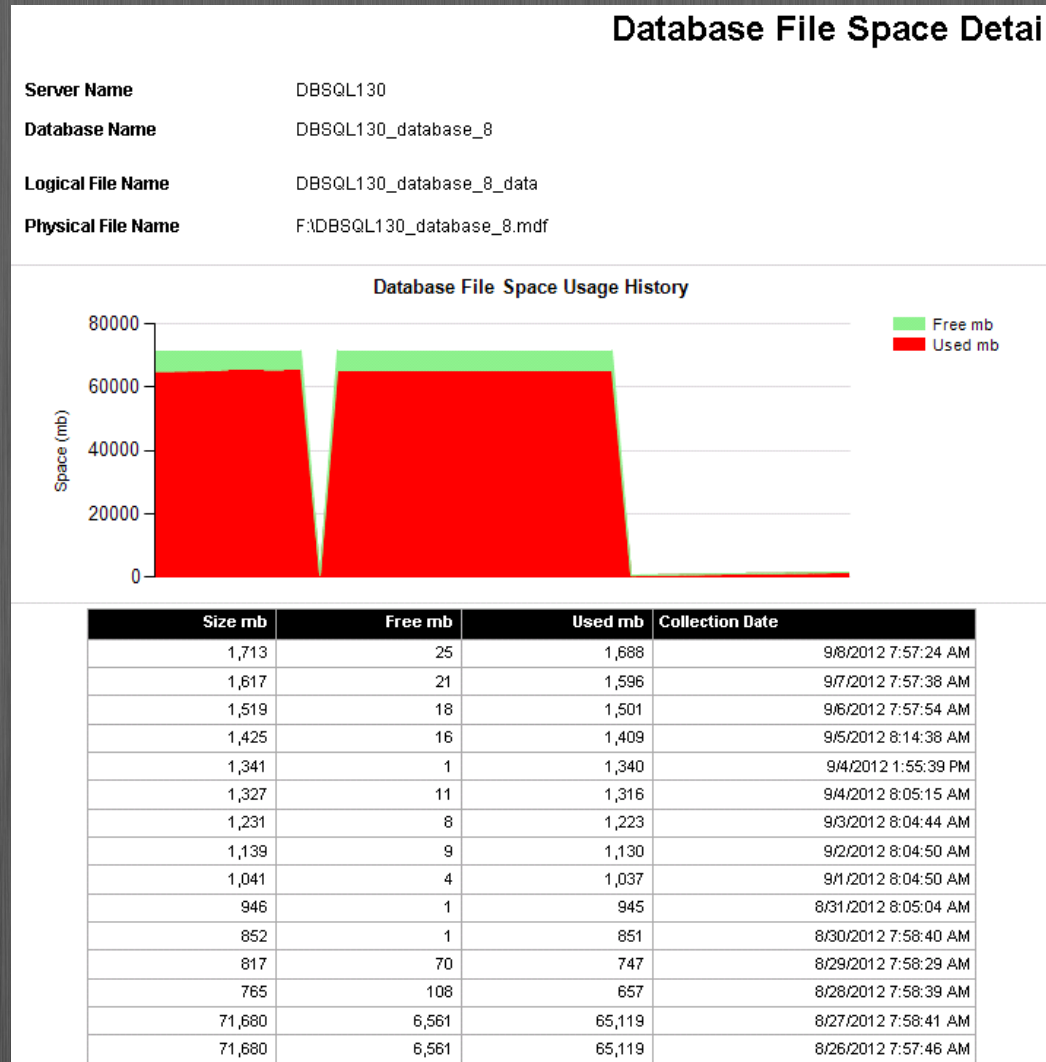
Database File Space Usage History



Size mb	Free mb	Used mb	Collection Date
56,320	924	55,396	9/8/2012 7:57:07 AM
56,320	1,051	55,269	9/7/2012 7:57:40 AM
56,320	1,224	55,096	9/6/2012 7:57:45 AM
56,320	1,457	54,863	9/5/2012 8:13:00 AM
56,320	1,505	54,815	9/4/2012 1:55:02 PM
56,320	1,588	54,732	9/4/2012 8:04:58 AM
56,320	1,590	54,730	9/3/2012 8:04:23 AM

identify trending of use
how urgent is planning a proactive file size adjustment?

DATABASE FILE SPACE FORECASTING – WTH?

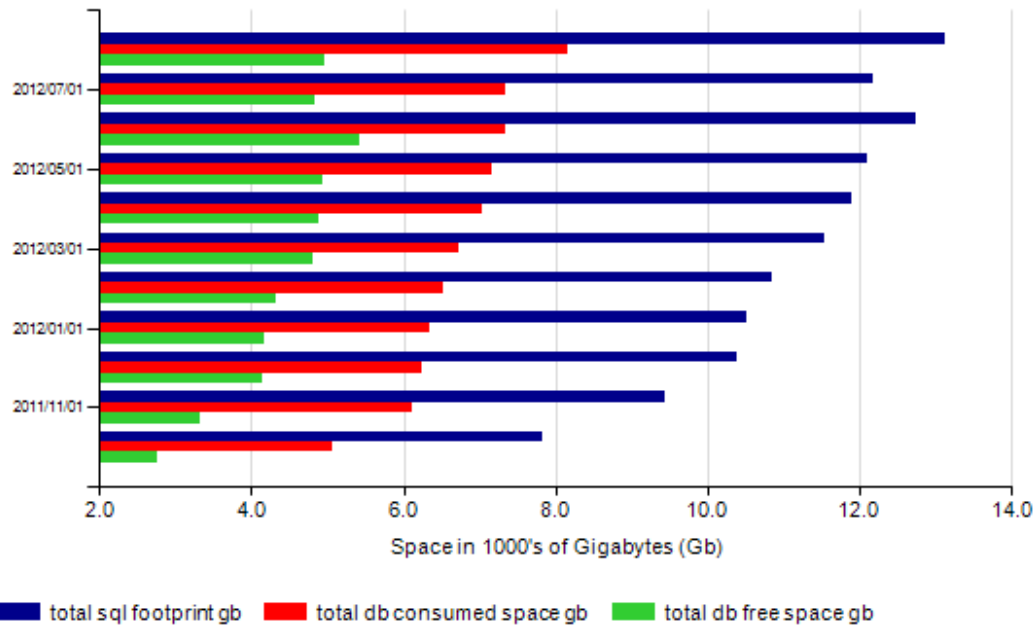


can you name the application that does this to it's databases?

DATABASE FILE SPACE FORECASTING

SQL Server Managed Space

SQL Server Managed Space: All Instances



All SQL Server Instances

Date	Total Gb	Consumed Gb	Free Gb
2012/09/01	13124	8167	4957
2012/07/01	12173	7344	4828
2012/06/01	12743	7331	5411
2012/05/01	12100	7157	4943
2012/04/01	11898	7022	4876
2012/03/01	11531	6728	4803
2012/02/01	10845	6529	4316
2012/01/01	10519	6347	4172
2011/12/01	10388	6238	4150
2011/11/01	9429	6103	3326
2011/09/01	7832	5068	2764

just how large is your
environment?

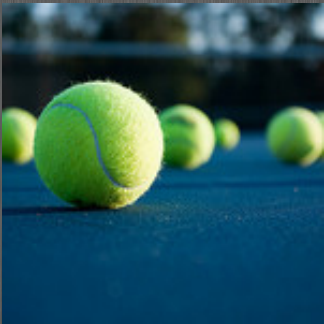
keep an eye on growth

dazzle management with
dashboard reporting

AGENDA



a good breakfast



routine exercise



performance

ROUTINE EXERCISE



recycling your code



relay on others' tools



server config sprints

RECYCLING YOUR CODE



... shift gears;
pedal easier!

RELAY ON OTHERS' TOOLS



you're not in this alone.

SPRINT THROUGH SERVER CONFIGURATIONS



... without smoke and mirrors

AGENDA



a good breakfast



routine exercise



performance

A photograph of a toy store aisle. In the foreground, a long wooden display table is covered with various toys. Notable items include a white stuffed rabbit, a green alien figure, a blue robot figure, a yellow car, and several action figures. The background shows shelves filled with more toys, and a sign for 'The Wind' is visible on the wall.

SUMMARY



a good breakfast



routine exercise



performance

Your Feedback is Important

Please fill out a session evaluation form
drop it off at the conference registration
desk.

Thank you!