SQLS*Plus for SQL Server

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Chapter 1

Register License:

Issue “sqlsplus.exe –r” command and paste your license token to register SQLS*Plus

```
D:\sqlsplus>sqlsplus.exe -r

SQLS*Plus: Release 2.0.1.6 - Production on Mon Jan 31 02:34:32 2011

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SQLS*Plus is free for individual use and commercial use on a single SQL Server instance.

Please visit http://www.memfix.com or email support@memfix.com to purchase required multi-instance enterprise support and
maintenance site license


Please enter license token below:
4XXX-1C14-5045-XXX-5E5F-5F5J-9FD3-4E38
```

Startup Scripts

When SQLS*Plus starts, and after CONNECT commands, the two sql files are being executed:

1) login.ssp - SQLS*Plus profile
2) login.sql - User profile

The files may contain SQLS*Plus commands.

Connecting to database (example)

D:\ >sqlsplus sa/password@192.168.1.160 SQLS*Plus: Release 2.0.1.8 - Production on Tue Nov 1 17:07:45 2011 Copyright (c) 2010, 2011, Memfix. All rights reserved. SQLS*Plus is free for an individual use and a commercial use on a single SQL Server instance. Please visit http://www.memfix.com or email support@memfix.com to purchase required… Connected to: Microsoft SQL Server RTM, version 9.00.1399.06, Developer Edition (64-bit), current database: tempdb	**Connect to SQL Server instance using database username and password**
0:sa@192.168.1.160> show dbs; Database Name AdventureWorks BusinessServiceIISRepository BusinessServiceRepository CapacityPlanner CompositeWebAppRepository Load2Test master model msdb OrderProcessorForwardRepository OrderProcessorRepository StockTraderDB StockTraderWebAppRepository tempdb	**“show“ command (sqlsplus) to list all accessible databases**
0:sa@192.168.1.160> use AdventureWorks;	**“use” command (SQL) to select database**
0:sa@192.168.1.160> show db; database is "AdventureWorks" 0:sa@192.168.1.160>	**“show“ command (sqlsplus) to show current database**

Setting up default database for connection:

1) Command line:

   sqlsplus.exe sa/<pwd>@192.168.1.160:AdventureWorks

   or

   sqlsplus.exe sa/<pwd>@192.168.1.160\ SQLSERVER2005:AdventureWorks

2) SQLSDBNAME environment variable

   SET SQLSDBNAME=AdventureWorks

3) SQLCMDDBNAME environment variable (sqlcmd variable)

   SET SQLCMDDBNAME =AdventureWorks

Batch execution of SQL Scripts

Make sure to use double slashes ("\\") in the path, i.e "d:\\x1.sql"

You can call batch sql file as below:

sqlsplus.exe sa/<pwd>@192.168.1.160 @d:\\x1.sql

In this example we connect to default instance of SQL Server on a server and execute sql script x1.sql.

or

sqlsplus.exe sa/<pwd>@192.168.1.160\SQLSERVER2005 @d:\\x1.sql

In second case we connect to specific instance (in case there are more than one)

Sample x1.sql content - includes "quit" command to insure that program quits after script execution

```
--
set pages 200
set lines 200
select * from master.dbo.sysprocesses;
quit
```

Functionality Highlights

- Vertical Output – allows to see large column sets as a vertical output
- Table data grep – search for data across all columns
- Data purge – purge table data in a small chunks
- HTML output support
- CSV output support

Chapter 2

HTML Data Output

Use “set markup html on|off” command to output data in HTML format

Sample SQL script for HTML output:

```
D:\sqlsplus>type t2.sql

set pages 10

ttitle LEFT 'this is a top title'

set markup html on
spool xx.htm

select top 25 name n1, id, name n2 from sysobjects;

spool off

set markup html off

host xx.htm
```

HTML output:

this is a top title

n1	id	n2
sysrowsetcolumns	4	sysrowsetcolumns
sysrowsets	5	sysrowsets
sysallocunits	7	sysallocunits
sysfiles1	8	sysfiles1
syshobtcolumns	13	syshobtcolumns
syshobts	15	syshobts
sysftinds	25	sysftinds
sysserefs	26	sysserefs
sysowners	27	sysowners

CSV Data Output

Use “set output csv” command to output data in CSV format

Sample SQL script for CSV output:

```
0:sa@192.168.1.160> set output csv
0:sa@192.168.1.160> set head off
0:sa@192.168.1.160> set pages 0
```

CSV output:

```
0:sa@192.168.1.160> select name,crdate from sys.sysobjects;
"sysrowsetcolumns","2005-10-14 01:36:15.923",
"sysrowsets","2005-10-14 01:36:15.910",
"sysallocunits","2005-10-14 01:36:15.910",
"sysfiles1","2003-04-08 09:13:38.093",
"syshobtcolumns","2005-10-14 01:36:15.940",
"syshobts","2005-10-14 01:36:15.923",
"sysftinds","2005-10-14 01:36:17.063",
"sysserefs","2005-10-14 01:36:15.940",
"sysowners","2005-10-14 01:36:17.050",
"sysprivs","2005-10-14 01:36:15.877",
"sysschobjs","2005-10-14 01:36:15.987",
…
```

Vertical Data Output

Use "set vout on" command to output data in vertical format, where each column is printed on its own line. Vertical output format is helpful when outputting data from a tables with many columns

Sample SQL script for CSV output:

```
0:sa@192.168.1.160> set vout on
```

Vertical output:

```
0:sa@192.168.1.160> select name,crdate from sys.sysobjects;

name  | sysrowsetcolumns
crdate| 2005-10-14 01:36:15.923

name  | sysrowsets
crdate| 2005-10-14 01:36:15.910

name  | sysallocunits
crdate| 2005-10-14 01:36:15.910

name  | sysfiles1
crdate| 2003-04-08 09:13:38.093
…
```

Chapter 3

List of SQLS*Plus Commands

Command	Usage	Description
&	&<variable name>	Use substitution variable
&&	&&<variable name>	Use substitution variable
/		Executes the SQL command or batch currently stored in the SQL buffer
AGAIN |!!	Again | !!<number>	Rerun latest matching entry or command from history
BTITLE	**Syntax** BTI[TLE] [*printspec* [*text* | *variable*] ...] | [ON | OFF] where *printspec* represents one or more of the following clauses used to place and format the text: CE[NTER] LE[FT] R[IGHT] S[KIP] [*n*] Enter BTITLE with no clauses to list the current BTITLE definition. **Options** See the **TTITLE** command for information on terms and clauses in the BTITLE command syntax. **Examples** `BTITLE LEFT 'REPORT ' RIGHT 'PAGE:' SQL.PNO`	Places and formats a specified title at the bottom of each report page, or lists the current BTITLE definition.
CAT	cat <table_name> -a	Synonym for "select * from <table/view name" Cat <table/view name> Selects first 3000 rows Options: -a – select all rows
CD	cd <directory_name>	Change current directory location
COLUMN | COL	col <name> format <format>	Set column format

<table>
<tr><td>CONNECT | CONN</td><td>connect user/password@ip[\\instance_name][:db_name]

<table><tr><td>-a</td><td>create additional session, don't disconnect</td></tr><tr><td>-l</td><td>List all sessions, don't disconnect</td></tr><tr><td>-s <sess_num></td><td>switch to session (as reported by -l)</td></tr></table></td><td>Create a new session

Connect creates a database session. Multiple sessions can exists at the same time

Instance name and database names are optional

Instead of db_name it is possible to use below environmental variables to set up default database for connection:

a) SQLSDBNAME

b) SQLCMDDBNAME (standard sqlcmd variable)</td></tr>
<tr><td>COUNT</td><td></td><td>Count rows in the tables</td></tr>
<tr><td>DEFINE</td><td>DEF[INE] [variable]|[variable = text]

-l list defines</td><td>Define a variable and assigns a value to it, or lists the value and variable type of a single variable or all variables</td></tr>
<tr><td>DEPS</td><td>DEPS [NAME]

-r list dependencies recursively</td><td>Object dependencies and references</td></tr>
<tr><td>DESCRIBE</td><td></td><td>Describe a table or stored procedure</td></tr>
<tr><td>DIR</td><td></td><td>List file directory</td></tr>
<tr><td>DISCONNECT</td><td></td><td>Disconnect session</td></tr>
<tr><td>EDIT | ED</td><td>ED | ED <sql_file_name></td><td>Edit current statement or sql script file

Default editor is “notepad”

Environment variable SQLSEDIT can be used to set custom editor</td></tr>
<tr><td>EXEC</td><td></td><td>Execute T-SQL procedure</td></tr>
<tr><td>FIND</td><td></td><td>Find a line in T-SQL procedure source</td></tr>
<tr><td>GREP</td><td>grep <pattern table [extra clause]></td><td>Show rows that match</td></tr>
</table>

	-v show rows that don't match pattern -I ignore case Search pattern across all table columns	pattern
HEAD		Show first rows of table
HELP		Provide help for a command
HISTORY | HI		Show history items matching pattern (or all)
HOST		Execute host OS command
LIST		List last sql statement
LS		List all objects matching pattern
PAUSE	SET PAUSE <TEXT> SET PAUSE [ON|OFF]	Enables to control scrolling of terminal when executing reports. First step is to "SET PAUSE text", and then "SET PAUSE ON" to make text to appear each time SQLS*Plus pauses.
PRINTVAR		Print bind variables
PROMPT		Sends the specified message or a blank line to the user's screen
PURGE	purge <table where ...> -c print table count at the end -n 1000 chunk size -i 1000 max iterations -q be quiet You can specify an additional "where" clause: **purge Table where id=23**	Delete from (large) table in chunks Purge executes a series (-i) of delete statements, where each statement deletes (-n) rows at a time and commits.
PWD		Show current directory
QUIT		Leave SQLS*Plus.
RECOMPILE		Recompile objects
REFS		Display referential integrity dependencies
REM		
RERUN	rerun <history_number>	Run history item number
SET COLSEP		Set column separator character
SET DDVIEW		Switch between user and all views in Data Dictionary

SET FEEDBACK	set feedback <on|off|N>	Display number of records returned by a query when a query selects at least n records **N** – when number of selected records is over N, number of records returned will be shown
SET HEADING		Set heading value
SET HEADSEP		Set heading separator
SET LINESIZE | LINES	set linesize <size>	Set output line size
SET MARKUP HTML | SET MARK HTML	SET MARK[UP] HTML [ON | OFF] [HEAD text] [BODY text] [TABLE text] [ENTMAP {ON | OFF}] [SPOOL {ON | OFF}] [PRE[FORMAT] {ON | OFF}]	Set output to HTML **HTML [ON|OFF]** HTML is a mandatory argument which specifies that HTML output is to be generated. HTML arguments, ON and OFF, specify whether or not to generate HTML output. The default is OFF. **HEAD text** The HEAD text option enables to specify content for the <HEAD> tag. By default, text includes a default in-line CSS and title. If text includes spaces, it must be enclosed in quotes. **BODY text** The BODY text option enables to specify attributes for the <BODY> tag. By default, there are no attributes. If text includes spaces, it must be enclosed in quotes. **TABLE text**

		The TABLE text option enables to enter attributes for the <TABLE> tag. By default, the <TABLE> WIDTH attribute is set to 90% and the BORDER attribute is set to 1. If text includes spaces, it must be enclosed in quotes. **ENTMAP {ON|OFF}** ENTMAP ON or OFF specifies whether or not SQL*Plus replaces special characters <, >, " and & with the HTML entities <, >, " and & respectively. ENTMAP is set ON by default. **SPOOL {ON|OFF}** SPOOL ON or OFF specifies whether or not SQLS*Plus writes the HTML opening tags, <HTML> and <BODY>, and the closing tags, </BODY> and </HTML>, to the start and end of each file created by the SQLS*Plus SPOOL filename command. The default is OFF. Header and footer tags enabled by the SET MARKUP HTML SPOOL ON option are not written to the spool file until "SPOOL filename" command is not issued **PRE[FORMAT] {ON|OFF}** PREFORMAT ON or OFF specifies whether or not SQLS*Plus writes output to

		the <PRE> tag or to an HTML table. The default is OFF, so output is written to a HTML table by default.
SET OUTPUT	set output <csv | default>	Set output to CSV (commas separated values) or to default output. Supported CSV format outputs all fields surrounded by double quotes
SET PAGESIZE | PAGES	set pagesize <size>	Set output page size
SET TERMOUT|TERM	set termout on|off	Controls the display of output generated by commands in a script that is executed with @, @@ or START. OFF stops output to screen to enable output to a file without displaying it on a screen. ON displays the output on screen. TERMOUT OFF does not affect output from commands entered interactively or directed to SQLS*Plus from the OS.
SET VERIFY		Print ampersand replacing
SET VOUT	set vout on|off	Set vertical output mode
SHOW DB|DATABASE		Show current database
SHOW DBS|DATABASES		Show available databases
SHOW TABLES|TAB		Show database tables
SHOW ERRORS		Show server error log
SHOW USER		Show the current username
SPOOL	spool <file_name>	Write output to file
START | @		Execute sql script
STARTREL | @@		Execute sql script relative / nested to a running script
TTITLE	**Syntax**	Places and formats a

	TTI[TLE] [*printspec* [*text* | *variable*] ...] [ON | OFF] where *printspec* represents one or more of the following clauses used to place and format the text: CE[NTER] LE[FT] R[IGHT] S[KIP] [*n*] **Options:** These options also apply to the BTITLE command. *text* The ttitle text. Enter text in single quotes if you want to place more than one word on a single line. *variable* A substitution variable or any of the following system-maintained values, **SQL.LNO** (the current report line number), **SQL.PNO** (the current report page number) or **SQL.SYSDATE** (the current report timestamp) To print one of these values, reference the appropriate variable in the title. You can format *variable* with the FORMAT clause. SQLS*Plus substitution variables (& variables) are expanded before TTITLE is executed. The resulting string is stored as the TTITLE text. **OFF** Turns the ttitle off (suppresses its display) without affecting its definition. **ON** Turns the title on (restores its display). When you define a top title, SQLS*Plus automatically sets TTITLE to ON. **S[KIP] [*n*], n>=1** Skips to the start of a new line *n* times; if you omit *n*, one time; **LE[FT] | CE[NTER] | R[IGHT]** Left-align, center, and right-align data on the current line respectively. CENTER and RIGHT use current LINESIZE value to calculate the relative position of the data items TTITLE with no clauses lists current TTITLE definition. **Examples** To define "Monthly Report" as the top title and to left-align it, to center the current date, to right-align the page number, and to display "Data in Millions" in the center of	specified title at the top of each report page. Enter TTITLE with no clauses to list its current definition.

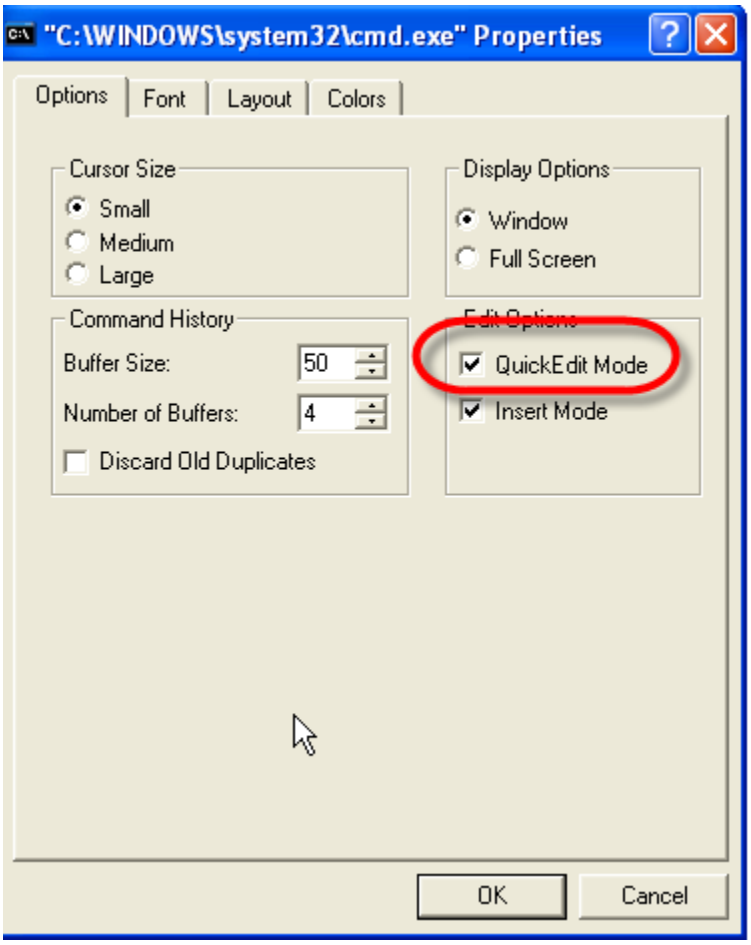
	the next line, enter
	`TTITLE LEFT 'Monthly Report' CENTER`
	`SQL.SYSDATE`
	`RIGHT 'Page:' SQL.PNO SKIP CENTER`
	`'Data in Millions'`	

TSQL		Display t-sql procedure code
VARIABLE		declare a bind variable

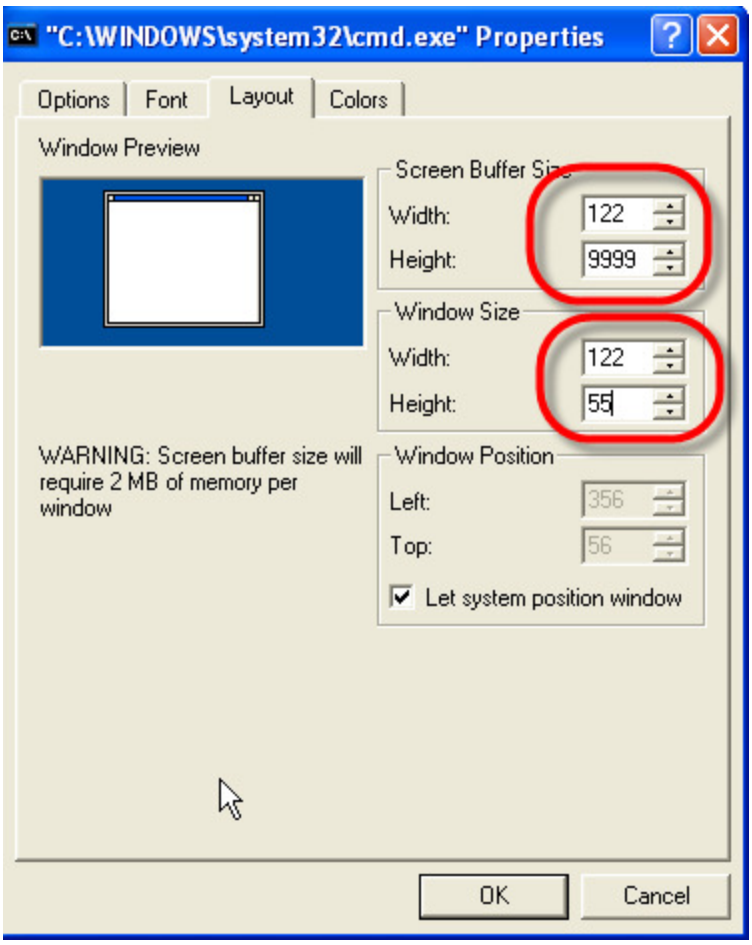
Chapter 4

Using Command Window as a suitable work environment

1) **Activate Quick Edit Mode**



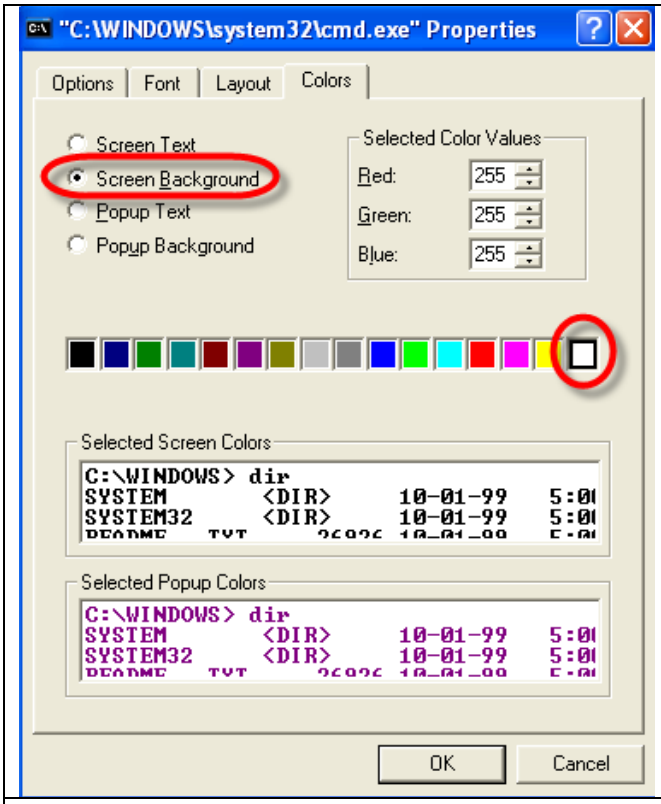
2) Set proper layout attributes



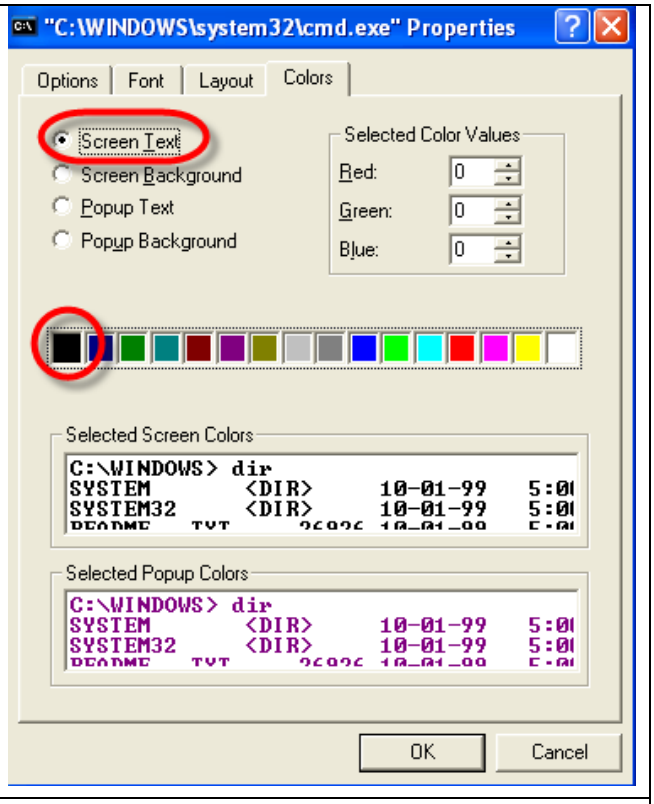
a) Set Screen Buffer Size to 122 and 9999 correspondingly

b) Set Window Buffer Size to 122 and 55 correspondingly

3) Set “easy to work with” Colors



Set Screen Background to White



Set Screen Text to Black