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Preface

This manual describes the sample database (pubs2), system tables, reserved words, and SQLSTATE status codes. It also includes a list of Sybase SQL ServerTM error messages.

Audience

This manual is intended as a reference tool for Transact-SQL® users of all levels. It is a collection of information about SQL Server, such as the sample database and the system tables, that is referenced in other SQL Server documentation.

How to Use This Book

This manual consists of the following chapters:

- Chapter 1, "The pubs2 Database," contains information about the *pubs2* sample database, including its tables, views, triggers, stored procedures, and user-defined datatypes.
- Chapter 2, "The System Tables," contains information about all of the system tables in the *master* database and in any user databases (such as *pubs2*).
- Chapter 3, "Reserved Words," contains information about the Transact-SQL, APT-SQL, and SQL92 keywords.
- Chapter 4, "SQLSTATE Codes and Messages," contains information about SQL Server's SQLSTATE status codes and the associated messages.
- Chapter 5, "Error Messages," contains information about SQL Server error messages.

Related Documents

SQL Server relational database management system documentation is designed to satisfy both the inexperienced user's preference for simplicity and the experienced user's desire for convenience and comprehensiveness. The user's guide and the reference manuals address the various needs of end users, database and security administrators, application developers, and programmers.

Other manuals you may find useful are:

- The SQL Server installation and configuration guide for your platform, which describes the installation procedures for SQL Server and documents operating-system-specific system administration tasks.
- SQL Server Performance and Tuning Guide, which explains how to tune SQL Server for maximum performance. The book includes information about database design issues that affect performance, query optimization, tuning SQL Server for very large databases, disk and cache issues, and the effects of locking and cursors on performance.
- *SQL Server Reference Manual*, which contains detailed information on all of the commands and system procedures discussed in this manual.
- SQL Server Security Administration Guide, which is addressed to
 administrators who are responsible for maintaining a secure
 operating environment for SQL Server. The manual explains how
 to use the security features provided by SQL Server to control
 user access to data. The manual includes information about how
 to add users to the server, give them controlled access to database
 objects and procedures, and manage remote servers.
- SQL Server Security Features User's Guide, which is addressed to the general user and explains how to use the security features of SQL Server.
- SQL Server System Administration Guide, which provides in-depth information about administering servers and databases. The manual includes instructions and guidelines for managing physical resources and user and system databases, and specifying character conversion, international language, and sort order settings.
- *SQL Server Utility Programs* manual, which documents the Sybase utility programs, such as isql and bcp, that are executed from the operating system level.
- Transact-SQL User's Guide, which documents Transact-SQL, Sybase's enhanced version of the relational database language. It serves as a textbook for beginning users of the database management system.
- What's New in Sybase SQL Server Release 11.0, which describes the new features in release 11.0.

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Conventions

Formatting SQL Statements

SQL is a free-form language: there are no rules about the number of words you can put on a line, or where you must break a line. However, for readability, all examples and syntax statements in this manual are formatted so that each clause of a statement begins on a new line. Clauses that have more than one part extend to additional lines, which are indented.

SQL Syntax Conventions

The conventions for syntax statements in this manual are as follows:

Table 1: Syntax statement conventions

Key	Definition
command	Command names, command option names, utility names, utility flags, and other keywords are in bold Courier in syntax statements, and in bold Helvetica in paragraph text.
variable	Variables, or words that stand for values that you fill in, are in <i>italics</i> .
{ }	Curly braces indicate that you choose at least one of the enclosed options. Do not include braces in your option.
[]	Brackets mean choosing one or more of the enclosed options is optional. Do not include brackets in your option.
()	Parentheses are to be typed as part of the command.
	The vertical bar means you may select only one of the options shown.
,	The comma means you may choose as many of the options shown as you like, separating your choices with commas to be typed as part of the command.

• Syntax statements (displaying the syntax and all options for a command) are printed like this:

sp_dropdevice [device_name]

or, for a command with more options:

```
select column_name
  from table_name
  where search_conditions
```

In syntax statements, keywords (commands) are in non-italic type and identifiers are in lowercase: non-italic for keywords, italics for user-supplied words.

• Examples of Transact-SQL commands are printed like this:

```
select * from publishers
```

• Examples of output from the computer are printed like this:

pub_id	pub_name	city s	tate
0736	New Age Books	Boston	MA
0877	Binnet & Hardley	Washington	
1389	Algodata Infosystems	Berkeley C	A
(3 rows	affected)		

Case

You can disregard case when you type keywords:

```
SELECT is the same as Select is the same as select
```

SQL Server's sensitivity to the case (uppercase or lowercase) of database objects, such as table names, and data depends on the sort order installed on your SQL Server. Case sensitivity can be changed for single-byte character sets by reconfiguring SQL Server's sort order. (See the *System Administration Guide* for more information.)

Obligatory Options (You Must Choose At Least One)

• Curly Braces and Vertical Bars: Choose one and only one option.

```
{die_on_your_feet | live_on_your_knees |
live_on_your_feet}
```

• Curly Braces and Commas: Choose one or more options. If you choose more than one, separate your choices with commas.

```
{cash, check, credit}
```

Optional Options [You Don't Have to Choose Any]

• One Item in Square Brackets: You don't have to choose it.

[anchovies]

• Square Brackets and Vertical Bars: Choose none or only one.

```
[beans | rice | sweet_potatoes]
```

• Square Brackets and Commas: Choose **none**, **one**, **or more than one** option. If you choose more than one, separate your choices with commas.

[extra_cheese, avocados, sour_cream]

Ellipsis: Do It Again (and Again)...

An ellipsis (...) means that you can **repeat** the last unit as many times as you like. In this syntax statement, buy is a required keyword:

```
buy thing = price [cash | check | credit]
    [, thing = price [cash | check | credit]]...
```

You must buy at least one thing and give its price. You may choose a method of payment: one of the items enclosed in square brackets. You may also choose to buy additional things: as many of them as you like. For each thing you buy, give its name, its price, and (optionally) a method of payment.

Expressions

Several different types of expressions are used in SQL Server syntax statements.

Table 2: Types of expressions used in syntax statements

Usage	Definition
expression	Can include constants, literals, functions, column identifiers, variables or parameters
logical expression	An expression that returns TRUE, FALSE or UNKNOWN
constant expression	An expression that always returns the same value, such as "5+3" or "ABCDE"
float_expr	Any floating-point expression or expression that implicitly converts to a floating value
integer_expr	Any integer expression, or an expression that implicitly converts to an integer value
numeric_expr	Any numeric expression that returns a single value

Table 2: Types of expressions used in syntax statements (continued)

Usage	Definition
char_expr	Any expression that returns a single character-type value
binary_expression	An expression that returns a single binary or varbinary value

If You Need Help

Help with your Sybase software is available in the form of documentation and Sybase Technical Support.

Each Sybase installation has a designated person who may contact Technical Support. If you cannot resolve your problem using your documentation, ask the designated person at your site to contact Sybase Technical Support.

1

The pubs2 Database

This chapter describes the sample database *pubs2*. The names of the tables contained in it are *publishers*, *authors*, *titles*, *titleauthor*, *au_pix*, *salesdetail*, *sales*, *stores*, *discounts*, *roysched*, and *blurbs*.

The *pubs2* database also contains primary and foreign keys, rules, defaults, views, triggers and stored procedures.

At the end of this chapter is an entity relationship diagram of the *pubs2* tables.

Tables in the *pubs2* Database

The following tables describe each *pubs2* table. Each column header specifies the column name, its datatype (including any user-defined datatypes), and its null/not null status. Any defaults, rules, triggers, and indexes that affect the column are also specified in the column header.

	publishers						
pub_id	pub_name	city	state				
char(4)	varchar(40)	varchar(20)	char(2)				
not null	null	null	null				
pub_idrule ¹							
clust, uniq							
0736	New Age Books	Boston	MA				
0877	Binnet & Hardley	Washington	DC				
1389	Algodata Infosystems	Berkeley	CA				

^{1.} The pub_id rule states that the data must be 1389, 0736, 0877, 1622, or 1756, or must match the pattern 99[0-9][0-9].

				authors				
au_id	au_lname	au_fname	phone	address	city	state	country	postalcode
id	varchar(40)	varchar(20)	char(12)	varchar(12)	varchar(20)	char(2)	varchar(12)	char(10)
not null	not null	not null	not null	null	null	null	null	null
			UNKNOWN ¹					
clust, uniq	nond	clust						
172-32-1176	White	Johnson	408 496-7223	10932 Bigge Rd.	Menlo Park	CA	USA	94025
213-46-8915	Green	Marjorie	415 986-7020	309 63rd St. #411	Oakland	CA	USA	94618
238-95-7766	Carson	Cheryl	415 548-7723	589 Darwin Ln.	Berkeley	CA	USA	94705
267-41-2394	O'Leary	Michael	408 286-2428	22 Cleveland Av. #14	San Jose	CA	USA	95128
274-80-9391	Straight	Dick	415 834-2919	5420 College Av.	Oakland	CA	USA	94609
341-22-1782	Smith	Meander	913 843-0462	10 Mississippi Dr.	Lawrence	KS	USA	66044
409-56-7008	Bennet	Abraham	415 658-9932	6223 Bateman St.	Berkeley	CA	USA	94705
427-17-2319	Dull	Ann	415 836-7128	3410 Blonde St.	Palo Alto	CA	USA	94301
472-27-2349	Gringlesby	Burt	707 938-6445	PO Box 792	Covelo	CA	USA	95428
486-29-1786	Locksley	Chastity	415 585-4620	18 Broadway Av.	San Francisco	CA	USA	94130
527-72-3246	Greene	Morningstar	615 297-2723	22 Graybar House Rd.	Nashville	TN	USA	37215
648-92-1872	Blotchet-Halls	Reginald	503 745-6402	55 Hillsdale Bl.	Corvallis	OR	USA	97330
672-71-3249	Yokomoto	Akiko	415 935-4228	3 Silver Ct.	Walnut Creek	CA	USA	94595
712-45-1867	del Castillo	Innes	615 996-8275	2286 Cram Pl. #86	Ann Arbor	MI	USA	48105
722-51-5454	DeFrance	Michel	219 547-9982	3 Balding Pl.	Gary	IN	USA	46403
724-08-9931	Stringer	Dirk	415 843-2991	5420 Telegraph Av.	Oakland	CA	USA	94609
724-80-9391	MacFeather	Stearns	415 354-7128	44 Upland Hts.	Oakland	CA	USA	94612
756-30-7391	Karsen	Livia	415 534-9219	5720 McAuley St.	Oakland	CA	USA	94609
807-91-6654	Panteley	Sylvia	301 946-8853	1956 Arlington Pl.	Rockville	MD	USA	20853
846-92-7186	Hunter	Sheryl	415 836-7128	3410 Blonde St.	Palo Alto	CA	USA	94301
893-72-1158	McBadden	Heather	707 448-4982	301 Putnam	Vacaville	CA	USA	95688
899-46-2035	Ringer	Anne	801 826-0752	67 Seventh Av.	Salt Lake City	UT	USA	84152
998-72-3567	Ringer	Albert	801 826-0752	67 Seventh Av.	Salt Lake City	UT	USA	84152

 $^{1. \} The \ default \ UNKNOWN \ is \ inserted \ if \ no \ data \ is \ entered.$

					titles				
title_id	title	type	pub_id	price	advance	total_sales	notes	pubdate	contract
tid	varchar(80)	char(12)	char(4)	money	money	int	varchar(200)	datetime	bit
not null	not null	not null	null	null	null	null	null	not null	not null
		UNDECIDED ¹						getdate() ²	
deltitle ³	titleidrule ⁴								
clust, uniq	nonclust								
BU1032	The Busy Executive's Database Guide	business	1389	19.99	5000.00	4095	An overview of available database systems with emphasis on common business applications. Illustrated.	Jun 6, 1986	1
BU1111	Cooking with Computers: Surreptitious Balance Sheets	business	1389	11.95	5000.00	3876	Helpful hints on how to use your electronic resources to the best advantage.	Jun 9, 1988	1
BU2075	You Can Combat Computer Stress!	business	0736	2.99	10125.00	18722	The latest medical and psychological techniques for living with the electronic office. Easy-to-understand explanations.	Jun 30, 1985	1
BU7832	Straight Talk About Computers	business	1389	19.99	5000.00	4095	Annotated analysis of what computers can do for you: a no-hype guide for the critical user.	Jun 22, 1987	1
MC2222	Silicon Valley Gastronomic Treats	mod_cook	0877	19.99	0.00	2032	Favorite recipes for quick, easy, and elegant meals, tried and tested by people who never have time to eat, let alone cook.	Jun 9, 1989	1
MC3021	The Gourmet Microwave	mod_cook	0877	2.99	15000.00	22246	Traditional French gourmet recipes adapted for modern microwave cooking.	Jun 18, 1985	1
PC1035	But Is It User Friendly?	popular_comp	1389	22.95	7000.00	8780	A survey of software for the naive user, focusing on the 'friendliness' of each.	Jun 30, 1986	1
MC3026	The Psychology of Computer Cooking	UNDECIDED	0877	NULL	NULL	NULL	NULL	Jul 24, 1991	0
PC8888	Secrets of Silicon Valley	popular_comp	1389	20.00	8000.00	4095	Muckraking reporting by two courageous women on the world's largest computer hardware and software manufacturers.	Jun 12, 1987	1

- 1. The default UNDECIDED is inserted if no data is entered in the column.

- The details of Notice in the data is entered in the column.
 The getdate function inserts the current date as the default if no data is entered in the column.
 The deltitle trigger prohibits deleting a title if the title_id is listed in the sales table.
 The titledrule states that the data must be BU, MC, TC, PS, or PC, plus 4 digits, or any two uppercase letters followed by xxxx or yyyy.

					titles				
title_id	title	type	pub_id	price	advance	total_sales	notes	pubdate	contract
tid	varchar(80)	char(12)	char(4)	money	money	int	varchar(200)	datetime	bit
not null	not null	not null UNDECIDED ¹	null	null	null	null	null	not null getdate() ²	not null
deltitle ³	titleidrule ⁴								
clust, uniq	nonclust								
PC9999	Net Etiquette	popular_comp	1389	NULL	NULL	NULL	A must-read for computer conferencing debutantes!	Jul 24, 1991	0
PS1372	Computer Phobic and Non- Phobic Individuals: Behavior Variations	psychology	0877	21.59	7000.00	375	A must for the specialist, this book examines the difference between those who hate and fear computers and those who think they are swell.	Oct 21,1990	1
PS2091	Is Anger the Enemy?	psychology	0736	10.95	2275.00	2045	Carefully researched study of the effects of strong emotions on the body. Metabolic charts included.	Jun 15, 1989	1
PS2106	Life Without Fear	psychology	0736	7.00	6000.00	111	New exercise, meditation, and nutritional techniques that can reduce the shock of daily interactions. Popular audience. Sample menus included, exercise video available separately.	Oct 5, 1990	1
PS3333	Prolonged Data Deprivation: Four Case Studies	psychology	0736	19.99	2000.00	4072	What happens when the data runs dry? Searching evaluations of information-shortage effects on heavy users.	Jun 12, 1988	1
PS7777	Emotional Security: A New Algorithm	psychology	0736	7.99	4000.00	3336	Protecting yourself and your loved ones from undue emotional stress in the modern world. Use of computer and nutritional aids emphasized.	Jun 12, 1988	1
TC3218	Onions, Leeks, and Garlic: Cooking Secrets of the Mediterranean	trad_cook	0877	20.95	7000.00	375	Profusely illustrated in color, this makes a wonderful gift book for a cuisine-oriented friend.	Oct 21, 1990	1

- 1. The default UNDECIDED is inserted if no data is entered in the column.
- $2. \ \ The\ \textit{getdate}\ function\ inserts\ the\ current\ date\ as\ the\ default\ if\ no\ data\ is\ entered\ in\ the\ column.$
- 3. The deltitle trigger prohibits deleting a title if the $title_id$ is listed in the sales table.
- 4. The *titleidrule* states that the data must be BU, MC, TC, PS, or PC, plus 4 digits, or any two uppercase letters followed by xxxx or yyyy.

					titles				
title_id	title	type	pub_id	price	advance	total_sales	notes	pubdate	contract
tid	varchar(80)	char(12)	char(4)	money	money	int	varchar(200)	datetime	bit
not null	not null	not null	null	null	null	null	null	not null	not null
		UNDECIDED ¹						getdate() ²	
deltitle ³	titleidrule ⁴								
clust, uniq	nonclust								
TC4203	Fifty Years in Buckingham Palace Kitchens	trad_cook	0877	11.95	4000.00	15096	More anecdotes from the Queen's favorite cook describing life among English royalty. Recipes, techniques, tender vignettes.	Jun 12, 1985	1
TC7777	Sushi, Anyone?	trad_cook	0877	14.99	8000.00	4095	Detailed instructions on improving your position in life by learning how to make authentic Japanese sushi in your spare time. 5-10% increase in number of friends per recipe reported from beta test.	Jun 12, 1987	1

- 1. The default UNDECIDED is inserted if no data is entered in the column.
- The *getdate* function inserts the current date as the default if no data is entered in the column.
 The *deltitle* trigger prohibits deleting a title if the *title_id* is listed in the *sales* table.
- 4. The titleidrule states that the data must be BU, MC, TC, PS, or PC, plus 4 digits, or any two uppercase letters followed by xxxx or yyyy.

	titlea	uthor	
au_id id not null nonclust	title_id tid not null nonclust	au_ord tinyint null	royaltyper int null
uniq, clust,	composite PS3333	1	100
		1	
213-46-8915	BU1032	2	40
213-46-8915	BU2075	1	100
238-95-7766	PC1035	1	100
267-41-2394	BU1111	2	40
267-41-2394	TC7777	2	30
274-80-9391	BU7832	1	100
409-56-7008	BU1032	1	60
427-17-2319	PC8888	1	50
472-27-2349	TC7777	3	30
486-29-1786	PC9999	1	100
486-29-1786	PS7777	1	100
648-92-1872	TC4203	1	100
672-71-3249	TC7777	1	40
712-45-1867	MC2222	1	100
722-51-5454	MC3021	1	75
724-80-9391	BU1111	1	60
724-80-9391	PS1372	2	25
756-30-7391	PS1372	1	75
807-91-6654	TC3218	1	100
846-92-7186	PC8888	2	50
899-46-2035	MC3021	2	25
899-46-2035	PS2091	2	50
998-72-3567	PS2091	1	50
998-72-3567	PS2106	1	100

	au_pix							
au_id	pic	format_type	bytesize	pixwidth_hor	pixwidth_vert			
id	image	char(11)	int	char(14)	char(14)			
not null	null	null	null	null	null			
409-56-7008	0x0000	PICT	30220	626	635			
486-29-1786	0х59а6	Sunraster	27931	647	640			
648-92-1872	0x59a6	Sunraster	36974	647	640			
672-71-3249	0x000a	PICT	13487	654	639			
899-46-2035	0x4949	TIF	52023	648	641			
998-72-3567	0x4949	TIF	52336	653	637			

The *pic* column contains binary data, which is not reproduced in this table in its entirety. The pictures represented by this data are shown on the next page. Since the *image* data (six pictures, two each in PICT, TIF, and Sunraster file formats) is quite large, you should run the <code>installpix2</code> script **only** if you want to use or test the *image* datatype. The *image* data is supplied to show how Sybase stores *image* data. Sybase does not supply any tools for displaying *image* data: you must use the appropriate screen graphics tools in order to display the images once you have extracted them from the database.

Author Portraits from the *au_pix* Table



Akiko Yokomoto

672-71-3249



Chastity Locksley

486-29-1786



Anne Ringer

899-46-2035



Albert Ringer

998-72-3567



Abraham Bennet

409-56-7008



Reginald Blotchet-Halls

648-92-1872

		salesdetail		
stor_id	ord_num	title_id	qty	discount
char(4)	varchar(20)	tid	smallint	float
not null	not null	not null	not null	not null
		title_idrule		
	onclust	nonclust		
7896	234518	TC3218	75	40.000000
7896	234518	TC7777	75	40.000000
7131	Asoap432	TC3218	50	40.000000
7131	Asoap432	TC7777	80	40.000000
5023	XS-135-DER-432-8J2	TC3218	85	40.000000
8042	91-A-7	PS3333	90	45.000000
8042	91-A-7	TC3218	40	45.000000
8042	91-A-7	PS2106	30	45.000000
8042	91-V-7	PS2106	50	45.000000
8042	55-V-7	PS2106	31	45.000000
8042	91-A-7	MC3021	69	45.000000
5023	BS-345-DSE-860-1F2	PC1035	1000	46.700000
5023	AX-532-FED-452-2Z7	BU2075	500	46.700000
5023	AX-532-FED-452-2Z7	BU1032	200	46.700000
5023	AX-532-FED-452-2Z7	BU7832	150	46.700000
5023	AX-532-FED-452-2Z7	PS7777	125	46.700000
5023	NF-123-ADS-642-9G3	TC7777	1000	46.700000
5023	NF-123-ADS-642-9G3	BU1032	1000	46.700000
5023	NF-123-ADS-642-9G3	PC1035	750	46.700000
7131	Fsoap867	BU1032	200	46.700000
7066	BA52498	BU7832	100	46.700000
7066	BA71224	PS7777	200	46.700000
7066	BA71224	PC1035	300	46.700000
7066	BA71224	TC7777	350	46.700000
5023	ZD-123-DFG-752-9G8	PS2091	1000	46.700000
7067	NB-3.142	PS2091	200	46.700000
7067	NB-3.142	PS7777	250	46.700000
7067	NB-3.142	PS3333	345	46.700000
7067	NB-3.142	BU7832	360	46.700000
5023	XS-135-DER-432-8J2	PS2091	845	46.700000
5023	XS-135-DER-432-8J2	PS7777	581	46.700000
5023	ZZ-999-ZZZ-999-0A0	PS1372	375	46.700000
7067	NB-3.142	BU1111	175	46.700000
5023	XS-135-DER-432-8J2	BU7832	885	46.700000
5023	ZD-123-DFG-752-9G8	BU7832	900	46.700000
5023	AX-532-FED-452-2Z7	TC4203	550	46.700000
7131	Fsoap867	TC4203	350	46.700000
7896	234518	TC4203	275	46.700000
7066	BA71224	TC4203	500	46.700000

		salesdetail		
stor_id	ord_num	title_id	qty	discount
char(4)	varchar(20)	tid	smallint	float
not null	not null	not null	not null	not null
		title_idrule		
	nonclust	nonclust		
7067	NB-3.142	TC4203	512	46.700000
7131	Fsoap867	MC3021	400	46.700000
5023	AX-532-FED-452-2Z7	PC8888	105	46.700000
5023	NF-123-ADS-642-9G3	PC8888	300	46.700000
7066	BA71224	PC8888	350	46.700000
7067	NB-3.142	PC8888	335	46.700000
7131	Asoap432	BU1111	500	46.700000
7896	234518	BU1111	340	46.700000
5023	AX-532-FED-452-2Z7	BU1111	370	46.700000
5023	ZD-123-DFG-752-9G8	PS3333	750	46.700000
8042	13-J-9	BU7832	300	51.700000
8042	13-E-7	BU2075	150	51.700000
8042	13-E-7	BU1032	300	51.700000
8042	13-E-7	PC1035	400	51.700000
8042	91-A-7	PS7777	180	51.700000
8042	13-J-9	TC4203	250	51.700000
8042	13-E-7	TC4203	226	51.700000
8042	13-E-7	MC3021	400	51.700000
8042	91-V-7	BU1111	390	51.700000
5023	AB-872-DEF-732-2Z1	MC3021	5000	50.000000
5023	NF-123-ADS-642-9G3	PC8888	2000	50.000000
5023	NF-123-ADS-642-9G3	BU2075	2000	50.000000
5023	GH-542-NAD-713-9F9	PC1035	2000	50.000000
5023	ZA-000-ASD-324-4D1	PC1035	2000	50.000000
5023	ZA-000-ASD-324-4D1	PS7777	1500	50.000000
5023	ZD-123-DFG-752-9G8	BU2075	3000	50.000000
5023	ZD-123-DFG-752-9G8	TC7777	1500	50.000000
5023	ZS-645-CAT-415-1B2	BU2075	3000	50.000000
5023	ZS-645-CAT-415-1B2	BU2075	3000	50.000000
5023	XS-135-DER-432-8J2	PS3333	2687	50.000000
5023	XS-135-DER-432-8J2	TC7777	1090	50.000000
5023	XS-135-DER-432-8J2	PC1035	2138	50.000000
5023	ZZ-999-ZZZ-999-0A0	MC2222	2032	50.000000
5023	ZZ-999-ZZZ-999-0A0	BU1111	1001	50.000000
5023	ZA-000-ASD-324-4D1	BU1111	1100	50.000000
5023	NF-123-ADS-642-9G3	BU7832	1400	50.000000
5023	BS-345-DSE-860-1F2	TC4203	2700	50.000000
5023	GH-542-NAD-713-9F9	TC4203	2500	50.000000
5023	NF-123-ADS-642-9G3	TC4203	3500	50.000000

		salesdetail		
stor_id	ord_num	title_id	qty	discount
char(4)	varchar(20)	tid	smallint	float
not null	not null	not null	not null	not null
		title_idrule		
n	nonclust			
5023	BS-345-DSE-860-1F2	MC3021	4500	50.000000
5023	AX-532-FED-452-2Z7	MC3021	1600	50.000000
5023	NF-123-ADS-642-9G3	MC3021	2550	50.000000
5023	ZA-000-ASD-324-4D1	MC3021	3000	50.000000
5023	ZS-645-CAT-415-1B2	MC3021	3200	50.000000
5023	BS-345-DSE-860-1F2	BU2075	2200	50.000000
5023	GH-542-NAD-713-9F9	BU1032	1500	50.000000
5023	ZZ-999-ZZZ-999-0A0	PC8888	1005	50.000000
7896	124152	BU2075	42	50.500000
7896	124152	PC1035	25	50.500000
7131	Asoap132	BU2075	35	50.500000
7067	NB-1.142	PC1035	34	50.500000
7067	NB-1.142	TC4203	53	50.500000
8042	12-F-9	BU2075	30	55.500000
8042	12-F-9	BU1032	94	55.500000
7066	BA27618	BU2075	200	57.200000
7896	124152	TC4203	350	57.200000
7066	BA27618	TC4203	230	57.200000
7066	BA27618	MC3021	200	57.200000
7131	Asoap132	MC3021	137	57.200000
7067	NB-1.142	MC3021	270	57.200000
7067	NB-1.142	BU2075	230	57.200000
7131	Asoap132	BU1032	345	57.200000
7067	NB-1.142	BU1032	136	57.200000
8042	12-F-9	TC4203	300	62.200000
8042	12-F-9	MC3021	270	62.200000
8042	12-F-9	PC1035	133	62.200000
5023	AB-123-DEF-425-1Z3	TC4203	2500	60.500000
5023	AB-123-DEF-425-1Z3	BU2075	4000	60.500000
6380	342157	BU2075	200	57.200000
6380	342157	MC3021	250	57.200000
6380	356921	PS3333	200	46.700000
6380	356921	PS7777	500	46.700000
6380	356921	TC3218	125	46.700000
6380	234518	BU2075	135	46.700000
6380	234518	BU1032	320	46.700000
6380	234518	TC4203	300	46.700000
6380	234518	MC3021	400	46.700000

	sales	
stor_id char(4) not null	ord_num varchar(20) not null	date datetime not null
clus	t, uniq	
5023	AB-123-DEF-425-1Z3	Oct 31 1985
5023	AB-872-DEF-732-2Z1	Nov 6 1985
5023	AX-532-FED-452-2Z7	Dec 1 1990
5023	BS-345-DSE-860-1F2	Dec 12 1986
5023	GH-542-NAD-713-9F9	Mar 15 1987
5023	NF-123-ADS-642-9G3	Jul 18 1987
5023	XS-135-DER-432-8J2	Mar 21 1991
5023	ZA-000-ASD-324-4D1	Jul 27 1988
5023	ZD-123-DFG-752-9G8	Mar 21 1991
5023	ZS-645-CAT-415-1B2	Mar 21 1991
5023	ZZ-999-ZZZ-999-0A0	Mar 21 1991
6380	234518	Sep 30 1987
6380	342157	Dec 13 1985
6380	356921	Feb 17 1991
7066	BA27618	Oct 12 1985
7066	BA52498	Oct 27 1987
7066	BA71224	Aug 5 1988
7067	NB-1.142	Jan 2 1987
7067	NB-3.142	Jun 13 1990
7131	Asoap132	Nov 16 1986
7131	Asoap432	Dec 20 1990
7131	Fsoap867	Sep 8 1987
7896	124152	Aug 14 1986
7896	234518	Feb 14 1991
8042	12-F-9	Jul 13 1986
8042	13-E-7	May 23 1989
8042	13-J-9	Jan 13 1988
8042	55-V-7	Mar 20 1991
8042	91-A-7	Mar 20 1991
8042	91-V-7	Mar 20 1991

			stores				
stor_id char(4) not null	stor_name varchar(40) null	stor_address varchar(40) null	city varchar(20) null	state char(2) null	country varchar(12) null	postalcode char(10) null	payterms varchar(12) null
7066	Barnum's	567 Pasadena Ave.	Tustin	CA	USA	92789	Net 30
7067	News & Brews	577 First St.	Los Gatos	CA	USA	96745	Net 30
7131	Doc-U-Mat: Quality Laundry and Books	24-A Avrogado Way	Remulade	WA	USA	98014	Net 60
8042	Bookbeat	679 Carson St.	Portland	OR	USA	89076	Net 30
6380	Eric the Read Books	788 Catamaugus Ave.	Seattle	WA	USA	98056	Net 60
7896	Fricative Bookshop	89 Madison St.	Fremont	CA	USA	90019	Net 60
5023	Thoreau Reading Discount Chain	20435 Walden Expressway	Concord	MA	USA	01776	Net 60

discounts				
discounttype varchar(40) not null	stor_id char(4) null	lowqty smallint null	highqty smallint null	discount float not null
Initial Customer	8042	NULL	NULL	10.5
Volume Discount	NULL	100	1001	6.7
Huge Volume Discount	NULL	1001	NULL	10
Customer Discount	8042	NULL	NULL	5

	roysched			
title_id tid not null nonclust	lorange int null	hirange int null	royalty int null	
BU1032	0	5000	10	
BU1032	5001	50000	12	
PC1035	0	2000	10	
PC1035	2001	3000	12	
PC1035	3001	4000	14	
PC1035	4001	10000	16	
PC1035	10001	50000	18	
BU2075	0	1000	10	
BU2075	1001	3000	12	
BU2075	3001	5000	14	
BU2075	5001	7000	16	
BU2075	7001	10000	18	
BU2075	10001	12000	20	
BU2075	12001	14000	22	
BU2075	14001	50000	24	
PS2091	0	1000	10	
PS2091	1001	5000	12	
PS2091	5001	10000	14	
PS2091	10001	50000	16	
PS2106	0	2000	10	
PS2106	2001	5000	12	
PS2106	5001	10000	14	
PS2106	10001	50000	16	
MC3021	0	1000	10	
MC3021	1001	2000	12	
MC3021	2001	4000	14	
MC3021	4001	6000	16	
MC3021	6001	8000	18	
MC3021	8001	10000	20	
MC3021	10001	12000	22	

	roys	ched	
title_id tid not null nonclust	lorange int null	hirange int null	royalty int null
MC3021	12001	50000	24
TC3218	0	2000	10
TC3218	2001	4000	12
TC3218	4001	6000	14
TC3218	6001	8000	16
TC3218	8001	10000	18
TC3218	10001	12000	20
TC3218	12001	14000	22
TC3218	14001	50000	24
PC8888	0	5000	10
PC8888	5001	10000	12
PC8888	10001	15000	14
PC8888	15001	50000	16
PS7777	0	5000	10
PS7777	5001	50000	12
PS3333	0	5000	10
PS3333	5001	10000	12
PS3333	10001	15000	14
PS3333	15001	50000	16
BU1111	0	4000	10
BU1111	4001	8000	12
BU1111	8001	10000	14
BU1111	12001	16000	16
BU1111	16001	20000	18
BU1111	20001	24000	20
BU1111	24001	28000	22
BU1111	28001	50000	24
MC2222	0	2000	10
MC2222	2001	4000	12
MC2222	4001	8000	14

	roysched			
title_id tid not null nonclust	lorange int null	hirange int null	royalty int null	
MC2222	8001	12000	16	
MC2222	8001	12000	16	
MC2222	12001	20000	18	
MC2222	20001	50000	20	
TC7777	0	5000	10	
TC7777	5001	15000	12	
TC7777	15001	50000	14	
TC4203	0	2000	10	
TC4203	2001	8000	12	
TC4203	8001	16000	14	
TC4203	16001	24000	16	
TC4203	24001	32000	18	
TC4203	32001	40000	20	
TC4203	40001	50000	22	
BU7832	0	5000	10	
BU7832	5001	10000	12	
BU7832	10001	15000	14	
BU7832	15001	20000	16	
BU7832	20001	25000	18	
BU7832	25001	30000	20	
BU7832	30001	35000	22	
BU7832	35001	50000	24	
PS1372	0	10000	10	
PS1372	10001	20000	12	
PS1372	20001	30000	14	
PS1372	30001	40000	16	
PS1372	40001	50000	18	

	blurbs				
au_id id not null	copy text null				
486-29- 1786	If Chastity Locksley didn't exist, this troubled world would have created her! Not only did she master the mystic secrets of inner strength to conquer adversity when she encountered it in life, but, after "reinventing herself", as she says, by writing "Emotional Security: A New Algorithm" following the devastating loss of her cat Old Algorithm, she also founded Publish or Perish, the page-by-page, day-by-day, write-yourself-to-wellness encounter workshops franchise empire, the better to share her inspiring discoveries with us all. Her "Net Etiquette," a brilliant social treatise in its own right and a fabulous pun, is the only civilized alternative to the gross etiquette often practiced on the public networks.				
648-92- 1872	A chef's chef and a raconteur's raconteur, Reginald Blotchet-Halls calls London his second home. "Th' palace kitchen's me first 'ome, act'lly!" Blotchet-Halls' astounding ability to delight our palates with palace delights is matched only by his equal skill in satisfying our perpetual hunger for delicious back-stairs gossip by serving up tidbits and entrees literally fit for a king!				
998-72- 3567	Albert Ringer was born in a trunk to circus parents, but another kind of circus trunk played a more important role in his life years later. He grew up as an itinerant wrestler and roustabout in the reknowned Ringer Brothers and Betty and Bernie's Circus. Once known in the literary world only as Anne Ringer's wrestling brother, he became a writer while recuperating from a near-fatal injury received during a charity benefit bout with a gorilla. "Slingshotting" himself from the ring ropes, Albert flew over the gorilla's head and would have landed head first on the concrete. He was saved from certain death by Nana, an elephant he had befriended as a child, who caught him in her trunk. Nana held him so tightly that three ribs cracked and he turned blue from lack of oxygen. "I was delirious. I had an out-of-body experience! My whole life passed before me eyes. I promised myself 'If I get through this, I'll use my remaining time to share what I learned out there.' I owe it all to Nana!"				
899-46- 2035	Anne Ringer ran away from the circus as a child. A university creative writing professor and her family took Anne in and raised her as one of their own. In this warm and television-less setting she learned to appreciate the great classics of literature. The stream of aspiring and accomplished writers that flowed constantly through the house confirmed her repudiation of the circus family she'd been born into: "Barbarians!" The steadily growing recognition of her literary work was, to her, vindication. When her brother's brush with death brought them together after many years, she took advantage of life's crazy chance thing and broke the wall of anger that she had constructed to separate them. Together they wrote, "Is Anger the Enemy?" an even greater blockbuster than her other collaborative work, with Michel DeFrance, "The Gourmet Microwave."				
672-71- 3249	They asked me to write about myself and my book, so here goes: I started a restaurant called "de Gustibus" with two of my friends. We named it that because you really can't discuss taste. We're very popular with young business types because we're young business types ourselves. Whenever we tried to go out to eat in a group we always got into these long tiresome negotiations: "I just ate Italian," or "I ate Greek yesterday," or "I NEVER eat anything that's not organic!" Inefficient. Not what business needs today. So, it came to us that we needed a restaurant we could all go to every day and not eat the same thing twice in a row maybe for a year! We thought, "Hey, why make people choose one kind of restaurant over another, when what they really want is a different kind of food?" At de Gustibus you can eat Italian, Chinese, Japanese, Greek, Russian, Tasmanian, Iranian, and on and on all at the same time. You never have to choose. You can even mix and match! We just pooled our recipes, opened the doors, and never looked back. We're a big hit, what can I say? My recipes in "Sushi, Anyone?" are used at de Gustibus. They satisfy crowds for us every day. They will work for you, too. Period!				
409-56- 7008	Bennet was the classic too-busy executive. After discovering computer databases he now has the time to run several successful businesses and sit on three major corporate boards. Bennet also donates time to community service organizations. Miraculously, he also finds time to write and market executive-oriented in-depth computer hardware and software reviews. "I'm hyperkinetic, so being dynamic and fast-moving is a piece of cake. But being organized isn't easy for me or for anyone I know. There's just one word for that: 'databases!' Databases can cure you or kill you. If you get the right one, you can be like me. If you get the wrong one, watch out. Read my book!"				

Primary and Foreign Keys in *pubs2*

Primary Keys		
Table Primary Key		
titles	title_id	
titleauthor	au_id + title_id	
authors	au_id	
publishers	pub_id	
roysched	title_id	
sales	stor_id + ord_num	
salesdetail	stor_id + ord_num + title_id	
stores	stor_id	
discounts	discounttype + stor_id	
au_pix	au_id	
blurbs	au_id	

Foreign Keys			
Table	Foreign Key	Primary Key Table	
titleauthor	title_id au_id	titles authors	
roysched	title_id	titles	
sales	stor_id	stores	
salesdetail	title_id stor_id, ord_num	titles sales	
titles	pub_id	publishers	
discounts	stor_id	stores	
au_pix	au_id	authors	
blurbs	au_id	authors	

Other Objects in pubs2

Rules pub_idrule create rule pub_idrule as @pub_id in ("1389", "0736", "0877", "1622", "1756") or @pub_id like "99[0-9][0-9]" title_idrule create rule title_idrule @title_id like "BU[0-9][0-9][0-9][0-9]" or @title_id like "[MT]C[0-9][0-9][0-9][0-9]" or @title_id like "P[SC][0-9][0-9][0-9][0-9]" or @title_id like "[A-Z][A-Z]xxxx" or @title_id like "[A-Z][A-Z]yyyy" /*valid values: BU, MC, TC, PS, PC + 4 digits or **any two uppercase letters followed by x's or y's **Defaults** typedflt create default typedflt as "UNDECIDED" datedflt create default datedflt as getdate() phonedflt create default phonedflt as "UNKNOWN" View titleview create view titleview select title, au_ord, au_lname,

price, total_sales, pub_id

from authors, titles, titleauthor
where authors.au_id = titleauthor.au_id
and titles.title_id = titleauthor.title_id

Triggers

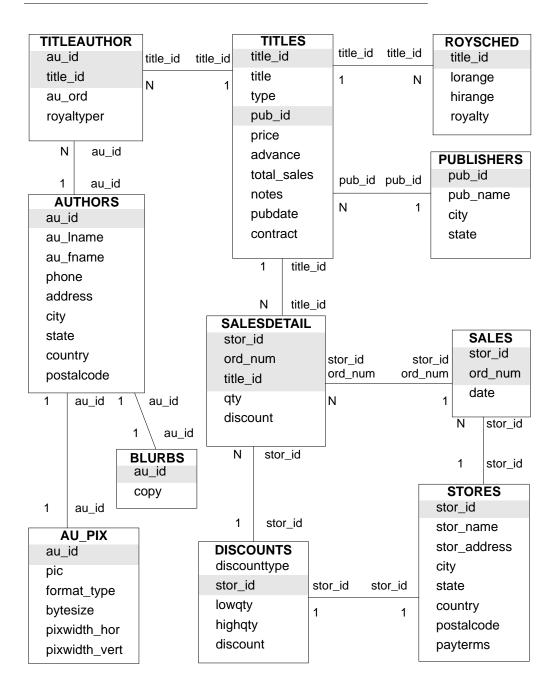
```
deltitle
              create trigger deltitle on titles for delete
              if (select count(*) from deleted, salesdetail
             where salesdetail.title_id = deleted.title_id) >0
             begin
                  rollback transaction
                  print "You can't delete a title with sales."
              end
           totalsales_trig
create trigger totalsales_trig on salesdetail
    for insert, update, delete
as
/* Save processing: return if there are no rows affected */
if @@rowcount = 0
   begin
        return
end
/* add all the new values */
/* use isnull: a null value in the titles table means
**
                "no sales yet" not "sales unknown"
*/
update titles
    set total_sales = isnull(total_sales, 0) + (select sum(qty)
    from inserted
    where titles.title_id = inserted.title_id)
    where title_id in (select title_id from inserted)
/* remove all values being deleted or updated */
update titles
    set total_sales = isnull(total_sales, 0) - (select sum(qty)
    from deleted
   where titles.title_id = deleted.title_id)
    where title_id in (select title_id from deleted)
```

Procedure

```
by royalty
```

```
create procedure byroyalty @percentage int
as
select au_id from titleauthor
where titleauthor.royaltyper = @percentage
```

Diagram of the pubs2 Database



SQL Server Reference Supplement

2

The System Tables

This chapter describes the SQL Server system tables.

All tables in the *master* database are system tables. Some of these tables also occur in user databases—they are automatically created when the create database command is issued.

The following system tables occur in all databases:

Table 2-1: System tables that occur in all databases

System Table	Contents	
sysalternates	One row for each SQL Server user mapped to a database user	
sysattributes	One row for each object attribute definition.	
syscolumns	One row for each column in a table or view, and for each parameter in a procedure	
syscomments	One or more rows for each view, rule, default, trigger, and procedure, giving SQL definition statement	
sysconstraints	One row for each referential and check constraint associated with a table or column	
sysdepends	One row for each procedure, view, or table that is referenced by a procedure, view, or trigger	
sysindexes	One row for each clustered or nonclustered index, and one row for each table with no indexes, and an additional row for each table containing text or image data	
syskeys	One row for each primary, foreign, or common key; set by user (not maintained by SQL Server)	
syslogs	Transaction log	
sysobjects	One row for each table, view, procedure, rule, trigger default, log, and (in <i>tempdb</i> only) temporary object	
syspartitions	One row for each partition (page chain) of a partitioned table	
sysprocedures	One row for each view, rule, default, trigger, and procedure, giving internal definition	
sysprotects	User permissions information	
sysreferences	One row for each referential integrity constraint declared on a table or column	
sysroles	Maps server-wide roles to local database groups	

Table 2-1: System tables that occur in all databases (continued)

System Table	Contents	
syssegments	One row for each segment (named collection of disk pieces)	
systhresholds	One row for each threshold defined for the database	
systypes	One row for each system-supplied and user-defined datatype	
sysusermessages	One row for each user-defined message	
sysusers	One row for each user allowed in the database	

The following system tables occur in the *master* database only:

Table 2-2: System tables that occur in the master database only

System Table	Contents	
syscharsets	One row for each character set or sort order	
sysconfigures	One row for each user-settable configuration parameter	
syscurconfigs	Information about configuration parameters currently being used by SQL Server	
sysdatabases	One row for each database on SQL Server	
sysdevices	One row for each tape dump device, disk dump device, disk for databases, and disk partition for databases	
sysengines	One row for each SQL Server engine currently online	
syslanguages	One row for each language (except U.S. English) known to the server	
syslisteners	One row for each type of network connection used by current SQL Server	
syslocks	Information about active locks	
sysloginroles	One row for each server login that possesses a system-defined role	
syslogins	One row for each valid SQL Server user account	
syslogshold	Information about the oldest active transaction and the Replication Server® truncation point for each database	
sysmessages	One row for each system error or warning	
sysprocesses	Information about server processes	
sysremotelogins	One row for each remote user	

Table 2-2: System tables that occur in the master database only (continued)

System Table	Contents	
syssrvroles	One row for each server-wide role	
sysservers	One row for each remote SQL Server	
sysusages	One row for each disk piece allocated to a database	

The following system tables occur in the *sybsecurity* database only:

Table 2-3: System tables that occur in the sybsecurity database only

System Table	Contents	
sysaudits	One row for each audit record	
sysauditoptions	One row for each global audit option	

In the pages that follow, each system table is described in more detail, including a list of their columns and datatypes. In addition, the indexes and the system procedures that reference a particular table are listed.

The word "reserved" in the column description means that the column is currently not being used by SQL Server.

Permissions for use of the system tables can be controlled by the database owner, just like permissions on any other tables.

The Sybase installation program sets up permissions so that all users can read the system tables, with the exception of a few fields. (For details, see the SQL Server installation/configuration guide for your platform.)

All direct updates on system tables are by default not allowed — even for the database owner. Instead, SQL Server supplies system procedures to make any normally needed updates and additions to system tables.

You can allow direct updates to the system tables if it becomes necessary to modify them in a way that cannot be accomplished with a system procedure. To accomplish this, a System Security Officer must reset the configuration parameter called allow updates to system tables with the system procedure <code>sp_configure</code>. For information, see the <code>System Administration Guide</code>.

There are entries in some of the *master* database tables that should not be altered by any user under any circumstances. For example, do

not attempt to modify *syslogs* with a delete, update, or insert command. In addition, an attempt to delete all rows from *syslogs* will put SQL Server into an infinite loop that eventually fills up the entire database.

Note that aggregate functions cannot be used on virtual tables such as *syslocks* and *sysprocesses*.

A large color poster with a diagram of the system tables and their relationships is included with each shipment of the SQL Server media.

sysalternates

(all databases)

Description

sysalternates contains one row for each SQL Server user mapped (or aliased) to a user of the current database. When a user tries to access a database, SQL Server looks for a valid *uid* entry in *sysusers*. If none is found, it looks in *sysalternates.suid*. If the user's *suid* is found there, he or she is treated as the database user whose *suid* is listed in *sysalternates.altsuid*.

On the SQL Server distribution tape, there are no entries in *sysalternates*.

Table 2-4: Columns in the sysalternates table

Column	Datatype	Description
suid	smallint	Server user ID of user being mapped
altsuid	smallint	Server user ID of user to whom another user is mapped

Indexes

Unique clustered index on suid

Referenced by System Procedures

 $sp_addalias, sp_adduser, sp_changedbowner, sp_dropalias, sp_dropuser, sp_helpuser \\$

sysattributes

(all databases)

Description

System attributes define properties of objects such as databases, tables, indexes, users, logins, and procedures. *sysattributes* contains one row for each of an object's attribute definitions (configured by various system procedures). *master..sysattributes* defines the complete set of valid attribute values and classes for SQL Server as a whole. It also stores attribute definitions for server-wide objects, such as databases and logins.

sysattributes should only be accessed indirectly using system procedures. The permissions required for modifying *sysattributes* depend on the system procedure you use.

Table 2-5: Columns in the sysattributes table

Column	Datatype	Description
class	smallint	The attribute class ID. This describes the category of the attribute.
		In <i>mastersysattributes</i> , the special class 1 identifies all valid attributes for SQL Server. Class 0 identifies valid classes of attributes.
attribute	smallint	The attribute ID.
object_type	char(2)	The one- or two-letter character ID that defines the type of object to associate with the attribute: D = Database I = Index L = Login name P = Procedure T = Table U = Username UI = Upgrade Item (used internally during user database upgrades)
object_cinfo	varchar(30)	A string identifier for the object (for example, the name of an application). This field is not used by all attributes.
object	int null	The object identifier. This may be an object ID, user ID, or database ID, depending on the type of object. If the object is a part of a table (for example, an index), then this column contains the object ID of the associated table.

Table 2-5: Columns in the sysattributes table (continued)

Column	Datatype	Description
object_info1	int null	Defines additional information required to identify the object. This field is not used by all attributes. The contents of this field depend on the attribute that is defined.
object_info2	int null	Defines additional information required to identify the object. This field is not used by all attributes. The contents of this field depend on the attribute that is defined.
object_info3	int null	Defines additional information required to identify the object. This field is not used by all attributes. The contents of this field depend on the attribute that is defined.
int_value	int null	An integer value for the attribute (for example, the display level of a user).
char_value	varchar(255)	A character value for the attribute (for example, a cache name).
text_value	text null	A text value for the attribute.
image_value	image null	An image value for the attribute.
comments	varchar(255)	Comments or additional information about the attribute definition.

Indexes

unique clustered index on class, attribute, object_type, object, object_info1, object_info2, object_info3, and object_cinfo

nonclustered index on object_type object_info1 object_info1

nonclustered index on object_type, object, object_info1, object_info2, object_info3, object_cinfo

Referenced by System Procedures

 $sp_bindcache, sp_cacheconfig, sp_configure, sp_dropuser, sp_droplogin, sp_help, sp_helpdb, sp_helpindex, sp_unbindcache, sp_unbindcache_all$

sysauditoptions

(sybsecurity database)

Description

sysauditoptions contains one row for each global audit option (options set via sp_auditoption). These are the system-wide options only, and do not include database, object, stored procedure, trigger, and user audit options. The default value for each option is 0 or "off." sysauditoptions can be accessed only by System Security Officers.

Table 2-6: Columns in the sysauditoptions table

Datatype	Description
smallint	Option number (see Table 2-7)
smallint	Current value; one of the following: off = 0 ok = 1 fail = 2 both = 3 (where applicable)
	For error auditing (optn=13), the values are: off = 0 nonfatal = 1 fatal = 2 both = 3
smallint	Minimum valid value for this option
smallint	Maximum valid value for this option
varchar(30)	Name of option
varchar(30)	String equivalent of the current value: for example, "on", "off", "nonfatal"
varchar(255)	Description of option
	smallint smallint smallint smallint varchar(30) varchar(30)

Possible values for optn are:

Table 2-7: Audit option values and descriptions

Option Number	Description
1	Enable or disable auditing
2	Unused
3	Login auditing
4	Logout auditing

Table 2-7: Audit option values and descriptions (continued)

Option Number	Description
5	Server boot auditing
6	RPC connection auditing
7	Auditing use of the set command to turn roles on and off
8	Auditing commands requiring sa_role role
9	Auditing commands requiring sso_role role
10	Auditing commands requiring oper_role role
12	Auditing commands requiring navigator role
13	Error auditing
14	Ad hoc auditing
15	Auditing commands requiring replication role

Indexes

None

Referenced by System Procedures sp_addauditrecord, sp_auditoption

sysaudits

(sybsecurity database)

Description

The *sysaudits* table contains one row for each audit record.

Table 2-8: Columns in the sysaudits table

Column	Datatype	Description
event	smallint	Type of event being audited. See Table 2-9.
eventmod	smallint	Further information about the event. Possible values are: 0 = no modifier for this event 1 = successful occurrence of this event; for error auditing (event=13), a nonfatal error 2 = failed occurrence of this event; for error auditing (event=13), a fatal error
spid	smallint	Server process ID of the process that caused the audit record to be written
eventtime	datetime	Date and time of the audited event
sequence	smallint	Sequence number of the record within a single event; some events require more than one audit record
suid	smallint	Server login ID of the user who performed the audited event
dbid	int null	Database ID in which the audited event occurred or the object/stored procedure/trigger resides, depending on the type of event
objid	int null	ID of the accessed object or stored procedure/trigger
xactid	binary(6) null	ID of the transaction containing the audited event. For a multi-database transaction, this is the transaction ID from the database where the transaction originated.
loginname	varchar(30) null	Login name corresponding to the suid
dbname	varchar(30) null	Database name corresponding to the <i>dbid</i>
objname	varchar(30) null	Object name corresponding to the objid
objowner	varchar(30) null	Name of the owner of objid

Table 2-8: Columns in the sysaudits table (continued)

Column	Datatype	Description
extrainfo	varchar(255) null	Additional information about the audited event; contents vary with the type of event audited. (See Table 2-9.)

Possible values for the *event* column are shown in Table 2-9, along with the corresponding contents of the *extrainfo* column. Global audit events have a code of less than 100. All other event types are numbered starting at 100.

Table 2-9: Contents of event and extrainfo columns of sysaudits table

Event Number	Description	Contents of extrainfo Column
1	Enable auditing	NULL
2	Disable auditing	NULL
3	Login	Host name
4	Logout	Host name
5	Server boot	Names of the server program, master device, interfaces file path, server, and error log file
6	RPC connection	Remote server name, host name
7	Use of set command to turn roles on and off	Role, new setting
8	Command requiring sa_role role	Command type
9	Command requiring sso_role role	Command type
10	Command requiring oper_role role	Command type
12	Command requiring navigator role	Command type
13	Error	Error number, severity, and state
14	Ad hoc audit record	User-supplied comment text
15	Command requiring replication role	Command type
100	Database reference	Command type
101	Table reference	Command type
102	View reference	Command type
103	Stored procedure execution	Parameter list
104	Trigger execution	NULL
105	User's attempts to access a table	Command type
106	User's attempt to access a view	Command type
107	User's command text auditing	Command batch text

Indexes

None

Referenced by System Procedures sp_addauditrecord

syscharsets

(master database only)

Description

syscharsets contains one row for each character set and sort order defined for use by SQL Server. One of the sort orders is marked in *master..sysconfigures* as the default sort order, which is the only one actually in use.

Table 2-10: Columns in the syscharsets table

Column	Datatype	Description
type	smallint	The type of entity this row represents. Numbers from 1001 to 1999 represent character sets. Numbers from 2000 to 2999 represent sort orders.
id	tinyint	The ID for a character set or sort order. A sort order is defined by the combination of the sort order ID and the character set ID (<i>csid</i>). The character set is defined by <i>id</i> , which must be unique. Sybase reserves ID numbers 0-200.
csid	tinyint	If the row represents a character set, this field is unused. If the row represents a sort order, this is the ID of the character set that sort order is built on. A character set row with this ID must exist in this table.
status	smallint	Internal system status information bits.
name	varchar(30)	A unique name for the character set or sort order. Must contain only the 7-bit ASCII letters A-Z or a-z, digits 0-9, and underscores (_), and begin with a letter.
description	varchar(255)	An optional description of the features of the character set or sort order.
definition	image	The internal definition of the character set or sort order. The structure of the data in this field depends on the <i>type</i> .

Indexes

unique clustered index on *id, csid, type* unique nonclustered index on *name*

Referenced by System Procedures sp_checkreswords, sp_helpsort

syscolumns

(all databases)

Description

syscolumns contains one row for every column in every table and view, and a row for each parameter in a procedure.

Table 2-11: Columns in the syscolumns table

Column	Datatype	Description	
id	int	ID of table to which this column belongs or of procedure with which this parameter is associated	
number	smallint	Sub-procedure number when the procedure is grouped (0 for non-procedure entries)	
colid	tinyint	Column ID	
status	tinyint	Indicates unique position for <i>bit</i> columns, whether NULL values are legal in this column, and if a check constraint exists for the column	
type	tinyint	Physical storage type; copied from systypes	
length	tinyint	Physical length of data; copied from <i>systypes</i> or supplied by user	
offset	smallint	Offset into the row where this column appears; if negative, this is a variable-length column	
usertype	smallint	User type ID; copied from systypes	
cdefault	int	ID of the procedure that generates default value for this column	
domain	int	Constraint ID of the first rule or check constraint for this column	
name	sysname	Column name	
printfmt	varchar(255)	Reserved	
prec	tinyint	Number of significant digits	
scale	tinyint	Number of digits to the right of the decimal point	

Indexes

unique clustered index on id, number, colid

Referenced by System Procedures

sp_bindefault, sp_bindrule, sp_changegroup, sp_checknames, sp_checkreswords, sp_column_privileges, sp_columns, sp_commonkey, sp_droptype, sp_droptype, sp_droptype, sp_estspace, sp_foreignkey, sp_help, sp_helpconstraint, sp_helpjoins, sp_helprotect, sp_primarykey, sp_rename, sp_special_columns, sp_sproc_columns, sp_statistics, sp_unbindefault, sp_unbindrule

syscomments

(all databases)

Description

syscomments contains entries for each view, rule, default, trigger, table constraint, and procedure. The *text* field contains the original definition statements. If the *text* field is longer than 255 bytes, the entries will span rows. Each object can occupy up to 65,025 rows.

Table 2-12: Columns in the syscomments table

Column	Datatype	Description
id	int	Object ID to which this text applies
number	smallint	Sub-procedure number when the procedure is grouped (0 for non-procedure entries)
colid	tinyint	Sequence of 255 rows for the object
texttype	smallint	0 for system-supplied comment (for views, rules, defaults, triggers, and procedures); 1 for user- supplied comment (users can add entries that describe an object or column)
language	smallint	Reserved
text	varchar(255)	Actual text of SQL definition statement
colid2	tinyint	Indicates next sequence of rows for the object (see <i>colid</i> above); object can have up to 255 sequences of 255 rows each

Indexes

unique clustered index on id, number, colid2, colid, texttype

Referenced by System Procedures

sp_helpconstraint, sp_helptext

sysconfigures

(master database only)

Description

sysconfigures and *syscurconfigs* contain one row for each user-settable configuration parameter.

Table 2-13: Columns in the sysconfigures table

Column	Datatype	Description
config	smallint	Configuration parameter number.
value	int	The user-modifiable value for the parameter with <i>integer</i> datatype. Its value is 0 for the parameters with <i>character</i> datatype.
comment	varchar(255)	Name of the configuration parameter.
status	smallint	Either 1 (dynamic) or 0 (parameter takes effect when SQL Server is restarted.
name	varchar(80)	Name of the configuration parameter (the same value as <i>comment</i>).
parent	smallint	Configuration parameter number of the parent; if more than one parent, the additional parent numbers are stored in <i>sysattributes</i> .
value2	varchar(255)	The user-modified value for the parameter with the character datatype. Its value is NULL for parameters with <i>integer</i> datatype. It is also used to store the "pool size" of a user-defined buffer pool configured by sp_poolconfig.
value3	int	Stores the "wash size" of a user-defined buffer pool configured by sp_poolconfig.

Indexes

unique clustered index on config

Referenced by System Procedures

sp_configure

sysconstraints

(all databases)

Description

The *sysconstraints* table has one row for each referential and check constraint associated with a table or column.

Whenever a user declares a new check constraint or referential constraint using create table or alter table, SQL Server inserts a row into the *sysconstraints* table. The row remains until a user executes alter table to drop the constraint. Dropping a table by executing drop table removes all rows associated with that table from the *sysconstraints* table.

Table 2-14: Columns in the sysconstraints table

Column	Datatype	Description
colid	tinyint	Column number in the table
spare1	tinyint	Unused
constrid	int	Object ID of the constraint
tableid	int	ID of the table on which the constraint is declared
error	int	Constraint specific error message
status	int	The type of constraint: $0x0040 = a$ referential constraint $0x0080 = a$ check constraint
spare2	int	Unused

Indexes

clustered index on *tableid*, *colid* unique nonclustered index on *constrid*

Referenced by System Procedures

sp_bindmsg, sp_bindrule, sp_helpconstraint, sp_unbindmsg, sp_unbindrule

syscurconfigs

(master database only)

Description

syscurconfigs is built dynamically when queried. Its structure is identical to that of *sysconfigures*. It contains an entry for each of the configuration parameters, as does *sysconfigures*, but with the current values rather than the default values. In addition, it contains four rows that describe the configuration structure.

Table 2-15: Columns in the syscurconfigs table

Column	Datatype	Description
config	smallint	Configuration parameter number.
value	int	The current run value for the parameter with <i>integer</i> datatype. Its value is 0 for the parameters with character datatype.
comment	varchar(255)	Name of the configuration parameter.
status	smallint	Either 1 (dynamic) or 0 (parameter takes effect when SQL Server is restarted).
value2	varchar(255)	The current run value for the parameter with the <i>character</i> datatype. Its value is NULL for parameters with the <i>integer</i> datatype.
defvalue	varchar(255)	Default value of the configuration parameter.
minimum_value	int	Minimum value of the configuration parameter.
maximum_value	int	Maximum value of the configuration parameter.
memory_used	int	Memory used by the configuration parameter.
display_level	int	Display level of the configuration parameter (the values are 1, 5, and 10).
datatype	int	Datatype of the configuration parameter.
message_num	int	Unused.

Indexes

None

Referenced by System Procedures sp_configure, sp_helpsort

sysdatabases

(master database only)

Description

sysdatabases contains one row for each database on SQL Server. When SQL Server is installed, sysdatabases contains entries for the master database, the model database, the sybsystemprocs database and the tempdb database. If you have installed auditing, it also contains an entry for the sybsecurity database

Table 2-16: Columns in the sysdatabases table

Column	Datatype	Description
name	sysname	Name of the database
dbid	smallint	Database ID
suid	smallint	Server user ID of database owner
status	smallint	Control bits; those that the user can set with sp_dboption are marked "settable" (see Table 2-17)
version	smallint	Version of SQL Server code under which database was created
logptr	int	Pointer to transaction log
crdate	datetime	Creation date
dumptrdate	datetime	Date of the last dump transaction
status2	intn	Additional control bits (see Table 2-18)
audflags	intn	Audit settings for database
deftabaud	intn	Bit-mask that defines default audit settings for tables
defvwaud	intn	Bit-mask that defines default audit settings for views
defpraud	intn	Bit-mask that defines default audit settings for stored procedures

The bit representations for the *status* column are:

Table 2-17: status control bits in the sysdatabases table

Decimal	Hex	Status
4	0x04	select into/bulkcopy; settable
8	0x08	trunc log on chkpt; settable
16	0x10	no chkpt on recovery; settable
32	0x20	Database created with for load option, or crashed while loading database, instructs recovery not to proceed
256	0x100	Database suspect; not recovered; cannot be opened or used; can be dropped only with dbcc dbrepair
512	0x200	ddl in tran; settable
1024	0x400	read only; settable
2048	0x800	dbo use only; settable
4096	0x1000	single user; settable
8192	0x2000	allow nulls by default; settable
16384	0x4000	dbname has changed

The bit representations for the *status2* column are:

Table 2-18: status2 control bits in the sysdatabases table

Decimal	Hex	Status
1	0x0001	abort tran on log full; settable
2	0x0002	no free space acctg; settable
4	0x0004	auto identity; settable
8	0x0008	identity in nonunique index; settable
16	0x0010	database is offline
32	0x0020	database is offline until recovery completes
32768	0x8000	database does not have a dedicated log device

Indexes

unique clustered index on *name* unique nonclustered index on *dbid*

Referenced by System Procedures

 $sp_addlogin, sp_addsegment, sp_addtype, sp_auditdatabase, sp_auditobject, sp_auditsproc, sp_changedbowner, sp_checknames, sp_checkreswords, \\$

 $sp_databases, sp_dboption, sp_dbremap, sp_dropdevice, sp_dropsegment, sp_extendsegment, sp_helpdb, sp_logdevice, sp_renamedb, sp_tables$

sysdepends

(all databases)

Description

sysdepends contains one row for each procedure, view, or table that is referenced by a procedure, view, or trigger.

Table 2-19: Columns in the sysdepends table

Column	Datatype	Description
id	int	Object ID
number	smallint	Procedure number
depid	int	Dependent object ID
depnumber	smallint	Dependent procedure number
status	smallint	Internal status information
selall	bit	On if object is used in select * statement
resultobj	bit	On if object is being updated
readobj	bit	On if object is being read

Indexes

unique clustered index on id, number, depid, depnumber

Referenced by System Procedures

sp_auditdatabase, sp_depends

sysdevices

(master database only)

Description

sysdevices contains one row for each tape dump device, disk dump device, disk for databases, and disk partition for databases. On the SQL Server distribution tape, there are four entries in sysdevices: one for the master device (for databases), one for a disk dump device, and two for tape dump devices.

Table 2-20: Columns in the sysdevices table

Column	Datatype	Description
low	int	First virtual page number on database device (not used for dump devices)
high	int	Last virtual page number on database device or dump device
status	smallint	Bit map indicating type of device, default and mirror status (see Table 2-21)
cntrltype	smallint	Controller type (0 if database device, 2 if disk dump device or streaming tape, 3–8 if tape dump device)
name	sysname	Logical name of dump device or database device
phyname	varchar(127)	Name of physical device
mirrorname	varchar(127)	Name of mirror device

The bit representations for the *status* column are additive. For example, "3" indicates a physical disk that is also a default.

The status control bits are:

Table 2-21: status control bits in the sysdevices table

Decimal	Hex	Status
1	0x01	default disk
2	0x02	physical disk
4	0x04	logical disk (not used)
8	0x08	skip header
16	0x10	dump device
32	0x20	serial writes

Table 2-21: status control bits in the sysdevices table (continued)

Decimal	Hex	Status
64	0x40	device mirrored
128	0x80	reads mirrored
256	0x100	secondary mirror side only
512	0x200	mirror enabled
2048	0x800	used internally

Indexes

unique clustered index on name

Referenced by System Procedures

 $sp_addsegment, sp_addumpdevice, sp_checknames, sp_checkreswords, \\ sp_configure, sp_diskdefault, sp_dropdevice, sp_dropsegment, sp_extendsegment, \\ sp_helpdb, sp_helpdevice, sp_helplog, sp_helpsegment, sp_logdevice, \\ sp_volchanged$

sysengines

(master database only)

Description

 $\ensuremath{\textit{sysengines}}$ contains one row for each SQL Server engine currently on line

Table 2-22: Columns in the sysengines table

Column	Datatype	Description
engine	smallint	Engine number
osprocid	int	Operating system process ID (may be NULL)
osprocname	char	Operating system process name (may be NULL)
status	char	One of: online, offline, in create, in destroy, debug
affinitied	int	Number of SQL Server processes with affinity to this engine
cur_kpid	int	Kernel process ID of process currently running on this engine, if any
last_kpid	int	Kernel process ID of process which previously ran on this engine
idle_1	tinyint	Reserved
idle_2	tinyint	Reserved
idle_3	tinyint	Reserved
idle_4	tinyint	Reserved
starttime	datetime	Date and time engine came online

Indexes

None

Referenced by System Procedures

sp_monitor

sysindexes

(all databases)

Description

sysindexes contains one row for each clustered index, one row for each nonclustered index, one row for each table that has no clustered index, and one row for each table that contains text or image columns.

The column *doampg* is used only if the row describes a table or clustered index; this column and *ioampg* are used by the system functions data_pgs, reserved_pgs and used_pgs.

Table 2-23: Columns in the sysindexes table

Column	Datatype	Description
name	sysname	Index or table name
id	int	ID of table, or ID of table to which index belongs
indid	smallint	0 if table, 1 if clustered index, >1 if nonclustered, 255 if text chain
doampg	int	Page number for the object allocation map of a table or clustered index
ioampg	int	Page number for the allocation map of a nonclustered index
oampgtrips	int	Ratio of OAM page to data page residency in cache
status2	int	Internal system status information (see Table 2-24)
ipgtrips	int	Ratio of index page to data page residency in cache
first	int	Page number of the first data or leaf page
root	int	Page number of the root page if entry is an index; page number of the last page if entry is an unpartitioned table or text chain; unused if entry is a partitioned table (see <i>syspartitions</i>)
distribution	int	Page number of the distribution page (if entry is an index)
usagecnt	smallint	Reserved

Table 2-23: Columns in the sysindexes table (continued)

Column	Datatype	Description
segment	smallint	Number of segment in which this object resides
status	smallint	Internal system status information (see Table 2-25)
maxrowsperpage	smallint	Maximum number of rows per page
minlen	smallint	Minimum size of a row
maxlen	smallint	Maximum size of a row
maxirow	smallint	Maximum size of a non-leaf index row
keycnt	smallint	Number of keys for a clustered index; number of keys+1 for a nonclustered index
keys1	varbinary(255)	Description of key columns (if entry is an index)
keys2	varbinary(255)	Description of key columns (if entry is an index)
soid	tinyint	Sort order ID that the index was created with; "0" if there is no character data in the keys
csid	tinyint	Character set ID that the index was created with; "0" if there is no character data in the keys

The bit representations for the *status2* column are:

Table 2-24: status2 control bits in the sysindexes table

Decimal	Hex	Status
1	0x1	Index supports foreign key constraint
2	0x2	Index supports primary key/unique declarative constraint
4	0x4	Index includes an IDENTITY column
8	0x8	User did not specify a constraint name
16	0x10	Large I/Os (prefetch) enabled for table, index or text chain
32	0x20	MRU cache strategy enabled for table, index or text chain

The bit representations for the *status* column are:

Table 2-25: status control bits in the sysindexes table

Decimal	Hex	Status
1	0x1	Abort current command or trigger if attempt to insert duplicate key
2	0x2	Unique index
4	0x4	Abort current command or trigger if attempt to insert duplicate row
16	0x10	Clustered index
64	0x40	Index allows duplicate rows
128	0x80	Sorted object; not set for tables without clustered indexes or for text objects
512	0x200	sorted data option used in create index statement
1024	0x400	Index being created
2048	0x800	Index on primary key
32768	0x8000	Suspect index; index was created under another sort order

Indexes

unique clustered index on id, indid

Referenced by System Procedures

```
sp_cachestrategy, sp_checknames, sp_checkreswords, sp_dropsegment, sp_estspace, sp_help, sp_helpconstraint, sp_helpindex, sp_helplog, sp_helpsegment, sp_indsuspect, sp_pkeys, sp_placeobject, sp_relimit, sp_rename, sp_spaceused, sp_special_columns, sp_statistics
```

syskeys

(all databases)

Description

syskeys contains one row for each primary, foreign, or common key.

Table 2-26: Columns in the syskeys table

Column	Datatype	Description
id	int	Object ID
type	smallint	Record type
depid	int null	Dependent object ID
keycnt	int null	The number of non-null keys
size	int null	Reserved
key1	int null	Column ID
key2	int null	Column ID
key3	int null	Column ID
key4	int null	Column ID
key5	int null	Column ID
key6	int null	Column ID
key7	int null	Column ID
key8	int null	Column ID
depkey1	int null	Column ID
depkey2	int null	Column ID
depkey3	int null	Column ID
depkey4	int null	Column ID
depkey5	int null	Column ID
depkey6	int null	Column ID
depkey7	int null	Column ID
depkey8	int null	Column ID

Indexes

clustered index on id

Referenced by System Procedures

 $sp_commonkey, sp_dropkey, sp_foreignkey, sp_helpjoins, sp_helpkey, sp_primarykey \\$

syslanguages

(master database only)

Description

syslanguages contains one row for each language known to SQL Server. us_english is not in *syslanguages*, but is always available to SQL Server.

Table 2-27: Columns in the syslanguages table

Column	Datatype	Description
langid	smallint	Unique language ID
dateformat	char(3)	Date order; for example, "dmy"
datefirst	tinyint	First day of the week—1 for Monday, 2 for Tuesday, and so on, up to 7 for Sunday
upgrade	int	SQL Server version of last upgrade for this language
name	varchar(30)	Official language name, for example, "french"
alias	varchar(30)	Alternate language name, for example, "français"
months	varchar(251)	Comma-separated list of full-length month names, in order from January to December—each name is at most 20 characters long
shortmonths	varchar(119)	Comma-separated list of shortened month names, in order from January to December—each name is at most 9 characters long
days	varchar(216)	Comma-separated list of day names, in order from Monday to Sunday—each name is at most 30 characters long

Indexes

unique clustered index on *langid* unique nonclustered index on *name* unique nonclustered index on *alias*

Referenced by System Procedures

 $sp_addlanguage, sp_addmessage, sp_checkreswords, sp_configure, sp_droplanguage, sp_dropmessage, sp_getmessage, sp_helplanguage, sp_setlangalias$

syslisteners

(master database only)

Description

syslisteners contains a row for each network protocol available for connecting with the current SQL Server. SQL Server builds *syslisteners* dynamically when a user or client application queries the table.

Table 2-28: Columns in the syslisteners table

Column	Datatype	Description
net_type	char(32)	Network protocol
address_info	char(255)	Information that uniquely identifies this SQL Server on the network, usually the name of the current SQL Server and identifying number, such as the server's port number for the protocol

Indexes

None

Referenced by System Procedures

None

syslocks

(master database only)

Description

syslocks contains information about active locks, but it is not a normal table. Rather, it is built dynamically when queried by a user. No updates to *syslocks* are allowed.

Table 2-29: Columns in the syslocks table

Column	Datatype	Description
id	int	Table ID
dbid	smallint	Database ID
page	int	Page number
type	smallint	Type of lock (bit values for the <i>type</i> column are listed in Table 2-30)
spid	smallint	ID of process that holds the lock
class	char(30)	Name of the cursor this lock is associated with, if any

The bit representations for the *type* column are:

Table 2-30: type control bits in the syslocks table

Decimal	Нех	Status
1	0x1	Exclusive table lock
2	0x2	Shared table lock
3	0x3	Exclusive intent lock (will do page locking on indicated pages)
4	0x4	Shared intent lock
5	0x5	Exclusive page lock
6	0x6	Shared page lock
7	0x7	Update page lock (changes to exclusive if page is actually modified)
256	0x100	Lock is blocking another process
512	0x200	Demand lock

Indexes

None

Referenced by System Procedures sp_lock

sysloginroles

(master database only)

Description

sysloginroles contains a row for each instance of a server login possessing a system-defined role. One row is added for each role possessed by each login. For example, if a single server user is granted three roles, three rows are added to sysloginroles associated with that user's suid.

Table 2-31: Columns in the sysloginroles table

Column	Datatype	Description
suid	smallint	Server user ID
srid	smallint	Server role ID; one of the following: 0 sa_role 1 sso_role 2 oper_role
status	smallint	Reserved

Indexes

Clustered index on suid, sensitivity

Referenced by System Procedures

sp_displaylogin, sp_droplogin, sp_locklogin, sp_role

syslogins

(master database only)

Description

syslogins contains one row for each valid SQL Server user account. On the SQL Server distribution tape, syslogins contains an entry in which the name is "sa", the suid is 1, and the password is null. It also contains an entry named "probe" with an unpublished password. The login "probe" and the user "probe" exist for the Two Phase Commit Probe Process, which uses a challenge and response mechanism to access SQL Server.

Table 2-32: Columns in the syslogins table

Column	Datatype	Description
suid	smallint	Server user ID
status	smallint	Status of the account (see Table 2-33)
accdate	datetime	Date totcpu and totio were last cleared
totcpu	int	CPU time accumulated by login
totio	int	I/O accumulated by login
spacelimit	int	Reserved
timelimit	int	Reserved
resultlimit	int	Reserved
dbname	sysname	Name of database in which to put user when connection established
name	sysname	Login name of user
password	varbinary	Password of user (encrypted)
language	varchar(30)	User's default language
pwdate	datetime	Date the password was last changed
audflags	int	User's audit settings
fullname	varchar(30)	Full name of the user

The bit representations for the *status* column are:

Table 2-33: status control bits in the syslogins table

Decimal	Hex	Status
1	0x1	Password less than 6 characters, or NULL
2	0x2	Account is locked
4	0x4	Password is expired

Indexes

unique clustered index on *suid* unique nonclustered index *on name*

Referenced by System Procedures

 $sp_addalias, sp_addlogin, sp_addremotelogin, sp_adduser, sp_auditlogin, sp_changedbowner, sp_checknames, sp_checkreswords, sp_clearstats, sp_displaylogin, sp_droplogin, sp_helpdb, sp_helpuser, sp_locklogin, sp_modifylogin, sp_reportstats, sp_role\\$

syslogs

(all databases)

Description

syslogs contains the transaction log. It is used by SQL Server for recovery and roll forward, and is not useful to users.

You cannot delete from, insert into, or update *syslogs*. Every data modification operation is logged, so before you can change *syslogs*, the change must be logged. This means that a change operation on *syslogs* adds a row to *syslogs*, which then must be logged, adding another row to *syslogs*, and so on, producing an infinite loop. The loop continues until the database becomes full.

Table 2-34: Columns in the syslogs table

Column	Datatype	Description
xactid	binary(6)	Transaction ID
op	tinyint	Update operation number

Indexes

None

Referenced by System Procedures

None

syslogshold

(master database only)

Description

syslogshold contains information about each database's oldest active transaction (if any) and Replication Server truncation point (if any) for the transaction log, but it is not a normal table. Rather, it is built dynamically when queried by a user. No updates to syslogshold are allowed.

Table 2-35: Columns in the syslogshold table

Column	Datatype	Description
dbid	smallint	Database ID.
reserved	int	Unused.
spid	smallint	Server process ID of the user that owns the oldest active transaction (always 0 for Replication Server).
page	int	Starting page number of active portion in <i>syslogs</i> defined by oldest transaction (or the truncation page in <i>syslogs</i> for Replication Server).
xactid	char(6)	ID of the oldest active transaction (always 0x000000 for Replication Server).
masterxactid	char(6)	ID of the transaction's master transaction (if any) for multi-database transactions; otherwise 0x000000 (always 0x000000 for Replication Server).
starttime	datetime	Date and time the transaction started (or when the truncation point was set for Replication Server).
name	char(67)	Name of the oldest active transaction. It is the value explicitly defined with begin transaction, "Suser_transaction" if no value is specified with begin transaction, or "Schained_transaction" for implicit transactions started by the ANSI chained mode. Internal transactions started by SQL Server have names that begin with the dollar sign (S) and indicate the operation (or "Sreplication_truncation_point" for Replication Server).

Indexes

None

Referenced by System Procedures

None

sysmessages

(master database only)

Description

sysmessages contains one row for each system error or warning that can be returned by SQL Server. SQL Server displays the error description on the user's screen.

Table 2-36: Columns in the sysmessages table

Column	Datatype	Description
error	int	Unique error number
severity	smallint	Severity level of error
dlevel	smallint	Reserved
description	varchar(255)	Explanation of error with place holders for parameters
langid	smallint	Language; null for us_english
sqlstate	varchar(5)	SQLSTATE value for the error

Indexes

clustered index on *error*, *dlevel* unique nonclustered index on *error*, *dlevel*, *langid*

Referenced by System Procedures

 $sp_configure, sp_dboption, sp_depends, sp_droplanguage, sp_getmessage, sp_help, sp_helpdb, sp_helpdevice, sp_helpremotelogin, sp_remoteoption$

sysobjects

(all databases)

Description

sysobjects contains one row for each table, view, stored procedure, log, rule, default, trigger, check constraint, referential constraint, and (in *tempdb* only) temporary object.

Table 2-37: Columns in the sysobjects table

Column	Datatype	Description
name	sysname	Object name
id	int	Object ID
uid	smallint	User ID of object owner
type	char(2)	One of the following object types:
		S system table U user table V view L log P procedure R rule D default TR trigger RI referential constraint
userstat	smallint	Application-dependent type information (32768 decimal [0x8000 hex] indicates to Data Workbench® that a procedure is a report)
sysstat	smallint	Internal status information (256 decimal [0x100 hex] indicates that table is read-only)
indexdel	smallint	Index delete count (incremented if an index is deleted)
schemacnt	smallint	Count of changes in schema of a given object (incremented if a rule or default is added)
sysstat2	smallint	Additional internal status information (see Table 2-38)
crdate	datetime	Date object was created
expdate	datetime	Reserved
deltrig	int	Stored procedure ID of a delete trigger if the entry is a table. Table ID if the entry is a trigger.

Table 2-37: Columns in the sysobjects table (continued)

Column	Datatype	Description
instrig	int	Stored procedure ID of a table's insert trigger
updtrig	int	Stored procedure ID of a table's update trigger
seltrig	int	Reserved
ckfirst	int	ID of first check constraint on the table
cache	smallint	Reserved
audflags	int	Object's audit settings
objspare	int	Spare

The bit representations for the *sysstat2* column are:

Table 2-38: sysstat2 control bits in the sysobjects table

Decimal	Hex	Status
1	0x1	Table has referential constraint
2	0x2	Table has foreign key constraint
4	0x4	Table has more than one check constraint
8	0x8	Table has primary key constraint
16	0x10	Stored procedure can execute only in chained transaction mode
32	0x20	Stored procedure can execute in any transaction mode
64	0x40	Table has IDENTITY field
512	0x200	Table does not contain variable-length columns

Indexes

unique clustered index on *id* unique nonclustered index on *name*, *uid*

Referenced by System Procedures

- $sp_addmessage, sp_addthreshold, sp_auditobject, sp_bindefault, sp_bindmsg,$
- sp_bindrule, sp_checknames, sp_checkreswords, sp_column_privileges,
- sp_columns, sp_commonkey, sp_depends, sp_dropgroup, sp_dropkey,
- sp_dropsegment, sp_dropthreshold, sp_droptype, sp_dropuser, sp_estspace,
- sp_fkeys, sp_foreignkey, sp_help, sp_helpconstraint, sp_helpindex, sp_helpjoins,
- sp_helpkey, sp_helprotect, sp_helpthreshold, sp_indsuspect, sp_modifythreshold,
- sp_pkeys, sp_placeobject, sp_primarykey, sp_procxmode, sp_recompile, sp_relimit,
- sp_remap, sp_rename, sp_spaceused, sp_sproc_columns, sp_statistics,
- sp_stored_procedures, sp_table_privileges, sp_tables, sp_unbindefault,
- sp_unbindmsg, sp_unbindrule

syspartitions

(all databases)

Description

syspartitions contains one row for each partition (page chain) of a partitioned table.

Table 2-39: Columns in the syspartitions table

Column	Datatype	Description
state	smallint	Internal information about the state of the partition
id	int	The object ID of the partitioned table
partitionid	int	The partition ID number
firstpage	int	The page number of the partition's first page
controlpage	int	The page number of the partition's control page
spare	binary(32)	Reserved for future use

Indexes

unique clustered index on id, partitionid

Referenced by System Procedures

sp_help, sp_helpartition, sp_placeobject

sysprocedures

(all databases)

Description

sysprocedures contains entries for each view, default, rule, trigger, procedure, declarative default, and check constraint. The plan or sequence tree for each object is stored in binary form. If the sequence tree doesn't fit in one entry, it is broken into more than one row. The *sequence* column identifies the sub-rows.

Table 2-40: Columns in the sysprocedures table

Column	Datatype	Description
type	smallint	Object type (see Table 2-41)
id	int	Object ID
sequence	smallint	Sequence number if more than one row is used to describe this object
status	smallint	Internal system status
number	smallint	Sub-procedure number when the procedure is grouped (0 for non-procedure entries)

The bit representations for the *type* column are:

Table 2-41: type control bits in the sysprocedures table

Decimal	Hex	Status
1	0x1	Entry describes a plan (reserved)
2	0x2	Entry describes a tree

Indexes

unique clustered index on id, type, sequence, number

Referenced by System Procedures

 $sp_bindefault, sp_bindrule, sp_remap, sp_sproc_columns, sp_stored_procedures, sp_unbindefault, sp_unbindrule\\$

sysprocesses

(master database only)

Description

sysprocesses contains information about SQL Server processes, but it is not a normal table. Rather, it is built dynamically when queried by a user. No updates to *sysprocesses* are allowed.

Use the kill statement to kill a process.

Table 2-42: Columns in the sysprocesses table

Column	Datatype	Description
spid	smallint	Process ID
kpid	int	Kernel process ID
enginenum	int	Number of engine on which process is being executed
status	char(12)	Process ID status, one of: infected background recv sleep send sleep alarm sleep lock sleep sleeping runnable running stopped bad status log suspend
suid	smallint	Server user ID of user who issued command
hostname	char(10)	Name of host computer
program_name	char(16)	Name of front-end module
hostprocess	char(8)	Host process ID number
cmd	char(16)	Command currently being executed
cpu	int	Cumulative CPU time for process in ticks
physical_io	int	Number of disk reads and writes for current command
memusage	int	Amount of memory allocated to process
blocked	smallint	Process ID of blocking process, if any

Table 2-42: Columns in the sysprocesses table (continued)

Column	Datatype	Description
dbid	smallint	Database ID
uid	smallint	ID of user who executed command
gid	smallint	Group ID of user who executed command
tran_name	varchar(64)	Name of the active transaction
time_blocked	int	Time blocked in seconds
network_pktsz	int	Current connection's network packet size

Indexes

None

Referenced by System Procedures

 $sp_dboption, sp_droplogin, sp_locklogin, sp_role, sp_who$

sysprotects

(all databases)

Description

sysprotects contains information on permissions that have been granted to, or revoked from, users, groups, and roles.

Table 2-43: Columns in the sysprotects table

Column	Datatype	Description
id	int	ID of object to which this permission applies.
uid	smallint	ID of user, group, or role to which this permission applies.
action	tinyint	One of the following permissions: select = 193 insert = 195 delete = 196 update = 197 execute = 224 references = 151 create database = 203 create default = 233 create procedure = 222 create rule = 236 create table = 198 create view = 207 dump database = 228 dump transaction = 235
protecttype	tinyint	One of the following values: grant with grant = 0 grant = 1 revoke = 2
columns	varbinary(32)	Bitmap of columns to which this select or update permission applies. Bit 0 indicates all columns; 1 means permission applies to that column; null means no information.
grantor	smallint	User ID of the grantor.

Indexes

unique clustered index on id, action, grantor, uid, protecttype

Referenced by System Procedures

 $sp_change group, sp_drop group, sp_drop user, sp_helprotect, sp_stored_procedures, sp_tables \\$

sysreferences

(all databases)

Description

 $\it sysreferences$ contains one row for each referential integrity constraint declared on a table or column.

Table 2-44: Columns in the sysreferences table

Column	Datatype	Description
indexid	smallint	ID of the unique index on referenced columns
constrid	int	Object ID of the constraint from sysobjects
tableid	int	Object ID of the referencing table
reftabid	int	Object ID of the referenced table
keycnt	tinyint	The number of columns in the foreign key
status	smallint	Reserved
frgndbid	smallint	Reserved
frgndbname	varchar(30)	Name of the database that includes the referencing table (the table with the foreign key); null if the referencing table is in the curren database
pmrydbid	smallint	Reserved
pmrydbname	varchar(30)	Name of the database that includes the referenced table (the table with the primary key); null if the referenced table is in the curren database
spare2	int	Reserved
fokey1	tinyint	Column ID of the first referencing column
foliari16	timedat	Column ID of the 18th referencing
fokey16	tinyint	Column ID of the 16th referencing column
refkey1	tinyint	Column ID of the first referenced column
refkey16	tinyint	Column ID of the 16th referenced column

Indexes

clustered index on *tableid, frgndbname* unique nonclustered index on *frgndbid, constrid* nonclustered index on *reftabid, indexid, pmrydbname*

Referenced by System Procedures sp_fkeys, sp_helpconstraint

sysremotelogins

(master database only)

Description

sysremotelogins contains one row for each remote user who is allowed to execute remote procedure calls on this SQL Server.

Table 2-45: Columns in the sysremotelogins table

Column	Datatype	Description
remoteserverid	smallint	Identifies the remote server
remoteusername	varchar(30)	User's login name on remote server
suid	smallint	Local server user ID
status	smallint	Bitmap of options

Indexes

unique clustered index on remoteserverid, remoteusername

Referenced by System Procedures

 $sp_addremotelogin, sp_checknames, sp_checkreswords, sp_dropremotelogin, sp_dropserver, sp_helpremotelogin, sp_remoteoption\\$

sysroles

(all databases)

Description

sysroles maps server role IDs to local role IDs.

Table 2-46: Columns in the sysroles table

Column	Datatype	Description
id	smallint	Server role ID (srid)
lrid	smallint	Local role ID
type	smallint	Unused
status	smallint	Unused

Indexes

unique clustered index on Irid, sensitivity

Referenced by System Procedures

None

syssegments

(all databases)

Description

syssegments contains one row for each segment (named collection of disk pieces). The default entries are: segment 0 (*system*) for system tables; segment 2 (*logsegment*) for the transaction log; and segment 1 (*default*) for other objects.

Table 2-47: Columns in the syssegments table

Column	Datatype	Description
segment	smallint	Segment number
name	sysname	Segment name
status	int null	Indicates which segment is default segment

Indexes

None

Referenced by System Procedures

 $sp_addsegment, sp_addthreshold, sp_checknames, sp_checkreswords, sp_dropsegment, sp_dropthreshold, sp_dropuser, sp_extendsegment, sp_helpdb, sp_helpindex, sp_helpsegment, sp_helpthreshold, sp_modifythreshold, sp_placeobject\\$

sysservers

(master database only)

Description

sysservers contains one row for each remote SQL Server, Backup ServerTM, or Open ServerTM on which this SQL Server can execute remote procedure calls.

Table 2-48: Columns in the sysservers table

Column	Datatype	Description
srvid	smallint	ID number (for local use only) of the remote server
srvstatus	smallint	Bitmap of options
srvname	varchar(30)	Server name
srvnetname	varchar(32)	Interfaces file name for the server

Indexes

unique clustered index on *srvid* unique nonclustered index on *srvname*

Referenced by System Procedures

sp_addremotelogin, sp_addserver, sp_checknames, sp_checkreswords,

sp_configure, sp_dropremotelogin, sp_dropserver, sp_helpremotelogin,

sp_helpserver, sp_remoteoption, sp_serveroption

syssrvroles

(master database only)

Description

syssrvroles contains a row for each server-wide role.

Table 2-49: Columns in the syssrvroles table

Column	Datatype	Description
srid	smallint	Server role ID
name	varchar	Name of the role

Indexes

unique clustered index on srid, sensitivity

Referenced by System Procedures

 $sp_adduser, sp_changegroup, sp_displaylogin, sp_dropgroup, sp_helpgroup, sp_role \\$

systhresholds

(all databases)

Description

systhresholds contains one row for each threshold defined for the database.

Table 2-50: Columns in the systhresholds table

Column	Datatype	Description
segment	smallint	Segment number for which free space is being monitored.
free_space	int	Size of threshold, in 2K pages (4K for Stratus).
status	smallint	Bit 1 equals 1 for the logsegment's last-chance threshold, 0 for all other thresholds.
proc_name	varchar(255)	Name of the procedure that is executed when the number of unused pages on <i>segment</i> falls below <i>free_space</i> .
suid	smallint	The server user ID of the user who added the threshold or modified it most recently.
currauth	varbinary(255)	A bit mask that indicates which roles were active for <i>suid</i> at the time the threshold was added or most recently modified. When the threshold is crossed, <i>proc_name</i> executes with this set of roles, less any that have been deactivated since the threshold was added or last modified.

Indexes

Unique clustered index on segment, free_space

Referenced by System Procedures

 $sp_add threshold, sp_drop segment, sp_drop threshold, sp_drop user, sp_help threshold, sp_modify threshold$

systypes

(all databases)

Description

systypes contains one row for each system-supplied and user-defined datatype. Domains (defined by rules) and defaults are given, if they exist.

The rows that describe system-supplied datatypes cannot be altered.

Table 2-51: Columns in the systypes table

Column	Datatype	Description
uid	smallint	User ID of datatype creator
usertype	smallint	User type ID
variable	bit	1 if datatype is variable length; 0 otherwise
allownulls	bit	Indicates whether nulls are allowed for this datatype
type	tinyint	Physical storage datatype
length	tinyint	Physical length of datatype
tdefault	int	ID of system procedure that generates default for this datatype
domain	int	ID of system procedure that contains integrity checks for this datatype
name	sysname	Datatype name
printfmt	varchar(255)	Reserved
prec	tinyint	Number of significant digits
scale	tinyint	Number of digits to the right of the decimal point
ident	tinyint	1 if column has the IDENTITY property, 0 if not
hierarchy	tinyint	Precedence of the datatype in mixed mode arithmetic

The listing that follows includes each system-supplied datatype's *name*, *hierarchy*, *type* (not necessarily unique), and *usertype* (unique).

The datatypes are ordered by $\it hierarchy$. In mixed-mode arithmetic, the datatype with the lowest $\it hierarchy$ takes precedence:

Table 2-52: Datatype names, hierarchy, types, and usertypes

Name Hierarchy Type Usertype floatn 1 109 14 float 2 62 8 datetimn 3 111 15 datetime 4 61 12 real 5 59 23 numericn 6 108 28 numeric 7 63 10 decimaln 8 106 27 decimal 9 55 26 moneyn 10 110 17 money 11 60 11 smallmoney 12 122 21 smalldatetime 13 58 22 intn 14 38 13 int 15 56 7 smallint 16 52 6 tinyint 17 48 5 bit 18 50 16 varchar 19 39<				
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sysname 19 39 18 nvarchar 19 39 25 char 20 47 1 nchar 20 47 24 varbinary 21 37 4 timestamp 21 37 80 binary 22 45 3 text 23 35 19	bit	18	50	16
nvarchar 19 39 25 char 20 47 1 nchar 20 47 24 varbinary 21 37 4 timestamp 21 37 80 binary 22 45 3 text 23 35 19	varchar	19	39	2
char 20 47 1 nchar 20 47 24 varbinary 21 37 4 timestamp 21 37 80 binary 22 45 3 text 23 35 19	sysname	19	39	18
nchar 20 47 24 varbinary 21 37 4 timestamp 21 37 80 binary 22 45 3 text 23 35 19	nvarchar	19	39	25
varbinary 21 37 4 timestamp 21 37 80 binary 22 45 3 text 23 35 19	char	20	47	1
timestamp 21 37 80 binary 22 45 3 text 23 35 19	nchar	20	47	24
binary 22 45 3 text 23 35 19	varbinary	21	37	4
text 23 35 19	timestamp	21	37	80
	binary	22	45	3
image 24 34 20	text	23	35	19
=	image	24	34	20

Indexes

unique clustered index on *name* unique nonclustered index on *usertype*

Referenced by System Procedures

 $sp_addtype, sp_bindefault, sp_bindrule, sp_checknames, sp_checkreswords, sp_columns, sp_datatype_info, sp_droptype, sp_dropuser, sp_help, sp_rename, sp_special_columns, sp_sproc_columns, sp_unbindefault, sp_unbindrule\\$

sysusages

(master database only)

Description

sysusages contains one row for each **disk allocation piece** assigned to a database. Each database contains a specified number of database (logical) page numbers. Each disk piece includes the segments on the SQL Server distribution tape, segments 0 and 1.

The create database command checks *sysdevices* and *sysusages* to find available disk allocation pieces. One or more contiguous disk allocation pieces is assigned to the database, and the mapping is recorded in *sysusages*.

Table 2-53: Columns in the sysusages table

Column	Datatype	Description
dbid	smallint	Database ID
segmap	int	Bitmap of possible segment assignments
lstart	int	First database (logical) page number
size	int	Number of contiguous database (logical) pages
vstart	int	Starting virtual page number
pad	smallint	Unused
unreservedpgs	int	Free space not part of an allocated extent

Indexes

unique clustered index on *dbid, lstart* unique nonclustered index on *vstart*

Referenced by System Procedures

 $sp_addsegment, sp_addthreshold, sp_databases, sp_dropdevice, sp_dropsegment, sp_extendsegment, sp_helplog, sp_helpsegment, sp_logdevice, sp_modifythreshold, sp_spaceused$

sysusermessages

(all databases)

Description

sysusermessages contains one row for each user-defined message that can be returned by SQL Server.

Table 2-54: Columns in the sysusermessages table

Column	Datatype	Description
sensitivity	sensitivity	The sensitivity label for the message described by the row; always equal to Data Low for all rows of the table.
error	int	Unique error number. Must be 20000 or above.
uid	smallint	Server user ID (suser_id) of the message creator.
description	varchar(255)	User-defined message with optional place holders for parameters.
langid	smallint	Language ID for this message; null for us_english.

Indexes

clustered index on *error* unique nonclustered index on *error*, *langid*

Referenced by System Procedures

 $sp_addmessage, sp_bindmsg, sp_dropmessage, sp_getmessage, sp_helpconstraint \\$

sysusers

(all databases)

Description

sysusers contains one row for each user allowed in the database, and one row for each group or role.

On the SQL Server distribution tape, *master..sysusers* contains some initial users: "dbo", whose *suid* is 1 and *uid* is 1; "guest", whose *suid* is -1 and *uid* is 2; and "public", whose *suid* is -2 and *uid* is 0. In addition, each role (sa_role, sso_role, and so on) is listed in *sysusers*, because SQL Server treats roles much like groups.

The user *guest* provides a mechanism for giving users not explicitly listed in *sysusers* access to the database with a restricted set of permissions. The "guest" entry in *master* means that any user with an account on SQL Server (that is, with an entry in *syslogins*) can access *master*.

The user "public" refers to all users. The keyword public is used with the grant and revoke commands to signify that permission is being given to or taken away from all users.

Table 2-55: Columns in the sysusers table

Column	Datatype	Description
suid	smallint	Server user ID, copied from syslogins.
uid	smallint	User ID, unique in this database, used for granting and revoking permissions. User ID 1 is "dbo".
gid	smallint	Group ID to which this user belongs. If <i>uid</i> = <i>gid</i> , this entry defines a group. The group "public" has <i>suid</i> = -2; all other groups have <i>suid</i> = - <i>gid</i> .
name	sysname	User or group name, unique in this database.
environ	varchar(255)	Reserved.

Indexes

unique clustered index on *suid* unique nonclustered index on *name* unique nonclustered index on *uid*

Referenced by System Procedures

 $sp_addalias, sp_addgroup, sp_adduser, sp_changedbowner, sp_changegroup, sp_checknames, sp_checkreswords, sp_column_privileges, sp_depends, sp_dropgroup, sp_droptype, sp_dropuser, sp_helpgroup, sp_helprotect, sp_helpuser, sp_indsuspect, sp_stored_procedures, sp_table_privileges, sp_tables$

3

Reserved Words

Keywords, also known as reserved words, are words that have special meanings. This chapter lists Transact-SQL, APT-SQL, and SQL92 keywords.

Transact-SQL Keywords

The following words are reserved by SQL Server as keywords (part of SQL command syntax) and cannot be used as names of database objects such as databases, tables, rules, and defaults. They can be used as names of local variables and as stored procedure parameter names. You can use the system procedure sp_checkreswords to find the names of existing objects that are reserved words. For more information, see the *SQL Server Reference Manual*.

Table 3-1: Transact-SQL keywords

add	char_convert	deallocate	exec
all	check	declare	execute
alter	checkpoint	default	exists
and	close	delete	exit
any	clustered	desc	fetch
arith_overflow	commit	disk	fillfactor
as	compute	distinct	for
asc	confirm	double	foreign
at	constraint	dummy	from
authorization	continue	dump	goto
avg	controlrow	else	grant
begin	convert	end	group
between	count	endtran	having
break	create	errlvl	holdlock
browse	current	errordata	identity_insert
bulk	cursor	errorexit	if
by	database	escape	in
cascade	dbcc	except	index

Table 3-1: Transact-SQL keywords (continued)

insert	on	reconfigure	temporary
intersect	once	references	textsize
into	online	replace	to
is	only	return	tran
isolation	open	revoke	transaction
key	option	role	trigger
kill	or	rollback	truncate
level	order	rowcount	tsequal
like	over	rows	union
lineno	partition	rule	unique
load	perm	save	unpartition
max	permanent	schema	update
max_rows_per_page	plan	select	use
min	precision	set	user
mirror	prepare	setuser	user_option
mirrorexit	primary	shared	using
national	print	shutdown	values
noholdlock	privileges	some	varying
nonclustered	proc	statistics	view
not	procedure	stripe	waitfor
null	processexit	sum	where
numeric_transaction	public	syb_identity	while
of	raiserror	syb_restree	with
off	read	table	work
offsets	readtext	temp	writetext
·			

APT-SQL Keywords

The following words are APT-SQL keywords that are not reserved words in Transact-SQL. If you are planning to use APT-SQL, avoid using these words as identifiers.

Table 3-2: APT-SQL keywords

\$channel	charindex	int	smallint
\$curfield	closesql	interruptsql	sqlbegin
\$curform	connect	list	sqlend
\$curgroup	curindex	local	sqlexpr
Scurpick	cursqlindex	log	sqlrow
\$date	datalength	lower	submit
\$index	datename	mchoice	substring
\$status	datepart	menu	switch
abort	datetime	menubar	switchend
and	define	money	system
append	disconnect	nextquery	tab
apt	enter	nomsg	text
backtab	entry	opensql	textport
bell	exitform	parentname	tinyint
binary	exp	perform	trace
bit	false	positionform	transfer
call	fetchsql	post	trim
callextern	field	printform	true
callform	float	rchoice	upper
callreport	foreach	remote	useform
cancelform	form	reset	variable
case	global	schoice	
channel	hidden	scroll	

SQL92 Keywords

SQL Server release 11.0 includes entry-level SQL92 features. Full SQL92 implementation includes the words listed in the following tables as command syntax. Since upgrading identifiers can be a complex process, we are providing this list for your convenience. The publication of this information does not commit Sybase to providing all of these SQL92 features in subsequent releases. In addition, subsequent releases may include keywords not included in this list.

The following words are SQL92 keywords that are not reserved words in Transact-SQL. $\,$

Table 3-3: SQL92 keywords

absolute	constraints	false
action	corresponding	first
allocate	cross	float
are	current_date	found
assertion	current_time	full
bit	current_timestamp	get
bit_length	current_user	global
both	date	go
cascaded	day	hour
case	dec	immediate
cast	decimal	indicator
catalog	deferrable	initially
char	deferred	inner
char_length	describe	input
character	descriptor	insensitive
character_length	diagnostics	int
coalesce	disconnect	integer
collate	domain	interval
collation	end-exec	join
column	exception	language
connect	external	last
connection	extract	leading

Table 3-3: SQL92 keywords (continued)

left	preserve	time
local	prior	timestamp
lower	real	timezone_hour
match	relative	timezone_minute
minute	restrict	trailing
module	right	translate
month	scroll	translation
names	second	trim
natural	section	true
nchar	session	unknown
next	session_user	upper
no	size	usage
nullif	smallint	value
numeric	space	varchar
octet_length	sql	when
outer	sqlcode	whenever
output	sqlerror	write
overlaps	sqlstate	year
pad	substring	zone
partial	system_user	
position	then	

Potential SQL92 Reserved Words

If you are using the ISO/IEC 9075:1989 standard, also avoid using the following words, as these words may become SQL92 reserved words in the future.

Table 3-4: Potential SQL92 reserved words

after	modify	routine
alias	new	row
async	none	savepoint
before	object	search
boolean	oid	sensitive
breadth	old	sequence
call	operation	signal
completion	operators	similar
cycle	others	sqlexception
data	parameters	structure
depth	pendant	test
dictionary	preorder	there
each	private	type
elseif	protected	under
equals	recursive	variable
general	ref	virtual
ignore	referencing	visible
leave	resignal	wait
less	return	without
limit	returns	
loop	role	

4

SQLSTATE Codes and Messages

This chapter describes SQL Server's SQLSTATE status codes and the associated messages. SQLSTATE codes are required for entry level SQL92 compliance. They provide diagnostic information about two types of conditions:

- Warnings conditions that require user notification but are not serious enough to prevent a SQL statement from executing successfully
- **Exceptions** conditions that prevent a SQL statement from having any effect on the database

Each SQLSTATE code consists of a two-character class followed by a three-character subclass. The class specifies general information about error type; the subclass, more specific information.

SQLSTATE codes are stored in the *sysmessages* system table, along with the messages that display when these conditions are detected. Not all SQL Server error conditions are associated with a SQLSTATE code—only those mandated by SQL92. In some cases, multiple SQL Server error conditions are associated with a single SQLSTATE value.

Warnings

SQL Server currently detects only one SQLSTATE warning condition, which is described in Table 4-1:

Table 4-1: Warnings

Message	Value	Description
Warning - null value eliminated in set function.	01003	Occurs when using an aggregate function (avg, max, min, sum, or count) on an expression with a null value.

Exceptions

SQL Server detects the following types of exceptions:

- · Cardinality violations
- · Data exceptions

- Integrity constraint violations
- Invalid cursor states
- Syntax errors and access rule violations
- Transaction rollbacks
- with check option violations

Exception conditions are described in Table 4-2 through Table 4-8. Each class of exceptions appears in its own table. Within each table, conditions are sorted alphabetically by message text.

Cardinality Violations

Table 4-2: Cardinality violations

Message	Value	Description
Subquery returned more than 1 value. This is	21000	Occurs when:
illegal when the subquery follows =, !=, <, <=, >, >=. or when the subquery is used as an expression.		 A scalar subquery or a row subquery returns more than one row.
•		 A select into parameter_list query in Embedded SQL returns more than one row.

Data Exceptions

Data exceptions occur when an entry:

- Is too long for its datatype, or
- · Contains an illegal escape sequence, or

• Contains other format errors.

Table 4-3: Data exceptions

Message	Value	Description
Arithmetic overflow occurred.	22003	Occurs when:
		 An exact numeric type would lose precision or scale as a result of an arithmetic operation or sum function.
		 An approximate numeric type would lose precision or scale as a result of truncation, rounding, or a sum function.
Data exception - string data right truncated.	22001	Occurs when a <i>char</i> or <i>varchar</i> column is too short for the data being inserted or updated and non-blank characters must be truncated.
Divide by zero occurred.	22012	Occurs when a numeric expression is being evaluated and the value of the divisor is zero.
Illegal escape character found. there are fewer bytes than necessary to form a valid character.	22019	Occurs when searching for strings that match a given pattern if the escape sequence does not consist of a single character.
Invalid pattern string. The character following the escape character must be percent sign, underscore, left square bracket, right square bracket, or the escape character.	22025	Occurs when searching for strings that match a particular pattern if:
		 The escape character is not immediately followed by a percent sign, an underscore, or the escape character itself or
		• The escape character partitions the pattern into substrings whose lengths are not 1 or 2 characters

Integrity Constraint Violations

Integrity constraint violations occur when an insert, update, or delete statement violates a primary key, foreign key, check, or unique constraint or a unique index.

Table 4-4: Integrity constraint violations

Message	Value	Description
Attempt to insert duplicate key row in object object_name with unique index index_name	23000	Occurs when a duplicate row is inserted in a table with a unique constraint or index.

Table 4-4: Integrity constraint violations

Message	Value	Description
Check constraint violation occurred, dbname = database_name, table name = table_name, constraint name = constraint_name	23000	Occurs when an update or delete would violate a check constraint on a column.
Dependent foreign key constraint violation in a referential integrity constraint. dbname = database_name, table name = table_name, constraint name = constraint_name	23000	Occurs when an update or delete on a primary key table would violate a foreign key constraint.
Foreign key constraint violation occurred, dbname = database_name, table name = table_name, constraint name = constraint_name	23000	Occurs when an insert or update on a foreign key table is performed without a matching value in the primary key table.

Invalid Cursor States

Invalid cursor states occur when:

- A fetch uses a cursor that is not currently open, or
- An update where current of or delete where current of affects a cursor row that has been modified or deleted, or
- An update where current of or delete where current of affects a cursor row that not been fetched.

Table 4-5: Invalid cursor states

Message	Value	Description
Attempt to use cursor <i>cursor_name</i> which is not open. Use the system stored procedure sp_cursorinfo for more information.	24000	Occurs when an attempt is made to fetch from a cursor that has never been opened or that was closed by a commit statement or an implicit or explicit rollback. Reopen the cursor and repeat the fetch.
Cursor <i>cursor_name</i> was closed implicitly because the current cursor position was deleted due to an update or a delete. The cursor scan position could not be recovered. This happens for cursors which reference more than one table.		Occurs when the join column of a multi-table cursor has been deleted or changed. Issue another fetch to reposition the cursor.

Table 4-5: Invalid cursor states

Message	Value	Description	
The cursor <i>cursor_name</i> had its current scan position deleted because of a DELETE/UPDATE WHERE CURRENT OF or a regular searched DELETE/UPDATE. You must do a new FETCH before doing an UPDATE or DELETE WHERE CURRENT OF.		Occurs when a user issues an update/delete where current of whose current cursor position has been deleted or changed. Issue another fetch before retrying the update/delete where current of.	
The UPDATE/DELETE WHERE CURRENT OF failed for the cursor <i>cursor_name</i> because	24000	Occurs when a user issues an update/delete where current of on a cursor that:	
it is not positioned on a row.		Has not yet fetched a row	
		 Has fetched one or more rows after reaching the end of the result set 	

Syntax Errors and Access Rule Violations

Syntax errors are generated by SQL statements that contain unterminated comments, implicit datatype conversions not supported by SQL Server, or other incorrect syntax.

Access rule violations are generated when a user tries to access an object that does not exist or one for which he or she does not have the correct permissions.

Table 4-6: Syntax errors and access rule violations

Message	Value	Description
command permission denied on object object_name, database database_name, owner owner_name.	42000	Occurs when a user tries to access an object for which he or she does not have the proper permissions.
Implicit conversion from datatype 'datatype' to 'datatype' is not allowed. Use the CONVERT function to run this query.	42000	Occurs when the user attempts to convert one datatype to another but SQL Server cannot do the conversion implicitly.
Incorrect syntax near object_name.	42000	Occurs when incorrect SQL syntax is found near the object specified.
Insert error: column name or number of supplied values does not match table definition.	42000	Occurs during inserts when an invalid column name is used, or when an incorrect number of values has been inserted.
Missing end comment mark '*/'.	42000	Occurs when a comment that begins with the /* opening delimiter does not also have a */ closing delimiter.

Table 4-6: Syntax errors and access rule violations

Message	Value	Description	
object_name not found. Specify owner.objectname or use sp_help to check whether the object exists (sp_help may produce lots of output).	42000	Occurs when a user tries to reference an object that he or she does not own. When referencing an object owned by another user, be sure to qualify the object name with the name of its owner.	
The size (size) given to the object_name	42000	Occurs when:	
exceeds the maximum. The largest size allowed is <i>size</i> .		 The total size of all the columns in a table definition exceeds the maximum allowed row size. 	
		 The size of a single column or parameter exceeds the maximum allowed for its datatype. 	

Transaction Rollbacks

Transaction rollbacks occur when a user has set the transaction isolation level to 3, but SQL Server cannot guarantee that concurrent transactions are serializable. This type of exception generally results from system problems such as disk crashes and off-line disks.

Table 4-7: Transaction rollbacks

Message	Value	Description
Your server command (process id #process_id) was deadlocked with another process and has been chosen as deadlock victim. Re-run your command.	40001	Occurs when SQL Server detects that it cannot guarantee the serializability of two or more concurrent transactions.

with check option Violation

This class of exception occurs when data being inserted or updated through a view would not be visible through the view.

Table 4-8: with check option violation

Message	Value	Description
The attempted insert or update failed because the target view was either created WITH CHECK OPTION or spans another view created WITH CHECK OPTION. At least one resultant row from the command would not qualify under the CHECK OPTION constraint.	44000	Occurs when the view itself, or any view on which it depends, was created with a with check option clause.

5

Error Messages

When SQL Server encounters a problem—whether caused by the user or the system—it displays information or messages about the problem, how serious it is, and what you can do to fix it. This chapter lists the SQL Server error messages.

Error Message Components

Each error message is composed of the following parts:

- A **message number**, which uniquely identifies the error message
- · A severity level number between 0 and 24
- Message text that tells you what the problem is and may suggest how to fix it

Message Number

Error message numbers are assigned based on the SQL Server module that generates the error. Each SQL Server module is assigned one or more number ranges for the error messages it raises. For example, all dbcc error messages are in these sequences: 2501 to 2599, 7901 to 7999, or 9901 to 9928.

Severity Level Number

The severity level number provides information about the kind of problem SQL Server has encountered. For maximum integrity, SQL Server responds to error conditions by displaying messages from *sysmessages* but taking action according to an internal table. Because a few corresponding messages differ in severity levels, occasionally you may notice a difference in expected behavior if you are developing applications or procedures that refer to SQL Server messages and severity levels.

Error messages with severity levels 11–16 are generated by problems caused by user errors, and can always be corrected by the user. Error messages with severity levels of 17 and higher should be reported to the System Administrator or Database Owner. Severity levels 17 and

 $18\ do$ not terminate the user's session. The following table describes the severity levels:

Table 5-1: Descriptions of the severity levels

	, ,
Level	Description
0	System stored procedure error messages have a severity level of 0.
10	Messages with severity level 10 are not errors at all. They provide additional information after certain commands have been executed and typically do not display the message number or severity level. For this reason, this chapter does not list messages of this level.
11	This level indicates that SQL Server can't find an object referenced in the command. This is often because the user has made a mistake in typing the name of a database object, because the user did not specify the object owner's name, or because of confusion about which database is current. Check spelling of object names, use owner names if the object is not owned by you or "dbo", and make sure you are in the correct database.
12	This level indicates a problem with datatypes. For example, the user may have tried to enter a value of the wrong datatype into a column, or to compare columns of different (and incompatible) datatypes. To correct comparison problems, use the convert function with select.
13	This level indicates that something is wrong with the current user-defined transaction. For example, you may have issued a commit command without having issued a begin transaction, or you may have tried to roll a transaction back to a savepoint that has not been defined (sometimes there may be a typing or spelling mistake in the name of the savepoint). Severity level 13 can also indicate a deadlock, in which case the deadlock victim's process is rolled back. The user must restart his or her command.
14	This level indicates that you don't have the permission necessary to execute the command or access the database object. You can ask the owner of the database object, the owner of the database, or the System Administrator to grant you permission to use the command or object in question.
15	This level indicates that the user has made a mistake in the syntax of the command. The text of these error messages includes the line numbers on which the mistake occurs and the specific word near which it occurs.

Table 5-1: Descriptions of the severity levels (continued)

Level	Description
16	This level indicates that the user has made some kind of nonfatal mistake that doesn't fall into any of the other categories. For example, the user may have tried to update a view in a way that violates the restrictions. Another error that falls into this category is unqualified column names in a command that includes more than one table with that column name. SQL Server has no way to determine which one the user intends. Check command syntax and working database context.
17	This level indicates that the command has caused SQL Server to run out of resources (usually space for the database on the disk) or to exceed some limit set by the System Administrator. These system limits include the number of databases that can be open at the same time and the number of connections allowed to SQL Server. They are stored in system tables and can be checked with the sp_configure command. The Database Owner can correct level 17 error messages indicating that you have run out of space. Other level 17 error messages should be corrected by the System Administrator.
18	This level indicates some kind of internal software bug. However, the command runs to completion and the connection to SQL Server is maintained. An example of a situation that generates severity level 18 is SQL Server detecting that a decision about the access path for a particular query has been made without a valid reason. Since problems that generate such messages don't keep users from their work, they may have a tendency not to report them. Users should be instructed to inform the System Administrator every time an error message with this severity level (and higher) occurs, so that the System Administrator can report them.
19	This level indicates that some nonconfigurable internal limit has been exceeded, and that SQL Server cannot recover gracefully. You must reconnect to SQL Server. See your System Administrator.
20	This level indicates that SQL Server has encountered a bug in some command. The problem has affected only the current process; it is unlikely that the database itself has been damaged. Run dbcc diagnostics. You must reconnect to SQL Server. See your System Administrator.
21	This level indicates that SQL Server has encountered a bug that affects all the processes in the current database. However, it is unlikely that the database itself has been damaged. Restart SQL Server and run dbcc diagnostics. You must reconnect to SQL Server. See your System Administrator.

Table 5-1: Descriptions of the severity levels (continued)

Level	Description
22	This level indicates that the table or index specified in the message has been damaged at some previous time by a software or hardware problem. The first step is to restart SQL Server and run dbcc to determine if other objects in the database are also damaged. Whatever the report from dbcc, it's possible that the problem is in the cache only, and not on the disk itself. If so, restarting SQL Server will fix the problem. If restarting doesn't help, the problem is on the disk as well. Sometimes the problem can be solved by dropping the object specified in the error message and reconnecting to SQL Server. See your System Administrator.
23	This level indicates that the integrity of the entire database is suspect due to damage caused at some previous time by a software or hardware problem. Restart SQL Server and run dbcc diagnostics. Even when a level 23 error indicates that the whole database is suspect, the damage may be confined to the cache, and the disk itself may be fine. If so, restarting SQL Server may fix the problem. If not, see your System Administrator.
24	This level indicates some kind of media failure or (in rare cases) the corruption of <i>sysusages</i> . The System Administrator may have to reload the database. It may be necessary to call your hardware vendor.

Message Text

The error message text is a description of the problem. The descriptions often include a line number, a reference to a kind of database object (a table, column, stored procedure, and so on), or the name of a particular database object. In the text, a percent symbol (%) followed by a character or character string serves as a placeholder for these pieces of data, which SQL Server supplies when it encounters the problem and generates the error message. For example, "%d" is a placeholder for a number; "%.*s" is a placeholder for the name of a particular database object.

The following chart explains the abbreviations that appear in the error message text provided with each error message explanation:

Table 5-2: Error text abbreviation key

Symbol	Stands For
%d, %D	A decimal number
%x, %X, %.*x, %lx, %04x, %08lx	A hexadecimal number
%s	A null-terminated string
%.*s, %*s, %*.s	A string, usually the name of a particular database object
%S_type	A SQL Server-defined structure
%с	A single character
%f	A floating point number
%ld	A long decimal
%lf	A double floating point number

SQL Server Error Messages

This section lists the error messages specific to SQL Server. The list is in numerical order and is divided into tables corresponding to the different SQL Server modules. There are multiple tables for some modules, since those modules call error messages in two or more number ranges.

For explanations and instructions for resolving many of the error messages listed here, see the separate volume, *SQL Server Error Messages*. The "Message Text" column in the following tables contains cross references for the messages documented in that guide at the time the *Reference Supplement* was published.

For more information about the error messages generated by system procedures and catalog stored procedures, see Chapter 1, "System Procedures," and Chapter 2, "Catalog Stored Procedures," in the *SQL Server Reference Manual*.

For general information about error messages and diagnosing system problems, see Chapter 4, "Diagnosing System Problems," in the *System Administration Guide*.

Error Messages 1 to 2416

Table 5-3: 1 to 21, general messages

Number	Severity	Message Text
1	10	Version Date of last upgrade: 92/01/11 13:59:19
21	10	WARNING - Fatal Error %ld occurred at %S_DATE. Please note the error and time, and contact a user with System Administrator (SA) authorization.

Table 5-4: 101 to 199, parser messages

Number	Severity	Message Text
101	15	Line %d: SQL syntax error.
102	15	Incorrect syntax near '%.*s'.
		See "Error 102" in SQL Server Error Messages.

Table 5-4: 101 to 199, parser messages (continued)

Number	Severity	Message Text
103	15	The %S_MSG that starts with '%.*s' is too long. Maximum length is %d.
104	15	Order-by items must appear in the select-list if the statement contains set operators.
105	15	Unclosed quote before the character string '%.*s'.
106	16	Too many table names in the query. The maximum allowable is %d.
107	15	The column prefix '%.*s' does not match with a table name or alias name used in the query. Either the table is not specified in the FROM clause or it has a correlation name which must be used instead.
108	15	The order-by position number '%ld' is out of range of the number of items in the select-list.
109	15	There are more columns in the INSERT statement than values specified in the VALUES clause. The number of values in the VALUES clause must match the number of columns specified in the INSERT statement.
110	15	There are fewer columns in the INSERT statement than values specified in the VALUES clause. The number of values in the VALUES clause must match the number of columns specified in the INSERT statement.
111	15	%s must be the first command in a query batch.
112	15	Variables are not allowed in %s statement.
113	15	Missing end comment mark '*/'.
114	15	'%.*s' is not a recognized DUMP DATABASE/TRANSACTION truncation option.
115	15	The offset '%d' given in a CONTROLROW command does not correspond to the beginning of a statement.
116	15	The symbol '*' can only be used for a subquery select list when the subquery is introduced with EXISTS or NOT EXISTS.
117	15	The %S_MSG name '%.*s' contains more than the maximum number of prefixes. The maximum is %d.
118	15	'%s' option name length plus value string length must total less than %d characters.
119	15	Must pass parameter number %d and subsequent parameters as '@name = value'. Once the form '@name = value' has been used, all subsequent parameters must be passed in the form '@name = value'.
120	15	The SELECT list for the INSERT statement contains fewer items than the INSERT list. The number of SELECT values must match the number of INSERT columns.
121	15	The SELECT list for the INSERT statement contains more items than the INSERT list. The number of SELECT values must match the number of INSERT columns.

Table 5-4: 101 to 199, parser messages (continued)

Number	Severity	Message Text
122	15	The debug option '%d' is larger than the maximum allowed. The highest option available is %d.
123	15	Must attach a value to the binary prefix '0x'; zero-length binary value is not allowed.
124	15	CREATE PROCEDURE contains no statements.
126	15	Cannot nest CREATE PROCEDURE statements.
127	15	This CREATE may only contain 1 statement.
128	15	The name '%.*s' is illegal in this context. Only constants, constant expressions, or variables allowed here. Column names are illegal.
129	15	Fillfactor '%d' is not a valid percentage; fillfactor must be between 1 and 100.
130	15	The comparison operator '= ALL' is not currently supported.
131	15	The size (%d) given to the %S_MSG '%.*s' exceeds the maximum. The largest size allowed is %d.
132	15	The label '%.*s': has already been declared. Label names must be unique within a query batch or stored procedure
133	15	A GOTO statment references the label '%.*s' but the label has not been declared.
134	15	The variable name '%.*s' has already been declared. Variable names must be unique within a query batch or stored procedure.
135	15	Cannot use a BREAK statement outside the scope of a WHILE statement.
136	15	Cannot use a CONTINUE statement outside the scope of a WHILE statement.
137	15	Must declare variable '%.*s'.
138	15	Illegal correlation clause in a subquery.
139	15	Cannot assign a default value to a local variable.
140	15	Can only use IF UPDATE within a CREATE TRIGGER.
141	15	A SELECT statement that assigns a value to a variable must not be combined with data-retrieval operations.
143	15	A compute-by item was not found in the order-by list. All expressions in the compute-by list must also be present in the order-by list
144	15	Cannot use an aggregate in an expression used for the by-list of a GROUP BY clause.
145	15	A subquery with no aggregate functions may only contain expressions in its GROUP BY clause that are in the select-list.
146	15	Cannot perform an aggregate function on a column from a table not declared in the same subquery.

Table 5-4: 101 to 199, parser messages (continued)

Number	Severity	Message Text
147	15	An aggregate function may not appear in a WHERE clause unless it is in a subquery that is in a HAVING clause, and the column being aggregated is in a table named in a FROM clause outside of the subquery.
148	15	Incorrect time syntax in time string '%.*s' used with WAITFOR.
149	15	Time value '%.*s' used with WAITFOR is not a legal value. Check date/time syntax.
150	15	Both terms of an outer join must contain columns.
151	15	'%.*s' is an invalid money value.
152	15	Subqueries that use DISTINCT with a GROUP BY clause are not currently supported.
153	16	Variables/Parameters are not allowed in the ORDER BY clause.
154	15	%S_MSG is not allowed in %S_MSG.
155	15	'%.*s' is not a recognized %s option.
156	15	Incorrect syntax near the keyword '%.*s'.
158	15	Too many ORDER BY expressions. The maximum is %d.
159	15	For DROP INDEX, must give both the table and the index name, in the form tablename.indexname
160	15	Rule does not contain a variable.
161	15	Rule contains more than one variable.
162	15	The select list item identified by the order by number '%ld' is a '*', rather than a column name. When ordering by column number, a column name must appear in the select list position that corresponds to the order by number.
163	15	The COMPUTE BY list does not match the ORDER BY list.
164	15	GROUP BY expressions must refer to column names.
165	16	Privilege %s may not be GRANTed or REVOKEd.
166	15	%s does not allow specifying the database name as a prefix to the object name.
167	16	May not create a trigger on a temporary object.
168	15	The %S_MSG '%.*s' is out of the range of machine representation (%d bytes).
169	15	Expression '%d' and '%d' in the ORDER BY list are same. Expressions in the ORDER BY list must be unique.
171	15	Can't use SELECT INTO in Browse Mode.
172	15	Can't use HOLDLOCK in Browse Mode
173	15	The definition for column '%.*s' must include a datatype.

Table 5-4: 101 to 199, parser messages (continued)

Number	Severity	Message Text
174	15	The function '%.*s' requires %d arguments.
175	15	Functions may only be nested to level %d.
176	15	Function '%.*s' is not yet implemented.
177	15	%s cannot create a temporary object (with '#' as the first character name.
178	15	A RETURN statement with a return status may only be used in a stored procedure.
179	15	Can't use the OUTPUT option when passing a constant to a stored procedure.
180	15	There are too many parameters in this CREATE PROCEDURE statement. The maximum number is $\%d.$
181	15	Can't use the OUTPUT option in a DECLARE statement.
182	15	Table and column names must be supplied for the READTEXT or WRITETEXT utility.
183	15	The scale (%d) for column '%.*s' must be within the range %d to %d.
184	15	Invalid money datatype specification for column '%.*s'. Only money(19, 4) is allowed for non-external tables.
185	15	Data stream is invalid for WRITETEXT command in bulk form.
186	15	Data stream missing from WRITETEXT command.
187	15	Odd number of bytes in IMAGE data.
188	15	Can't specify a log-device in a CREATE DATABASE statement without also specifying at least one non-log-device.
189	15	Function '%.*s' requires %d to %d arguments.
190	15	Can not update the global variable '%.*s'.
191	15	Some part of your SQL statement is nested too deeply. Please re-write the query or break it up into smaller queries.
192	15	Can't create a view inside a stored procedure.
193	15	The object or column name starting with '%.*s' is too long. The maximum length is %d characters.
195	15	'%.*s' is not a recognized %S_MSG.
196	15	SELECT INTO must be the first query in a SQL statement containing set operators.
197	15	Set operators may not appear within the definition of a view.
198	15	Browse mode is invalid for statements containing set operators.

Table 5-4: 101 to 199, parser messages (continued)

Number	Severity	Message Text
199	15	An INSERT statement may not contain a SELECT statement that assigns values to a variable.

Table 5-5: 201 to 298, sequencer messages

Number	Severity	Message Text
201	16	Procedure %.*s expects parameter %.*s, which was not supplied.
202	11	Internal error Unable to open table at query execution time.
203	16	The name '%.*s' is not a valid identifier.
204	20	Normalization error; node %s
205	16	All queries in a SQL statement containing set operators must have an equal number of expressions in their target lists.
206	16	Operand type clash: %s is incompatible with %s
207	16	Invalid column name '%.*s'.
		See "Error 207" in SQL Server Error Messages.
208	16	%.*s not found. Specify owner.objectname or use sp_help to check whether the object exists (sp_help may produce lots of output).
		See "Error 208" in SQL Server Error Messages.
209	16	Ambiguous column name %.*s
210	16	Syntax error converting DATETIME from BINARY/VARBINARY string.
211	16	Syntax error converting SMALLDATETIME from BINARY/VARBINARY string.
212	16	Expression result length exceeds maximum: max - %d found - %d
213	16	Insert error: column name or number of supplied values does not match table definition.
		See "Error 213" in SQL Server Error Messages.
214	16	Cannot convert parameter %.*s to type %.*s expected by procedure.
216	20	Attempt to automatically drop temporary table failed.
217	16	Maximum stored procedure nesting level exceeded (limit %d).
218	16	Given parameter %.*s is too large; maximum size for this parameter is %d bytes.
219	16	Print format failed to match with a result column.
220	16	Arithmetic overflow error for type %s, value = %ld.

Table 5-5: 201 to 298, sequencer messages (continued)

Number	Severity	Message Text
221	16	Column of type (%s) does not allow nulls. It may not be compared with null.
222	20	Unintelligible query plan step encountered.
223	11	Object %ld specified as a default for tabid %ld, colid %d is missing or not of type default.
224	11	Object %d specified as a rule/check constraint for tabid %d, colid %d is missing or not of type default.
225	11	Cannot run queryreferenced object (name %.*s) dropped during query optimization.
		See "Error 225" in SQL Server Error Messages.
226	16	%s command not allowed within multi-statement transaction.
		See "Error 226" in SQL Server Error Messages.
227	16	Arithmetic overflow error ocurred while converting the string '%.*s' to type %s.
228	14	Query is based on a view that no longer exists (id = %ld)cannot run.
229	14	%s permission denied on object %S_OBJID, database %S_DBID, owner %.*s
		See "Error 229" in SQL Server Error Messages.
230	14	%s permission denied on column %.*s of object %S_OBJID, database %S_DBID, owner %.*s
		See "Permissions on Views and Stored Procedures" on page 6-22 in the SQL Server Security Administration Guide or "Permissions on Views and Stored Procedures" on page 4-13 in the SQL Server Security Features User's Guide.
231	11	Getdefault: no such default. id=%ld dbid=%d
232	16	Arithmetic overflow error for type %s, value = %f.
		See "Error 232" in SQL Server Error Messages.
233	16	The column %.*s in table %.*s does not allow null values.%S_EED
234	16	There is insufficient result space to convert MONEY value to CHAR.
235	16	Precision error during %S_MSG conversion of %s value '%s' to a %s field.
236	16	The conversion from CHAR to MONEY resulted in a MONEY overflow error.
237	16	There is insufficient result space to convert MONEY value to %s.
238	16	There is insufficient result space to convert %s value (= %d) to MONEY.
239	16	Table '%.*s' does not exist. Please refer to sysobjects for correct name.
240	16	There is insufficient result space to convert DATETIME value to CHAR.
241	16	Scale error during %S_MSG conversion of %s value '%s' to a %s field.

Table 5-5: 201 to 298, sequencer messages (continued)

Number	Severity	Message Text
242	16	The conversion of CHAR to DATETIME resulted in a DATETIME value out of range.
243	16	Type '%.*s' is not a defined system type.
244	16	The conversion of CHAR value '%.*s' overflowed an INT1 field, use a larger integer field.
245	16	Domain error during %S_MSG conversion of %s value '%s' to a %s field.
246	16	The conversion of CHAR value '%.*s' overflowed an INT2 field, use a larger integer field.
247	16	Arithmetic overflow during %S_MSG conversion of %s value '%s' to a %s field .
248	16	The conversion of CHAR value '%.*s' overflowed an INT4 field. Maximum integer value exceeded.
249	16	Syntax error during %S_MSG conversion of %s value '%s' to a %s field.
251	16	Unable to allocate ancillary table for query optimization. Maximum number of tables in a query (%d) exceeded.
252	16	Can't group by a bit field.
253	16	Maximum number of group-by expressions exceeded (16 max, %d found).
254	16	Maximum number of columns in a work table (%d) exceeded.
255	16	Maximum row size (%d) for a work table exceeded.
256	16	The data type '%s' is invalid for the %s function. Allowed types are: CHAR/VARCHAR and BINARY/VARBINARY.
257	16	Implicit conversion from datatype '%s' to '%s' is not allowed. Use the CONVERT function to run this query.
258	20	Database '%.*s' missing during query recompile.
259	16	Ad-hoc updates to system catalogs not enabled. A user with System Security Officer (SSO) role must reconfigure system to allow this.
		See "Error 259" in SQL Server Error Messages.
261	16	'%.*s' is not a recognized global variable.
262	16	%s permission denied, database %S_DBID, owner %.*s
263	16	Must specify table to SELECT * FROM.
264	16	Column name %.*s appears more than once in the result column list.
265	16	Insufficient result space for %S_MSG conversion of %s value '%s' to a %s field.
266	16	Transaction count after EXECUTE indicates that a COMMIT or ROLLBACK TRAN is missing. Previous count = %ld, Current count = %ld.
267	16	Object '%.*s' cannot be found.

Table 5-5: 201 to 298, sequencer messages (continued)

Number	Severity	Message Text
268	16	You can't run SELECT INTO in this database. Please check with the Database Owner.
		See "Error 268" in SQL Server Error Messages.
269	16	NULL value cannot be specified for conversion from datatype '%s' to '%s'.
270	16	Table '%.*s' can't be modified.
272	16	Can't update a TIMESTAMP column.
273	10	Warning: A non-null value cannot be inserted into a TIMESTAMP column by the user. The database timestamp value has been inserted into the TIMESTAMP field instead.
274	20	A SYSTEM exception was raised with an unrecognized minor number %d.
276	16	The parameter '%.*s' in the procedure '%.*s' was not declared as an OUTPUT parameter.
277	16	There was a transaction active when exiting the stored procedure '%.*s'. The temporary table '%.*s' was dropped in this transaction either explicitly or implicitly. This transaction has been aborted to prevent database corruption.
278	16	TEXT and IMAGE datatypes may not be used in a GROUP BY clause.
279	16	TEXT and IMAGE datatypes are invalid in this subquery or aggregate expression
280	16	Only TEXT and IMAGE datatypes are valid with the TEXTPTR function.
281	16	%d is not a valid style number when converting from DATETIME to a character string.
282	10	Procedure '%.*s' attempted to return a status of NULL, which is not allowed. A status of 0 will be returned instead.
283	16	You can't use browse mode with DBLIB 2.0 you must upgrade to DBLIB 4.0 in order to run this query.
284	16	Rules may not be bound to TEXT or IMAGE datatypes.
285	16	READTEXT and WRITETEXT commands may not be used with views.
286	16	The logical tables INSERTED and DELETED may not be updated.
287	16	%s command not allowed within a trigger.
288	16	The PATINDEX function operates on CHAR, VARCHAR, and TEXT datatypes only.
290	16	Trace 3604 is illegal within a stored procedure.
291	16	Access to sysgams is disallowed.
292	16	There is insufficient result space to convert SMALLMONEY value to CHAR.

Table 5-5: 201 to 298, sequencer messages (continued)

Number	Severity	Message Text
294	16	The conversion from CHAR to SMALLMONEY resulted in a SMALLMONEY overflow error.
296	16	The conversion of CHAR to SMALLDATETIME resulted in a SMALLDATETIME value out of range.
297	16	There is insufficient result space to convert SMALLDATETIME value to CHAR.
298	16	The conversion from DATETIME to SMALLDATETIME resulted in a SMALLDATETIME overflow error.

Table 5-6: 301 to 316, decision module messages

Number	Severity	Message Text
301	16	Query contains an illegal outer-join request.
303	16	The table '%.*s' is an inner member of an outer-join clause. This is not allowed if the table also participates in a regular join clause.
304	16	The table '%.*s' is outer-joined with itself.
305	16	The column '%.*s' (user type:%.*s) is joined with '%.*s' (user type:%.*s). The user types are not compatible: underlying types must be identical in order to join.
306	16	TEXT and IMAGE datatypes may not be used in a WHERE clause, except with the LIKE expression.
307	10	Index '%.*s' specified as optimizer hint in the FROM clause of table '%.*s' does not exist. Optimizer will choose another index instead.
308	20	Table not open for range table entry '%d', objid '%ld', dbid '%d'.
309	20	Wrong sdes for range table entry '%d'. Expected object '%ld', dbid '%d', got object '%ld', dbid '%d'.
310	10	Index id %d on table id %d cannot be used in the optimization of a query as it is SUSPECT. Please have the SA run DBCC REINDEX on the specified table.
311	16	The optimizer could not find a unique index which it could use to scan table '%.*s' for cursor '%.*s'.
312	16	Index id %d on table '%.*s' is explicitly specified in cursor '%.*s' declared for update. This index is either not unique or its key includes a column in the for update of list. This cursor my be closed on an update or a delete.
313	16	The optimizer could not find a unique index which it could use to perform an isolation level 0 scan on table '%.*s'.

Table 5-6: 301 to 316, decision module messages (continued)

Number	Severity	Message Text
314	16	WARNING: A non-unique clustered index has been forced on an isolation level 0 scan on table '%.*s'. If the scan must restart, the scan will be repositioned at the beginning of the duplicate key group. Thus, it is possible that this can infin
315	18	Internal error - The SQL Server was unable to find a join order to run this query. Please inform technical support.
316	17	Cannot compile the query because the space required for the search arguments (%d bytes) exceeds the maximum amount of memory that can be granted. Try reducing the number of search arguments.

Table 5-7: 401 to 434, compile messages

Number	Severity	Text
401	16	Unimplemented command or expression %s.
403	16	Invalid operator for datatype op: %s type: %s.
		See "Error 403" in SQL Server Error Messages.
404	19	Too many ANDs or ORs in expression (limit %d per expression level). Try splitting query or limiting ANDs and ORs.
		See "Error 404" in SQL Server Error Messages.
405	20	Cannot route query results - query internal representation corrupted.
406	23	Ord_needed: Can't find index for varno=%d, objid=%ld.
407	19	You query creates too many internal work tables and/or user tables: the maximum is %d. Simplify the query and try again.
408	20	Is_var: Unknown data type %d.
409	16	The %s operation cannot take a %s datatype as an argument.
410	20	Compute clause #%d, 'by' expression #%d is not in the order-by list.
411	20	Compute clause #%d, aggregate expression #%d is not in the select list.
412	16	Cannot update more than 1 sysindexes row at a time.
413	17	Maximum procedure %s count exceeded. Limit is %d. Modify the procedure to use fewer %ss.
414	16	The current query would generate a key size of %d for a work table. This exceeds the maximum allowable limit of %d.
415	16	The current query would require an index on a work table to be built with %d keys. The maximum allowable number of keys is %d.

Table 5-7: 401 to 434, compile messages (continued)

Number	Severity	Text
416	16	Create of work table failed because row size would be %d. This exceeds the maximum allowable size of a row in a table, %d.
418	20	Can't find the real column name corresponding to the column heading '%.*s'.
420	16	TEXT and IMAGE datatypes may not be used in an ORDER BY clause.
421	16	TEXT and IMAGE datatypes may not be selected as DISTINCT.
422	19	Too many nested expressions or logical operators to compile. Try splitting query or limiting ANDs and ORs.
423	20	Table referenced in a foreign key constraint is missing, database = '%S_DBID', table = '%S_OBJID'.
424	20	Failed to enforce a referential constraint, database = '%S_DBID', table = '%S_OBJID'.
425	20	Referencing table in a foreign key constraint is missing, database = '% S_DBID ', table = '% S_DBID '.
426	20	Primary key column referenced in a foreign key constraint is missing, database '%S_DBID', table = '%S_OBJID'.
427	20	Referencing column in a foreign key constraint is missing from system catalog, database = '%S_DBID', table = '%S_OBJID'.
428	20	Too many table names or referential constraints in the query, maximum allowed table references is '%d'.
		See "Error 428" in SQL Server Error Messages.
429	18	Invalid constraint type passed to compile referential constraint. This is an internal error.
430	18	Constraint id info in the resvar for check constraints is missing. This is an internal error, database = '%S_DBID', table = '%S_OBJID'.
		See "Error 430" in SQL Server Error Messages.
431	26	Node off RESDOM is not MULTARG as expected.
432	16	Security Label datatypes may not be used in an ORDER BY clause.
433	17	Unable to allocate work table to process referential constraint. Query exceeds th maximum limit (%d) of work tables. Either simplify the query or reduce the number of referential constraints on the tables involved in the query.
434	16	Work table cannot be allocated for processing the order by clause which require a sort. Maximum limit (%d) of work tables is exceeded while processing this query. Simplify the query and retry.

Table 5-8: 501 to 599, query processor messages

Number	Severity	Message Text
501	20	There is no result-list for a SELECT statement.
502	18	Internal error encountered in merging rows; resubmit query batch.
502	11	
		Stored procedure '%.*s' not found.
508	20	No begin-row pointer found in plan.
509	11	User name '%.*s' not found.
510	20	Bad eop type 0x%x .
511	16	Updated or inserted row is bigger than maximum size (%d bytes) allowed for this table.
		See "Error 511" in SQL Server Error Messages.
512	16	Subquery returned more than 1 value. This is illegal when the subquery follows $=$, $!=$, $<$, $<=$, $>$, $>=$, or when the subquery is used as an expression.
513	16	A column insert or update conflicts with a rule imposed by a previous CREATE RULE command. The command was aborted. The conflict occurred in database '%S_DBID', table '%S_OBJID', column '%.*s'
514	20	Expression stack overflow. Usually this is because built-in functions have been nested too deeply. Try to rephrase the query using less deeply nested functions.
515	16	Attempt to insert NULL value into column '%.*s', table '%.*s'; column does not allow nulls. Update fails.%S_EED
		See "Error 515" in SQL Server Error Messages.
516	18	Attempt to get system date/time failed.
517	16	Adding a value to a %s field caused overflow.
518	16	Cannot convert type '%s' to type '%s'.
519	16	Overflow resulted from MONEY multiplication.
520	16	Overflow resulted from MONEY division.
521	16	Overflow resulted from MONEY addition.
522	16	Overflow resulted from MONEY subtraction.
523	16	Overflow resulted from %s minus operation.
524	16	Overflow resulted from MONEY remainder (modulo) operation.
526	18	SQL Server has run out of alarms. Re-run your command when there are fewer users running WAITFOR.
527	20	Cannot remove alarm.
528	20	System error detected during attempt to use upsleep system call.
529	16	Explicit conversion from datatype '%s' to '%s' is not allowed.

Table 5-8: 501 to 599, query processor messages (continued)

Number	Severity	Message Text
530	16	Attempt to insert NULL value into column %d in work table (table id %ld); column does not allow NULLS. UPDATE fails.
532	16	The timestamp (changed to %.*s) shows that the row has been updated by another user.
533	20	Can't find a range table entry for range %d.
534	16	TEXT and IMAGE datatypes require DBLIB version 4.0 or greater.
535	16	Difference of two datetime fields caused overflow at runtime.
536	16	Invalid length parameter passed to the substring function.
537	16	Overflow resulted from a SMALLMONEY remainder operation.
538	16	'%.*s' cannot be found. This language might have been dropped. Please contact a user with System Administrator (SA) role.
539	20	Access methods error code %d encountered but run does not know how to handle it.
540	16	Schema for table '%.*s' has changed since compilation of this query. Please reexecute query.
541	18	An unknown arithmetic exception type was reported. The transaction has been aborted. This is an internal system error. Please contact a user with System Administrator (SA) role.
542	16	An invalid datetime value was encountered. Value exceeds year 9999.
543	18	Constraint id information not found upon constraint violation, dbname = '%S_DBID', table name = '%.*s'. This is an internal error.
544	16	Unknown Constraint violation occurred, database = '%.*s', table name = '%.*s', constraint name = '%.*s'.
545	18	Constraint violation occurred, entry for the constraint missing from system catalog, database = '%.*s', table name = '%.*s', constraint name = '%.*s'.
546	16	Foreign key constraint violation occurred, dbname = '%.*s', table name = '%.*s', constraint name = '%.*s'.%S_EED
547	16	Dependent foreign key constraint violation in a referential integrity constraint. dbname = '%.*s', table name = '%.*s', constraint name = '%.*s'.%S_EED
548	16	Check constraint violation occurred, dbname = '%.*s', table name = '%.*s', constraint name = '%.*s'.%S_EED
549	18	Constraint violation occurred, bad constraint type passed to the exception handler.

Table 5-8: 501 to 599, query processor messages (continued)

Number	Severity	Message Text
550	16	The attempted insert or update failed because the target view was either created WITH CHECK OPTION or spans another view created WITH CHECK OPTION. At least one resultant row from the command would not qualify under the CHECK OPTION constrain
551	20	An unknown EVAL was sent to the execution module.
552	16	A column insert or update conflicts with a rule bound to the column. The command is aborted. The conflict occured in database '%.*s', table '%.*s', rule '%.*s', column '%.*s'.%S_EED
553	16	The number of parameters/variables in the FETCH INTO clause does not match the number of columns in cursor '%.*s' result set.
554	16	The UPDATE/DELETE WHERE CURRENT OF to the cursor '%.*s' failed because the row has changed since it was fetched.
555	16	The UPDATE/DELETE WHERE CURRENT OF to the cursor '%.*s' failed because the key of the row used in identifying the row changed since it was fetched.
556	16	The table referenced in the UPDATE/DELETE WHERE CURRENT OF is not part of the result set tables of cursor '%.*s'.
557	16	The cursor '%.*s' can not be used as it could not be found. It is possible that either it was not declared or it is not available in the current context.
558	16	Attempt to open cursor '%.*s' which is already open.
559	16	Attempt to use a cursor '%.*s' which is not open. Use the system stored procedure sp_cursorinfo for more information.
560	16	The UPDATE/DELETE WHERE CURRENT OF failed for the cursor '%.*s' because it is not positioned on a row.
562	16	The CURINFO datastream was not sent before the cursor command so no current cursor context is available.
563	16	There is already another cursor with the name '%.*s' at the nesting level '%d'.
564	16	The cursor identifiers are not available.
565	16	The open processing for cursor '%.*s' did not stop anywhere. The DECLARE CURSOR could have been an invalid statement or there is some internal problem.
566	26	The procedure buffer is not linked to the procedure header for an execute cursor '%.*s'. This is probably an internal system problem.
567	14	You must have the following role(s) to execute this command/procedure: '%.*s'. Please contact a user with the appropriate role for help.
568	14	The caller does not have the required System Security Officer (SSO) role. Please contact a user with System Security Officer (SSO) role for help.
569	16	The specified object with object ID '%d' is not found.

Table 5-8: 501 to 599, query processor messages (continued)

Number	Severity	Message Text
570	14	Only a person with System Security Officer (SSO) role can change another person's password.
571	16	Invalid user specified, password left unchanged.
572	14	Invalid caller's password specified, password left unchanged.
573	16	New password specified is too short. Minimum length of acceptable passwords is $6\ \mathrm{characters}.$
574	16	New password supplied is the same as the previous password. Please supply a different new password.
575	16	Error occured in internal encryptionroutines.
576	18	Access was denied into the master database. Password left unchanged.
577	18	The caller of the set_password builtin was not found! Password left unchanged.
578	18	Date acquisition function failed. Unable to retrieve the correct date in the set_password builtin function. Password left unchanged.
579	18	Unable to start a transaction in the set_password builtin. Password left unchanged.
580	18	Unable to update Syslogins in the set_password builtin. Password left unchanged.
581	18	Unable to open Syslogins table in the set_password builtin. Password left unchanged.
582	16	Cursor '%.*s' was closed implicitly because the current cursor position was deleted due to an update or a delete. The cursor scan position could not be recovered. This happens for cursors which reference more than one table.
583	16	The cursor '%.*s' had it's current scan position deleted either because of a DELETE/UPDATE WHERE CURRENT OF or a regular searched DELETE/UPDATE. You must do a new FETCH before doing an UPDATE or DELETE WHERE CURRENT OF.
584	16	Explicit value specified for identity field in table '%.*s' when IDENTITY_INSERT is set to OFF.
585	16	Explicit value must be specified for identity field in table '%.*s' when IDENTITY_INSERT is set to ON.
586	16	Illegal identity value specified for identity field '%.*s' in table '%.*s'.
587	16	Identity value overflow for field '%.*s' while inserting into table '%.*s'.
588	20	Failure adding identity column to table '%.*s' via select into.
589	16	Invalid role string received.
590	16	Dynamic SQL error - Prepared statement '%.*s' does not exist.

Table 5-8: 501 to 599, query processor messages (continued)

Number	Severity	Message Text
591	16	Dynamic SQL error - Prepared statement '%.*s' is already being used by a cursor.
592	16	The DELETE WHERE CURRENT OF to the cursor '%.*s' failed because the cursor is on a join.
593	16	The UPDATE WHERE CURRENT OF to the cursor '%.*s' failed because column '%.*s' being updated was not specified in the FOR UPDATE OF list.
594	16	The UPDATE WHERE CURRENT OF to the cursor '%.*s' failed because column '%.*s' being updated was not specified in the SELECT list.
595	16	Trying to return NULL from stored procedure for bit variable '%.*s'
596	17	Your query overflowed the space allocated for aligning internal data structures. Please simplify your query by breaking it up into a series of shorter queries.
599	16	The procedure, '%.*s', that cursor '%.*s' is declared on has been dropped and recreated since the first time the cursor was opened.

Table 5-9: 601 to 680, access manager messages

Number	Severity	Message Text
601	21	Descriptor for system table '%ld' in database '%d' not found in the descriptor hash table.
		See "Error 601" in SQL Server Error Messages.
602	21	Could not find row in sysindexes for dbid '%d', object '%ld',index '%d'. Run DBCC CHECKTABLE on sysindexes.
603	19	There are not enough system session descriptors available to run this query. The maximum number available to a process is %d. Split query and rerun.
		See "Error 603" in SQL Server Error Messages.
604	21	Could not find row in sysobjects for object '%ld' in database '%.*s'. Run DBCC checktable on sysobjects.
605	21	Attempt to fetch logical page %ld in database '%.*s' belongs to object id '%ld', not to object '%.*s'.
		See "Error 605" in SQL Server Error Messages.
607	21	Insufficient room was allocated in the session descriptor for object '%.*s' for search arguments. Only %d search arguments were anticipated.
608	0	Buffer holding logical page %ld of object '%.*s' in database '%.*s' was not kept in the first or second slot of the session descriptor for that object during a scan.
610	19	Maximum number of databases that may be accessed by a transaction is 8. This number has been exceeded by this query.

Table 5-9: 601 to 680, access manager messages (continued)

Number	Severity	Message Text
611	21	Attempt made to end a transaction that is idle or in the middle of an update.
		See "Error 611" in SQL Server Error Messages.
612	21	Attempt made to log a row of unknown type %d.
613	21	Request made to retrieve more rows from an already completed scan of object '%.*s' in database '%.*s'.
614	21	A row on page %ld was accessed that has an illegal length of %d in database '%.*s'.
		See "Error 614" in SQL Server Error Messages.
615	21	Unable to find database table.
616	20	Attempt to hash a previously hashed descriptor for object '%.*s' in database '%.*s'.
617	20	Descriptor for object '%ld' in database '%d' not found in the hash table during attempt to unhash it.
618	21	A varno of %d was passed to opentable - the largest valid value is %d.
619	20	A deferred update was requested but the query is not one of INSERT, DELETE or UPDATE.
620	21	Log record encountered at deferred update time with either a row length of less than 2 or an invalid log type. The log type was %d and the row length was %d.
621	21	A log record was encountered of type %d that is not one of the valid deallocation types.
622	20	Opentable was passed a varno of %d. Object '%.*s' already has that session descriptor in use.
623	21	Attempt to retrieve row from page via RID failed because logical page %ld is not a data page. %S_RID. %S_PAGE.
		See "Error 623" in SQL Server Error Messages.
624	21	Attempt to retrieve row from page via RID failed because the requested RID has a higher number than the last RID on the page. %S_RID.%S_PAGE.
		See "Error 624" in SQL Server Error Messages.
625	21	Could not retrieve row from logical page %ld via RID because the entry in the offset table for that RID is less than or equal to 0.
		See "Error 625" in SQL Server Error Messages.
626	21	Tried to read a data page instead of an index page. %S_PAGE.
627	20	A transaction tried to call beginupdate while in state 'prepare'.
628	13	Attempt to issue 'SAVE TRANsaction' when there is no active transaction.

Table 5-9: 601 to 680, access manager messages (continued)

Number	Severity	Message Text
629	21	Fatal attempt to delete clustered index entry for page %ld - index row contains page %ld - referenced by index page %ld.
		See "Error 629" in SQL Server Error Messages.
630	21	The end of page limit has been exceeded while building an offset table for object %ld on page %ld, page addr 0x%lx, eop addr 0x%lx, sargptr addr 0x%lx.
631	21	The length of %d passed to delete row routine for the row at offset %d is incorrect on the following page: %S_PAGE.
		See "Error 631" in SQL Server Error Messages.
632	20	Memmove() was called with a length of %d - maximum allowed length is 2048.
		See "Error 632" in SQL Server Error Messages.
633	21	The PG_DEALLOC bit set by recovery is on at runtime on the following page. %S_PAGE.
634	20	Memmove() was called with an address of 0x%lx and a length of %d - which would cross a 2k boundary.
635	20	Process %d tried to remove DES resource lock that it doesn't hold - %S_DES .
637	20	Index shrink program returned invalid status of 0.
638	20	Memmove() was called with an address of 0x%lx - which is not allocated memory.
639	21	Attempt to fetch logical page %ld dbid %d failed - page is not currently allocated
640	21	Attempt to insert/delete row on wrong type of page. %S_PAGE.
641	21	Attempt to add BEGINUPDATE record in transaction %S_RID that already has an active CMD.
642	20	Attempt to begin update in transaction %S_RID which already has an active transaction.
643	20	Attempt to read page %ld in database '%.*s' which is not allocated.
644	21	Index row entry for index id %d of table '%.*s' in database '%.*s' is missing. Drop and re-create the index. (index page %ld, row %d, data page %ld)
		See "Error 644" in SQL Server Error Messages.
649	21	Could not find the clustered index entry for Page %ld Objid %ld status 0x%x. Index page %ld was searched for this entry in database '%.*s'.
650	26	Page %ld, dbid %d not locked.
651	26	Startscan was called with an illegal combination of index and scan mode.
652	20	The buffer $0x\%lx$ should be kept in sdes $0x\%lx$ on entry to this function and it is not.

Table 5-9: 601 to 680, access manager messages (continued)

Number	Severity	Message Text
653	26	Buffer not rlocked. %S_BUF. %S_PAGE.
654	26	Page %ld, dbid %d not exclusive locked.
655	26	Page should be marked as having overflow page: %S_PAGE.
656	26	Locking not stipulated while attempting to modify page. %S_PAGE.
657	26	Passed buffer pointer for previous page is for page %ld, when the actual previous page is %ld. These pages are in database '%*.s'.
658	22	Last log page in database '%.*s' incorrectly identified as page %ld. Run DBCC checktable on syslogs.
659	16	Table id %d contains suspect indexes. This table is only available for read-only purposes until the DBCC REINDEX command has been run on the indicated table to rebuild its suspect indexes.
660	10	Index id %d cannot be used to access table id %d as it is SUSPECT. Please have the SA run the DBCC REINDEX command on the specified table.
661	21	As part of a transaction rollback, an attempt was made to modify object '%S_OBJID' in database '%.*s', even though the current session is not holding an exclusive lock on that object.
662	18	The index with index id '%d' on object with object id = '%d' was not found during cursor scan fixups. The fixup was being done for cursor '%.*s'. This is an internal error.
663	18	The lock on page '%d' for object with object id = '%d' could not be obtained during cursor scan fixups. The fixup was being done for cursor '%.*s'. This is an internal error.
664	18	The parameters passed to cursfix_main() were not correct. This is an internal error.
665	18	The cursor fixup is being done for the pre delete case with the data row for a scan using a non-clustered index and there was no fixup done for pre-delete of the non-clustered index row. This is an internal error.
666	18	The current position deleted bit is set for an SDES but there is no fixup information saved. This is an internal error.
667	26	Illegal locking strategy encountered at scan initialization. Object %S_OBJID, database %S_DBID. This is an internal error.
668	18	The cursor '%.*s' which is scanning a list of rids i.e a work table is having it's tables changed. This cursor should be read only and the tables should be private to it's query. This is an internal error.
669	18	The length computation of the row is wrong. This error was detected during cursor scan fixups for cursor '%.*s'. This is an internal error. The processing is being stopped for the current query.
670	16	Out of bound insert attempted on table '%.*s'.

Table 5-9: 601 to 680, access manager messages (continued)

Number	Severity	Message Text
671	14	Writetext is not allowed in reclassify mode.
672	16	Out of bound update attempted on table '%.*s'.
673	16	Out of bound delete attempted on table '%.*s'.
674	20	Invalid Buffer Cache Access: Attempt to locate page '%ld', database '%ld' in cache failed because the cache id '%ld' in scan_context is invalid. scan_context={objid '%ld', indid '%ld', cid '%ld'}. Contact Technical Support for assistance.
675	20	Invalid Buffer Cache Access: Attempt to locate page '%ld', database '%ld' in cache failed because no object id was specified. scan_context={objid '%ld', indid '%ld', cid '%ld'}. Contact Technical Support for Assistance.
676	21	NULL cache id specified in log record.
677	20	Invalid Buffer Cache Access: Attempt to locate page '%ld', dbid '%ld', objid '%ld', indid '%ld' in cache failed because the cache ID was not set in the scan_context structure. Contact Technical Support for assistance.
678	20	Invalid Buffer Cache Access: Could not open object '%ld' in database '%d'
679	20	Inconsistent update state found during expensive direct update of object '%ld'.
680	20	Attempt to extend the log in database '%.*s' failed due to an internal error. The returned status was %d.

Table 5-10: 701 to 710, memory manager messages

Number	Severity	Message Text
701	19	There is not enough procedure cache to run this procedure, trigger, or SQL batch. Retry later, or ask your SA to reconfigure SQL Server with more procedure cache.
		See "The Procedure Cache" on page 15-3 in the SQL Server Performance and Tuning Guide and "Error 701" in SQL Server Error Messages.
702	20	Memory request for %d bytes exceeds the size of single page of %d bytes.
		See "Error 702" in SQL Server Error Messages.
703	17	You cannot run this procedure, trigger, or SQL batch because it requires more than %ld pages of memory. Break it up into shorter queries, if possible.
		See "Error 703" in SQL Server Error Messages.
704	20	Tried to free procedure header $0x$ %lx, but it's still in use by procedure '%.*s' at procedure buffer $0x$ %lx.
705	19	There is no room for process %d to store PROC_HDR 0x%lx in Pss.

Table 5-10: 701 to 710, memory manager messages (continued)

Number	Severity	Message Text
706	20	Process %d tried to remove PROC_HDR 0x%lx that it does not hold in Pss.
		See "Error 706" in SQL Server Error Messages.
707	20	System error detected during attempt to free memory at address 0x%lx. Please consult the SQL Server error log for more details.
		See "Error 707" in SQL Server Error Messages.
708	17	There is insufficient system memory to run kernel task. spid %d, kpid %d.
709	17	There is insufficient system memory to continue login process for spid %d.
710	20	Memory request for %d bytes is too small.

Table 5-11: 801 to 868, buffer manager messages

Number	Severity	Message Text
801	20	Process %d tried to remove resource lock it doesn't hold on buffer $0x$ %lx - %S_PAGE in cache %s.
803	20	Unable to place buffer $0x\%lx$ holding logical page %ld in sdes for object '%.*s' - either there is no room in sdes or buffer already in requested slot.
		See "Error 803" in SQL Server Error Messages.
804	20	Unable to find buffer 0x%lx holding logical page %ld in sdes 0x%lx kept buffer pool for object '%.*s'.
		See "Error 804" in SQL Server Error Messages.
805	21	Unable to find descriptor for object '%.*s' in database '%.*s' in hash table when marking buffer dirty or flushing syslogs.
806	21	Could not find virtual page for logical page %ld in database '%S_DBID'.
		See "Error 806" in SQL Server Error Messages.
807	10	Logical page %ld in buffer 0x%lx already kept in SDES for object '%.*s' in database '%.*s'.
808	20	Alloc page buffer pool in Pss is full - logical pages %ld, %ld, and %ld in respective databases '%.*s', '%.*s' and '%.*s' are already held there. Cannot add logical page %ld in database '%.*s'.
809	20	Buffer 0x%lx, alloc pg %ld, in database '%.*s' not in alloc buf pool in Pss.
810	20	Attempt to pin log page buffer.
811	21	Attempt to grab buffer which is on descriptor chain.
812	21	Attempt to grab a pinned buffer.

Table 5-11: 801 to 868, buffer manager messages (continued)

Number	Severity	Message Text
813	20	Logical page %ld in database %d is already hashed.
		See "Error 813" in SQL Server Error Messages.
814	20	Keep count of buffer 0x%lx holding logical page %ld in database %.*s has become negative.
815	21	Unable to find buffer holding sysindexes page in the cache - pageno = $\%$ ld dbid = $\%$ d.
816	20	Process %d tried to remove a buffer resource lock %S_BUF that it does not hold in SDES %S_SDES.
817	20	Process %d tried to remove a buffer resource lock %S_BUF that it does not hold in Pss $0x$ %lx.
818	19	There is no room to hold the buffer resource lock $\%S_BUF$ in SDES $\%S_SDES$.
819	19	There is no room for process %d to hold buffer resource lock %S_BUF in Pss.
820	21	Attempt to dirty non-log buffer %S_BUF which is in I/O.
821	20	Attempt to unhash buffer at 0x%lx with a buffer pageno of %ld and database id %ld with HASHED status set failed - buffer was not found. %S_PAGE
		See "Error 821" in SQL Server Error Messages.
822	21	Could not start I/O for request BLKIO flags = $0x$ %lx, size = %ld, errcode = $0x$ %lx, %S_BUF.
		See "Error 822" in SQL Server Error Messages.
823	24	I/O error detected during %S_MSG for %S_BUF.
		See "Error 823" in SQL Server Error Messages.
824	21	Attempt made to write page in buffer in database that has no entry in sysdatabases. %S_BUF.
825	21	Attempt made to write page in buffer in database with no DBTABLE structure sysdatabases row marked as in use by process $\%d$. $\%S_BUF$.
826	20	Attempt made to hold allocation page %ld that is already in Pss pool. Database '%.*s'.
827	20	Attempt to dirty page %ld which is not kept in database '%.*s.
829	21	A problem with ordered writes was detected. Please call SYBASE.
830	20	Invalid magic number %ld for aux kept buffer structure 0x%x, for sdes 0x%x, object id %ld.
831	20	Unable to find buffer 0x%x holding logical page %ld in sdes 0x%x, aux keep struct 0x%x, for object '%.*s'.
832	20	Unable to place buffer 0x%x holding logical page %ld in sdes for object '%.*s' - there is no room in sdes aux keep pool.

Table 5-11: 801 to 868, buffer manager messages (continued)

Number	Severity	Message Text
833	20	Attempt to read logical page %ld, database '%S_DBID' into buffer $0x\%x$ that is hashed.
834	20	Illegal attempt to clean buffer: %S_BUF.
835	20	Illegal attempt to change contents of buffer: %S_BUF.
836	21	Attempted to grab lru header.
837	21	Attempted to grab wash header.
838	21	Grabbed buffer not marked in wash: %S_BUF.
839	21	Grabbed buffer dirty but not writing: %S_BUF.
840	17	Device '%.*s' (with physical name '%.*s', and virtual device number %d) has not been correctly activated at startup time. Please contact a user with System Administrator (SA) role.
		See "Error 840" in SQL Server Error Messages.
841	10	Attempt to set bufreserves in RESOURCE structure to negative value while unclaiming cache.
842	20	Attempt to set bufclaims in PSS structure for process %d to negative value while unclaiming cache.
843	20	Unable to find original instance of buffer 0x%x holding logical page %ld for object '%.*s'.
844	20	Attempt to unpredirty buffer %S_BUF which is %s.
845	20	Attempt to do a large I/O for page %ld in database '%.*s' with buffer 0x%x, which is not a large buffer.
846	10	Hardware error detected writing logical page %ld, virtual page %ld for dbid %ld User will sleep until write completes successfully.
847	10	Checkpoint Process detected hardware error writing logical page %ld, virtual page %ld for dbid %ld. It will sleep until write completes successfully.
848	21	Could not start I/O for device '%.*s' (with physical name '%.*s', and virtual device number %d). Operating system error %d.
849	21	I/O error detected for device '%.*s' (with physical name '%.*s', and virtual device number %d).
850	20	Wrong cache descriptor in buffer 0x%x, page %d, dbid %d.
851	20	Wrong cluster mask for cache '%.*s', mask encountered = %d, should = %d.
852	20	Command Failed: Invalid request to move '%ld' buffers from the '%ld'K pool of the '%.*s' cache to the '%ld'K pool. Source pool only contains '%ld' buffers. Retry the command specifying fewer buffers.

Table 5-11: 801 to 868, buffer manager messages (continued)

Number	Severity	Message Text
853	16	Invalid Configuration: Unable to start SQL Server since no information is available for configuring the data cache. The server may be started with a default configuration using the -c startserver option.
854	20	Fatal buffer pool error. Please contact Sybase technical support.
855	16	Bad prefetch size of %d encountered.
856	16	Command Failed: Cannot move buffers from the '%ld'K pool to the '%ldK' pool. '%ld'K pool does not exist. Please specify a valid buffer pool.
857	16	Command Failed: Cannot bind or unbind database '%S_DBID' to or from a cache because it is currently in use. Retry the command once all users have stopped using the database.
858	16	Cache '%.*s' does not exist.
859	20	Invalid Buffer Cache Access: Attempt to locate page '%ld', database '%ld' in cache failed because the cache id '%ld' in scan_context is invalid. Scan_context = {objid '%ld', indid '%ld', cid '%ld'}. Contact Technical Support for assistance.
860	20	Invalid Buffer Cache Access: Attempt to locate page '%ld', dbid '%ld' objid '%ld', indid '%ld' in cache failed because the cache ID was not set in the scan_context structure. Contact Technical Support for assistance.
861	16	Command Failed: Cannot bind object '%ld', dbid '%d' to cache because you have an open cursor on the target object. Retry the command after closing the cursor.
862	16	Command Failed: Database '%d' must be in single user mode to bind target object.
863	20	Buffer resources in cache %s, id %d are unavailable. Please re-run this query or ask the system administrator to re-configure buffer cache memory.
864	16	Command Failed: Cannot bind object '%ld', dbid '%d' to cache because you have active level0 scans on the target object. Retry the command after terminating the scans.
865	21	Error deleting row from Sysattributes during cache binding validation.
866	21	Error inserting row into Sysattributes during cache binding validation.
867	16	The system table Sysattributes or its indices may not be bound to a named cache
868	16	The system table Sysallocpg may not be bound to a named cache.

Table 5-12: 902 to 950, open database manager messages

Number	Severity	Message Text
902	24	Hardware error detected reading logical page %ld, virtual page %ld in database '%.*s'.
903	23	Unable to find row in sysindexes for clustered index on system catalog %d in database %d. This index should exist in all databases. Run DBCC CHECKTABLE on sysindexes in the database.
		See "Error 903" in SQL Server Error Messages.
904	22	Unable to find master database row in sysdatabases. Cannot open master database.
905	17	Unable to allocate a DBTABLE descriptor to open database '%S_DBID'. Another database must be closed or dropped before opening this one.
		See "Error 905" in SQL Server Error Messages.
906	23	Could not locate row in sysobjects for system catalog %d in database %d. This system catalog should exist in all databases. Run DBCC CHECKTABLE on sysindexes in the database.
		See "Error 906" in SQL Server Error Messages.
908	22	Unable to find any entries in sysusages for dbid '%d', database '%S_DBID'. Run DBCC CHECKTABLE on sysusages in the master database.
909	21	More than %d entries required to build the logical-virtual translation table for database '%S_DBID'. The database is too fragmented.
910	17	Could not allocate a new object descriptor for required system catalog in database '%d'. Another database must be closed or objects in another database dropped in order to open this database.
911	16	Attempt to locate entry in sysdatabases for database '%.*s' by name failed - no entry found under that name. Make sure that name is entered properly.
		See "Error 911" in SQL Server Error Messages.
912	21	DBTABLE descriptor cannot be found for database '%.*s' which is supposed to be already open.
913	22	Could not find row in sysdatabases with database id %d. Run DBCC CHECKTABLE on sysdatabases.
		See "Error 913" in SQL Server Error Messages.
915	21	Descriptor for system catalog '%.*s' not found in DBTABLE chain for database '%.*s' - all system catalogs should reside permanently in this chain.
916	14	Server user id %d is not a valid user in database '%.*s'
		See "Error 916" in SQL Server Error Messages.
917	20	Illegal attempt to close the master database for the last time - this database must always be open.

Table 5-12: 902 to 950, open database manager messages (continued)

Number	Severity	Message Text
918	14	Database '%.*s' has not yet been recovered - please wait before accessing this database.
919	21	Database '%.*s' was marked 'suspect' by an earlier attempt at recovery. Check the SQL Server errorlog for information as to the cause.
920	22	Could not find syslogs row in sysindexes for database '%.*s'. Run DBCC CHECKTABLE on this system catalog.
921	14	Database '%.*s' has not been recovered yet - please wait and try again.
		See "Error 921" in SQL Server Error Messages.
922	14	Database '%.*s' is being recovered - will wait until recovery is finished.
923	14	User %d not allowed in database '%.*s' - only the owner of this database can access it.
924	14	Database '%.*s' is already open and can only have one user at a time.
		See "Error 924" in SQL Server Error Messages.
925	19	Maximum number of used databases for each query has been exceeded. The maximum allowed is $\%d$.
		See "Error 925" in SQL Server Error Messages.
926	14	Database '%.*s' cannot be opened. An earlier attempt at recovery marked it 'suspect'. Check the SQL Server errorlog for information as to the cause.
		See "Error 926" in SQL Server Error Messages.
927	14	Database '%.*s' cannot be opened - it is in the middle of a load.
928	14	Database '%.*s' cannot be opened - it is currently being created. Wait and try query again.
929	21	Attempting to close a database which is not open. Please contact Technical support.
930	14	Database '%.*s' cannot be opened because either an earlier system termination left LOAD DATABASE incomplete or the database is created with 'for load' option. Load the database or contact a user with System Administrator (SA) role.
		See "Error 930" in SQL Server Error Messages.
931	21	Database '%.*s' cannot be opened because of a failure to initialize the global timestamp. This indicates that a problem exists in the log for the current database. Please contact Technical support for assistance.
932	22	Database '%.*s' cannot be opened because the log for the current database is corrupt. Page %ld of the log is linked to a page that belongs to a database object with id %ld. Please contact Technical support for assistance.

Table 5-12: 902 to 950, open database manager messages (continued)

Number	Severity	Message Text
933	22	Logical page %ld of the log encountered while retrieving highest timestamp in database '%.*s' is not the last page of the log and we are not currently recovering that database.
		See "Error 933" in SQL Server Error Messages.
934	21	Fatal error encountered while freeing up DBTABLE structure.
935	10	WARNING - the timestamp in database '%.*s' is approaching the maximum allowed.
936	14	The Model database is unavailable. It is being used to create a new database.
937	14	Database '%.*s' is unavailable. It is undergoing LOAD DATABASE.
938	14	Database '%.*s' is unavailable. It is undergoing LOAD TRANSACTION.
939	20	Illegal dbtable unlock: %S_DBT.
940	26	Dbtable in wrong state for operation: %S_DBT.
941	20	Illegal database context operation.
942	20	Database cannot be opened because a system descriptor cannot be installed.
943	14	Database '%.*s' cannot be opened since an attempt to upgrade it was unsuccessful.
944	20	Function %s requires that the user be in the database being worked on. Process %d passed it a dbtable for database %d, but is using database %d.
945	21	Function %s was asked to locate page %ld in database %ld. The page number is invalid for the database.
		See "Error 945" in SQL Server Error Messages.
946	10	A %S_MSG has prevented Sysusages changes for database %.*s from being copied into memory. Please run sp_dbremap to complete database space changes.
947	14	Database '%.*s' has been marked as having corrupt security labels. Please contact a user with the System Administrator, System Security Officer, or Oper role or the Database Owner.
948	14	Database '%.*s' is unavailable. It is undergoing a security label consistency fix.
949	14	Database '%.*s' is unavailable. It is being bound to a named cache.
950	14	Database '%.*s' is currently offline. Please wait and try your command again

Table 5-13: 1101 to 1150, page manager messages

Number	Severity	Message Text
1101	17	Unable to allocate new page for database '%.*s'. There are no more pages available on valid allocation pages. Space can be created by dropping objects, extending the database, or dumping the log with no_log.
1102	22	Unable to locate allocation page %ld for database '%.*s'. This allocation page contains the extent that the target allocation page is in, but the allocation page is not in the translation table in the DBTABLE. Run DBCC CHECKTABLE on sysusages.
1103	21	Allocation page %ld in database '%.*s' has different segment id than that of the object to which we are allocating. Run DBCC CHECKALLOC.
1104	20	Conflict between number of extents marked in log record in the allocation bitmap and the allocation count. Allocation count is %d. Bitmap is $0x$ %lx $0x$ %lx $0x$ %lx.
1105	17	Can't allocate space for object '%.*s' in database '%.*s' because the '%.*s' segment is full. If you ran out of space in syslogs, dump the transaction log. Otherwise, use ALTER DATABASE or sp_extendsegment to increase the size of the segment.
		See "Error 1105" in SQL Server Error Messages.
1106	20	First pass through allocation page %ld found %d free extents. After logging, only found %d free extents.
1108	21	Cannot deallocate extent %ld, database %d. Object id %ld, index id %d, status %d in extent does not match object id %ld, index id %d, status %d in object being deallocated. Run DBCC CHECKALLOC.
		See "Error 1108" in SQL Server Error Messages.
1109	21	Attempt to read allocation page %ld failed either because object ID is not correct (%ld) or the page ID is not correct (%ld).
1110	20	Attempt to resource lock allocation page %ld in database '%.*s' by process %d while allocating to non-syslogs object '%.*s'.
1111	20	Extent bitmap on allocation page %ld in database '%.*s' does not have extents marked that are being removed.
1112	20	Extent bitmap on allocation page %ld in database '%.*s' already has extents marked that are being added.
1113	20	Extent %ld already locked while allocating it in database '%.*s'.
1114	20	Attempt to resource lock page %ld in database '%.*s' by process %d failed because lock is already held by process %d.
1115	20	Attempt to transfer a resource lock to process ID 0 on allocation page %ld in database '%.*s'.
1116	20	Attempt to backout the allocation of LOG page %ld, in database '%.*s'.

Table 5-13: 1101 to 1150, page manager messages (continued)

Number	Severity	Message Text
1117	21	Extent chain for object %ld is not correctly linked.
		See "Error 1117" in SQL Server Error Messages.
1120	20	Attempt to call pg_readalloc on page %ld which is not an allocation page.
		See "Error 1120" in SQL Server Error Messages.
1121	0	Failed to get a lock on newly allocated page. Page number = %ld dbid = %d.
1122	20	Attempt to read allocation page before openning SYSALLOCPGS.
1123	20	Failed to get lock on OAM pg.
1124	20	Failed to get lock on allocation page %ld.
1125	20	Attempting to allocate page %ld in database %d to extent %ld which belongs to another object. Object id and index id in page are %ld, %ld. Object id and index id in extent are %ld, %ld.
1127	20	Internal Error: The OAM has no room for new inserts. Check OAM for object %ld, index %d.
1128	22	The OAM entry for allocation page %ld is missing from the OAM which starts or page %ld.
1129	22	The requested update to the OAM for object %ld, dbid %ld, index %d, oam page %ld, would cause a negative page count. allocation page: %ld, oamarray used: %ld, oamarray unused: %ld, deltaused: %ld, deltaunused: %ld, spid: %ld. Contact your System Admin.
		See "Error 1129" in SQL Server Error Messages.
1130	22	A dealloc log record has been detected which does not have an OAM page supplied.
1131	22	The OAM for object %ld, index %d, oam page %ld, is currently allocated to another object.
1132	22	Attempted to log allocation to the log.
1133	22	Page %ld was expected to be an OAM page for %ld and it is not.
		See "Error 1133" in SQL Server Error Messages.
1134	20	Failed to get lock on OAM page %ld. This should never happen.
		See "Error 1134" in SQL Server Error Messages.
1135	10	Page %ld was given as a target page for allocation to object %ld index id %d and there is no entry in the OAM for this page. This may indicate corruption of the OAM. Please run checkalloc on database %.*s.
1136	21	$^{\circ}$ Please run the upgrade38 utility before attempting to upgrade your database to MP.'
1137	21	'There is insufficient space in database %.*s to run this upgrade.'

Table 5-13: 1101 to 1150, page manager messages (continued)

Number	Severity	Message Text
1138	21	'Failed to complete allocation of SYSGAMS in database %.*s.'
1139	20	Impossible deadlock on page mgr lock.
1140	20	'Page mgr lock should not already be held.'
1141	20	Unexpected value returned to page manager routine: %ld.
1142	22	Invalid OAM Page %ld. Found pstat=%d,object=%S_OBJID,database=%S_DBID,indid=%d.
		See "Error 1142" in SQL Server Error Messages.
1143	22	Invalid OAM Page %ld. Expected object=%S_OBJID. Found Object=%S_OBJID,database=%S_DBID,pstat=%d,indid=%d.
		See "Error 1143" in SQL Server Error Messages.
1144	21	Page number %ld is higher than the highest page in database '%.*s': %ld.
1145	20	ss %d was expected to hold logical lock on page %ld.
1146	20	Process %d was expected to hold logical lock on object %ld.
1147	20	Process %d trying to do a logged operation on a non-logged object %ld.
1148	16	Error: %d, Severity: %d, State: %dn
1149	21	A Log Run Deallocation routine was passed one or more bad parameters. The bad parameter is either %ld or %ld.
1150	20	Failed to get intent lock on object %ld.

Table 5-14: 1201 to 1288, lock manager messages

Number	Severity	Message Text
1201	20	Page_lock was called with illegal mode %d.
1203	20	Caller of lock manager is incorrectly trying to unlock an unlocked object. spid=%d locktype=%d dbid=%d object id or page number=%ld.
		See "Error 1203" in SQL Server Error Messages.
1204	19	SQL Server has run out of LOCKS. Re-run your command when there are fewer active users, or contact a user with System Administrator (SA) role to reconfigure SQL Server with more LOCKS.
		See "Error 1204" in SQL Server Error Messages.
1205	13	Your server command (process id #%d) was deadlocked with another process and has been chosen as deadlock victim. Re-run your command.
		See "Error 1205" in SQL Server Error Messages.

Table 5-14: 1201 to 1288, lock manager messages (continued)

Number	Severity	Message Text
1207	20	Locksleep called with bad process id %d
		See "Error 1207" in SQL Server Error Messages.
1221	26	Lock free chain linkage has been corrupted.
1222	26	A non lock is linked on the free chain.
1223	26	Lock hash table linkage has been corrupted.
1224	26	A structure from outside the lock area has been linked onto a lock hash chain.
1225	26	Lock record chain linkage has been corrupted.
1226	26	A non lock record is linked onto a semaphore cursor.
1227	26	Semaphore cursor chain linkage has been corrupted.
1228	26	A non semaphore cursor is linked onto a semaphore.
1229	26	The actual number of free locks does not match the free lock count.
1230	26	A semaphore cursor has no lock records linked to it.
1231	26	An incorrect lock structure is linked on the free chain.
1232	26	An incorrect lock structure is linked onto a hash chain.
1233	26	An incorrect lock structure is linked a chain of lock structures.
1234	26	An incorrect lock structure is linked to a semaphore.
1235	26	A semaphore cursor at the head of a semaphore queue is marked as waiting.
1236	26	A semaphore cursor not at the head of a semaphore queue is marked as not waiting.
1237	26	A semaphore cursor has mutually incompatible lock records linked to it.
1238	26	%d locks not accounted for.
1239	26	%d extra locks found.
1240	0	Maximum skip count on an exclusive lock has been exceeded.
1241	26	A semaphore cursor refers to a different semaphore than the one it is linked to.
1242	26	A lock record refers to a different semaphore cursor than the one it is linked to.
1243	26	Couldn't find object to be released.
1244	20	Could not find address lock at address 0x%lx while trying to release it.
1245	26	Lock record and process disagree.
1246	26	Process attempting to wait on a lock that does not belong to it.
1247	26	Process attempting to wait on a lock that has already been waited for.
1248	0	Could not find the lock held by a process chosen as a deadlock victim.

Table 5-14: 1201 to 1288, lock manager messages (continued)

Number	Severity	Message Text
1249	20	Process became runnable before lock it was waiting for was released.
1250	26	A non-preallocated semaphore cursor encountered while trying to obtain a semaphore.
1251	26	An in-use preallocated semaphore cursor was encountered.
1252	26	Lock header linkage has been corrupted.
1253	26	The wrong number of lock records was found on a semaphore cursor.
1254	26	While following the lock record chain for a process, a lock record belonging to a different process was encountered.
1255	26	Unlinking a duplicate lock caused a task to be awakened.
1256	26	Encountered a non-preallocated semaphore cursor on a chain that should only have preallocated semaphore cursors.
1257	0	Attempt to obtain a logical lock that is incompatible with one already held. Spid = $\%$ d, type = $\%$ d, dbid = $\%$ d, object id or page number = $\%$ ld.
1258	26	A process is not waiting for a lock that it should be waiting for.
1259	26	A process is waiting for a lock that has been granted.
1260	26	A process is waiting for a lock that it did not request.
1261	20	Attempt to promote from page to table locking on objid %ld encountered an internal error.
1262	20	No matching xdes found. Lock was requested for objid %ld, dbid %d, type %d, by process %d.
1263	26	A process was found to be waiting for the same object twice.
1265	20	A lock manager routine expected a lock record as an argument but was passed something else.
		See "Error 1265" in SQL Server Error Messages.
1266	20	Upgrade of lock on object id or page number %ld left the lock ungranted.
1267	26	A lock record at the head of a semaphore queue is not marked as granted.
1268	26	A lock record is marked as granted, but isn't at the head of the semaphore queue.
1269	10	Temporary buffer overflow occurred while scanning the lock table. Rows will be missing in syslocks for one or more objects.
1270	26	A task attempted to release a semaphore that it had not previously obtained.
1271	26	A task attempted to acquire a semaphore with a preallocated semaphore cursor that did not belong to it.
1272	20	Invalid parameter(s) passed to lock manager.
1273	16	Syntax error at line %d of file %s starting at '%s'.

Table 5-14: 1201 to 1288, lock manager messages (continued)

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Number	Severity	Message Text
1274	16	Error with input file %s: %s.
1275	16	The lock unit test can only be run with a single engine on line.
1276	26	Attempt to acquire a lock in dbid $\% d$ while in an internal transaction. This is an internal error.
1277	20	In a call to lock_multiple(), the lock requests were out of order. They should be sorted by object id, dbid.
1278	26	This semawait (1st) should only have one lockrec.
1279	19	SQL Server has run out of locks on engine %d. Re-run your command when there are fewer active users, or contact a user with System Administrator (SA) role to reconfigure maximum engine freelocks or number of locks.
1280	26	Lock Sleeptask chain has been corrupted.
1281	26	A non lock sleeptask entry is linked to the Lock Sleeptask chain.
1282	26	An incorrect lock sleeptask structure is linked to the Lock Sleeptask chain.
1283	10	Could not change deadlock checking period because SQL Server has run out of alarms. Please retry the command later.
1284	26	Used Lock Sleeptask Entry not in Chain.
1285	26	Un-used Lock Sleeptask Entry in Lock Sleeptask Chain.
1286	26	Missing Preallocated Lock Sleeptask Entry.
1287	16	Freelock transfer block size (%d) cannot be more than half the number of freelocks allowed per engine (%d). To increase the number of freelocks per engine to allow this change please increase maximum engine freelocks to %d.
1288	16	Setting maximum engine freelocks to %d allows only %d freelocks per engine. This value cannot be less than twice the value of freelock transfer block size. Please reduce freelock transfer block size to %d and reattempt this command.

Table 5-15: 1301 to 1315, query processor messages

Number	Severity	Message Text
1301	16	The Propagation Context Data entry could not be saved. There is already an entry with the same key values for the context provided.
1302	16	A Propagation Context Data value could not be returned in parameter %d because the datatype of the return parameter does not match the datatype of the stored field.
1303	16	The second argument for this Propagation Context Data built-in command specifies the number of keys supplied with the call. This argument must be of datatype 'integer'.

Table 5-15: 1301 to 1315, query processor messages (continued)

Number	Severity	Message Text
1304	16	This Propagation Context Data built-in function requires at least %d arguments.
1305	16	This Propagation Context Data built-in function requires one argument.
1306	16	The second argument for this Propagation Context Data built-in command specifies the number of keys supplied with the call. The value '%d' supplied is more than the keys given. At most '%d' arguments may be keys for this call.
1307	18	Internal Error in Propagation Context routines: An invalid or garbaged command 0x%x was seen by pcxt_cmdinit().
1308	18	Internal Error in Propagation Context routines: pcxt_nodenew(PCXT_NODE_ENTRY) copied %d arguments, expected %d arguments.
1309	18	Internal Error in Propagation Context routines: An invalid or garbaged node type 0x%x tried to free memory at 0x%x in pcxt_nodefree(). The request was ignored.
1310	18	Internal Error in Propagation Context routines: The memory tracking fields in the PCD resource structure are inconsistent: inuse %d, free %d. Some PCD memory may not be reclaimed until the login session ends.
1311	18	Internal Error in Propagation Context routines: An invalid or garbaged node type 0x%x was seen by pcxt_nodedup().
1312	18	Internal Error in Propagation Context routines: An invalid or garbaged node type 0x%x was seen by pcxt_nodenew().
1313	18	Internal Error in Propagation Context routines: An invalid or garbaged event type 0x%x was seen by pcxt_event().
1314	16	The built-in function requested %d data fields as return parameters. The Propagation Context Data entry that was selected contains only %d data fields. It is an error to request more data fields than exist in the entry.
1315	16	Argument %d of this Propagation Context Data built-in command must be of datatype 'integer'.

Table 5-16: 1501 to 1536, sort manager messages

Number	Severity	Message Text
1501	20	Sort failure
		See "Error 1501" in SQL Server Error Messages.
1503	20	Sort failure: too many sort keeps (%d)
1505	14	Create unique index aborted on duplicate key. Primary key is '%S_KEY'
		See "Error 1505" in SQL Server Error Messages.

Table 5-16: 1501 to 1536, sort manager messages (continued)

Number	Severity	Message Text
1508	14	Create index aborted on duplicate rows. Primary key is '%S_KEY'
		See "Error 1508" in SQL Server Error Messages.
1509	20	Row compare failure
		See "Error 1509" in SQL Server Error Messages.
1510	17	Sort failed: Out of space in database '%.*s'
		See "Error 1510" in SQL Server Error Messages.
1511	20	Sort cannot be reconciled with transaction log
1513	20	Reuse of extent failed in sort
1514	21	Page allocated to sort found to be busy. Page number %ld. %S_BUF.
1515	20	Bad session descriptor for sort
1519	20	An attempt was made to keep a sort buffer in a slot where a buffer was already kept. Buffer pointer: 0x%lx Slot: %d.
1520	18	Sort failed for table '%.*s' in database '%.*s' because internal count of used pages is incorrect. Run DBCC TABLEALLOC to correct the value.
		See "Error 1520" in SQL Server Error Messages.
1521	18	Sort failed because a table in tempdb used for the processing of the query had a bad data page count. Tempdb should not have been damaged.
1522	20	Sort failure. Prevented overwriting of allocation page in database '%S_DBID' by aborting sort.
1523	20	Sort failure. Prevented incorrect extent deallocation by aborting sort.
1525	21	Sort Failure. Rollforward of sort encountered sort descriptor timestamps out of sequence. Old timestamp in log: %04x %08lx. New timestamp in log: %04x %08lx. Timestamp in sort descriptor: %04x %08lx.
1526	17	Sort failure. Configured size of buffer cache is insufficient. A user with System administrator (SA) role should consult Technical Support to establish minimum requirement.
1527	20	Sort failure. Unknown exception returned from bufclaimcache: %d.
1528	21	Character data comparison failure. An unrecognized Sort-Map-Element type (%d) was found in the server-wide default sort table at SMEL entry [%d].
1529	21	Character data comparison failure. A list of Sort-Map-Elements from the server wide default sort table does not end properly. This list begins at SMEL entry [%d].
1530	16	Create index with sorted_data was aborted because of row out of order. Primary key of first out of order row is '%S_KEY'
		See "Error 1530" in SQL Server Error Messages.

Table 5-16: 1501 to 1536, sort manager messages (continued)

Number	Severity	Message Text
1531	16	The sorted_data option cannot be used for a nonclustered index if the keys are not unique within the table. Create index was aborted because of duplicate keys. Primary key is '%S_KEY'.
		See "Error 1531" in SQL Server Error Messages.
1532	20	Invalid merge page. %s on page %ld.
1533	20	Internal Sort error. Extend read returns an invalid page. Requested pageno=%ld Read pageno=%ld.
1534	20	Internal Sort error: Attempt to split presorted clustered data page failed. Attempted to split page, pageno = %ld.
1535	20	Internal Sort error: Attempt to split presorted clustered data page failed. Split page, pageno = %ld.
1536	20	Internal Sort error. Presorted clustered data page invalid. Page, pageno = $\%$ ld, parm1 = $\%$ d, parm2 = $\%$ d.

Table 5-17: 1601 to 1624, initialization messages

Number	Severity	Message Text
1601	21	There are not enough 'user connections' available to start a new process. Retry when there are fewer active users, or ask your System Administrator to reconfigure SQL Server with more user connections.
		See "Error 1601" in SQL Server Error Messages.
1602	21	Unable to initialize network %d
		See "Error 1602" in SQL Server Error Messages.
1603	21	Process priority %d invalid or no process slots available
1604	21	Process not runnable or kpid %d not within range
1605	21	Failed to open virtual socket for new connections
		See "Error 1605" in SQL Server Error Messages.
1606	21	Failed to initialize network receive buffer
1607	21	Failed to initialize network send buffer
1608	21	A client process exited abnormally, or a network error was encountered. Unless other errors occurred, continue processing normally.
		See "Error 1608" in SQL Server Error Messages.
1609	21	Kpid %d out of range
1610	21	Could not kill process %d
1611	21	Could not install quit function

Table 5-17: 1601 to 1624, initialization messages (continued)

Number	Severity	Message Text
1612	21	Could not install attention function
1613	21	Could not close network %d connection for server process %d.
		See "Error 1613" in SQL Server Error Messages.
1614	21	Could not yield process
1615	21	Process unable to sleep
1616	21	Failed to flush receive stream buffer
1617	21	Could not infect process %d
1618	21	Could not spawn the checkpoint process, unable to continue.
1619	21	Could not open TEMPDB, unable to continue.
1620	21	Failure to open master db for the first time
1621	18	Type '%c' not allowed before login.
1622	18	Type '%c' not implemented.
1623	21	Warning: dataserver -p option fails. Please check for state '%d' to see where it fails.
		See "Error 1623" in SQL Server Error Messages.
1624	18	Warning: Errors occured while initializing thresholds on tempdb. Trying to continue the startup. Thresholds might not be active on tempdb.

Table 5-18: 1701 to 2111, create utilities messages

Number	Severity	Message Text
1701	16	Creating table '%.*s' failed because row size would be %d. This exceeds the maximum allowable size of a row in a table, %d.
1702	16	Create table failed because column '%.*s' in table '%.*s' exceeds the maximum of 250 columns.
		See "Error 1702" in SQL Server Error Messages.
1703	17	Failed to allocate disk space for a work table in database '%.*s'. You may be able to free up space by using the DUMP TRANsaction command, or you may want to extend the size of the database by using the ALTER DATABASE command.
1704	16	Only the SA can create the system table '%.*s'.
1705	16	Must create system table '%.*s' in the Master Database.
1706	16	System table '%.*s' was not created, because ad-hoc updates to system catalogs are not enabled.
1707	18	Could not create system table '%.*s'.

Table 5-18: 1701 to 2111, create utilities messages (continued)

Number	Severity	Message Text
1708	16	Warning: Row size could exceed row size limit, which is %d bytes.
1709	16	Referenced table name missing in a referential constraint declaration on table '%.*s'.
1710	16	Referenced table '%.*s' specified in a referential constraint declared on '%.*s' does not exist in the database '%.*s'.
1711	16	There is no unique constraint on the referenced columns in the referenced table '%.*s' specified in referential constraint declaration on the table '%.*s'.
1712	18	Internal inconsistency - constraint exists in sysconstraints table, but not sysobjects table, id = $\%d$.
1714	16	Exceeded maximum allowed referenced columns in a single referential constraint declaration, table = '%.*s', database = '%.*s'.
1715	16	The number of columns in a foreign key column list and primary key/referenced column list not the same in referential constraint declaration on table '%.*s', in database '%.*s'.
1716	18	Invalid system table given for status update, this is an internal error.
1717	16	System catalog column/table specified for status change not found.
1718	16	The number of columns in a forign key column list is less than a primary/referential column list in a referential constraint declaration, table = '%.*s', data base = '%.*s'.
1719	16	Primary key does not exist for the table referenced in a referential constraint declaration, table = '%.*s', data base = '%.*s'.
1720	16	A column referenced in a referential constraint declaration does not exist, referencing table = '%.*s', data base = '%.*s'.
1721	16	Column types of referencing and referenced columns don't match. referencing column = '%.*s', referenced column = '%.*s'.
1722	16	Column lengths of string type referencing and referenced columns don't match. referencing column = '%.*s', referenced column = '%.*s'.
1723	16	Column precision and scale of numeric referencing and referenced columns don't match. referencing column = '%.*s', referenced column = '%.*s'.
1724	16	The number of columns in a forign key column list is greater than a primary/referential column list in a referential constraint declaration, table = '%.*s', data base = '%.*s'.
1725	16	SELECT INTO failed because column %d in table '%.*s' has a null column name. Null column names are not allowed.
1726	18	Internal inconsistency: database id %d sent to crt_main() does not match Pss->pcurdb value of %d.

Table 5-18: 1701 to 2111, create utilities messages (continued)

Number	Severity	Message Text
1727	20	The crt_main() function is trying to put too many lock requests in the lock_requests[] array.
1729	10	An object with the same name, but owned by a different user, is already being replicated. The table '%.*s' is not marked as replicated.
1730	10	Due to an internal error the table '%.*s' is not marked as replicated. Please contact your System Administrator (SA) for help.
1732	20	Failed to reserve/initialize allocation hints space in table '%.*s'.
1801	16	Database '%.*s' already exists
1802	11	CREATE DATABASE failed. Some disk names listed in command were not found. Check that names exist and are spelled correctly before re-running
1803	17	CREATE DATABASE failed. Could not allocate enough disk space for a new database on the disks named in the command. Total space allocated must be at least %d Mbytes (%ld 2048-byte pages) to accommodate copy of Model Database.
1804	10	There is no disk named '%.*s'. Checking other disk names.
1805	10	CREATE DATABASE: allocating %ld pages on disk '%.*s'
1806	21	Crdb_dbrow: Getnext SCAN_NOINDEX on sysdatabases.dbid failed to find row for MODELDBID.
1807	17	MODEL database in use, cannot create new database. Contact a user with System Administrator (SA) role before re-running CREATE DATABASE.
1808	21	Crdb_disk: Getnext SCAN_NOINDEX on sysdevices.status=DEFAULT failed to find default rows
		See "Error 1808" in SQL Server Error Messages.
1809	14	CREATE DATABASE must be preceded by a 'USE master' command. Check with your DBO <or (sa)="" a="" administrator="" role="" system="" user="" with=""> if you do not have permission to USE master.</or>
		See "Error 1809" in SQL Server Error Messages.
1810	16	CREATE DATABASE failed because of incorrect size parameter(s). Total number of megabytes specified must be at least %d megabytes so that the Model Database can be copied to the new database.
		See "Error 1810" in SQL Server Error Messages.
1811	16	'%.*s' is the wrong type of device for CREATE or ALTER database. Please check sysdevices. The CREATE or ALTER is aborted.
		See "Error 1811" in SQL Server Error Messages.
1813	16	Cannot open new database '%.*s'. CREATE DATABASE is aborted.
		See "Error 1813" in SQL Server Error Messages.

Table 5-18: 1701 to 2111, create utilities messages (continued)

Number	Severity	Message Text
1814	10	Problem creating Temporary Database - if out of space, please extend and reboot. If some other problem, please contact Technical Support.
1816	16	CREATE DATABASE failed because the log device '%.*s' has no space available.
1817	16	Problem allocating extents for SYSGAMS. Create/alter database is aborted.
1818	17	CREATE DATABASE failed because the device '%.*s' is not online.
1820	20	This command adds %S_MSG space to disk '%.*s', which previously contained only %S_MSG. You must specify WITH OVERRIDE to force this allocation.
1822	16	Invalid database maxhold provided.
1823	16	Invalid label provided. Dbmaxhold must be dominated by your maxwrite.
1824	16	Invalid label provided. Dbmaxhold must dominate your minwrite.
1825	14	Invalid curwrite label for creating sybsecurity database, label must be DATA_HIGH.
1901	16	Column '%.*s' Can't create index on a column of BIT data type.
1902	16	Cannot create more than one clustered index on table '%.*s'. Drop the existing clustered index '%.*s' before creating another
		See "Error 1902" in SQL Server Error Messages.
1903	16	%d is the maximum allowable size of an index. Composite index specified is %d bytes.
		See "Error 1903" in SQL Server Error Messages.
1904	16	Cannot specify more than %d column names for index key list. %d specified.
		See "Error 1904" in SQL Server Error Messages.
1905	21	Could not find 'zero' row for index '%.*s' the table in sysindexes.
1906	11	Cannot create an index on table '%.*s', because this table does not exist in database '%S_DBID'.
1907	10	Create index on non-empty table not supported yet
1908	16	Too many parameters symbol table overflow.
1909	16	Can't use duplicate column names in index key list. Column name '%.*s' listed more than once.
1910	16	Cannot create more than %d indexes on one table.
1913	16	There is already an index on table '%.*s' named '%.*s'
1914	16	Cannot create index on object '%.*s' because it is not a user table.
1915	14	Only the owner of table '%.*s' or a user with System Administrator (SA) role can create an index on it.

Table 5-18: 1701 to 2111, create utilities messages (continued)

Number	Severity	Message Text
1916	16	CREATE INDEX options %s and %s are mutually exclusive.
		See "Error 1916" in SQL Server Error Messages.
1918	10	Non-clustered index (index id = %d) is being rebuilt.
1919	16	Column '%.*s' Can't create index on a column of TEXT or IMAGE data type.
1920	16	A column in a primary key constraint's column list is not constrained to be not null, column name: '%.*s'.
1921	16	An index with the same columns in the same order already exists on the table '%.*s'.
1922	16	An unknown index creation error occurred: %d.
1923	16	A table cannot have more than one primary key, attempt to define a second primary key failed on table '%.*s'.
1924	16	You cannot create an index on the sysaudits table.
1927	16	Create Index failed because user curwrite level is not equal to the level of table '%.*s'.
1928	16	Cannot create clustered index on '%.*s' because it is partitioned.
1929	20	Failed to reserve/initialize allocation hints space in index '%.*s' on table '%.*s'.
2001	10	Cannot use duplicate parameter names. Parameter name '%.*s' listed more than once.
2002	10	Cannot use variable '%.*s' without first declaring it.
2004	16	Procedure '%.*s' has already been created with group number %d - create procedure with an unused group number
2005	18	Maximum procedure %s count exceeded. Limit is %d. Modify the procedure to use fewer %ss.
2007	11	Cannot add rows to sysdepends for the current stored procedure because it depends on the missing object '%.*s'. The stored procedure will still be created.
2008	16	The object '%.*s' is not a procedure so you cannot create another procedure under that group name.
2103	16	Cannot create a trigger on a view, name: %.*s
2106	11	Cannot create a trigger on table '%.*s', because this table does not exist in database '%S_DBID'.
2108	16	Cannot CREATE TRIGGER on table '%.*s',because you can only create a trigger on a table in the current database.
2109	16	Cannot CREATE TRIGGER on table '%.*s', that accesses 'inserted' or 'deleted' because the table was created with the no_log option

Table 5-18: 1701 to 2111, create utilities messages (continued)

Number	Severity	Message Text
2110	20	The proccreate() function is trying to put too many lock requests in the lock_requests[] array.
2111	16	Create trigger aborted. User's cuwrite is not equal to the hurdle of table '%.*s'.

Table 5-19: 2201 to 2301, read/write messages

Number	Severity	Message Text
2201	16	Could not open file/device %s unix errno=%d. Check mode of db file.
2202	21	Could not translate virtual read address to device and seek vaddr=0x%x.
2203	24	Could not seek to vaddr 0x%x for read. Fd=%d errno =%d.
2204	24	Could not read complete record. Count=%d fd=%d errno =%d.,
2205	21	Could not translate virtual write address to device and seek vaddr=0x%x.
2206	24	Could not seek to vaddr 0x%x for write. Fd=%d errno =%d.
2207	24	Could not write complete record. Count=%d fd=%d errno =%d.
2208	21	Tried to read unopened device vaddr=0x%x.
2209	21	Tried to write unopened device vaddr=0x%x.
2210	16	Tried to write database without using -w or -W flag.
2301	19	Operating System allocation call failed.

Table 5-20: 2401 to 2416, character set conversion messages

Number	Severity	Message Text
2401	11	Character set conversion is not available between client character set '%.*s' and server character set '%.*s'.
		See "Error 2401" in SQL Server Error Messages.
2402	16	Error converting client characters into server's character set. Some character(s) could not be converted.
		See "Error 2402" in SQL Server Error Messages.
2403	10	WARNING! Some character(s) could not be converted into client's character set. Unconverted bytes were changed to question marks ('?').
2404	18	Buffer overflow converting characters from client into server's character set.
2405	18	Internal error occurred while converting characters.

Table 5-20: 2401 to 2416, character set conversion messages (continued)

Number	Severity	Message Text
2406	16	Cannot use SET CHAR_CONVERT ON, since this session has never had codeset conversions turned on.
2407	17	Cannot use the requested character set since the character set cache is full.
2408	11	Cannot find the requested character set in Syscharsets: id = %d.
2409	11	Cannot find the requested character set in Syscharsets: name = '%.*s'.
		See "Error 2409" in SQL Server Error Messages.
2410	18	Unexpected error returned from the Character Set Manager: return value = %d.
2411	10	No conversions will be done.
2412	10	Existing character conversions (if any) will remain in effect.
2414	10	Since only 7-bit ASCII characters are allowed with the special character set 'ascii_7', the language for this session is being forced to 'us_english'.
2415	10	Due to previous errors, the language for this session is being forced to 'us_english'.
2416	10	Due to codeset conversion errors in the remote servername/password list of the LOGINREC, remote procedure calls to other servers may not work.

Error Messages 2501 to 6006

Table 5-21: 2501 to 2599, dbcc messages

Number	Severity	Message Text
2501	16	Table named %.*s not found; check sysobjects
		See "Error 2501" in SQL Server Error Messages.
2502	16	Table Corrupt: A page is linked in more than one chain; check this page:page number=%ld allocation status=%d
		See "Error 2502" in SQL Server Error Messages.
2503	16	Table Corrupt: Page linkage is not consistent; check the following pages: (current page#=%ld; page# pointing to this page=%ld; previous page# indicated in this page=%ld)
		See "Error 2503" in SQL Server Error Messages.
2504	16	Table Corrupt: The index id in alloc page does not match the index id in sysindexes (alloc page#=%ld; extent id=%ld; index id in alloc=%d; index id in sysindexes=%d)
2505	16	Table Corrupt: Free offset in page header is not reasonable; free offset should be >= 32 and <= 2048; check this page and offset (page#=%ld freeoffset on the page header=%ld)
2506	16	Table Corrupt: The values in adjust table should be in ascending order starting from the end of the table (page#=%ld row#=%d); check adjust table in this row
		See "Error 2506" in SQL Server Error Messages.
2507	16	Table Corrupt: Offset table is incorrect (page#=%ld row#=%d offset in offset table is=%d correct offset is=%d)
		See "Error 2507" in SQL Server Error Messages.
2508	16	Table Corrupt: Row length is incorrect (page#=%ld row#=%d minimum row length=%d row length=%d)
2509	16	Table Corrupt: The row number and offset of each row in the page should have a matching entry in row number table; check this page (page#=%ld row#=%d offset in row number table=%d)
		See "Error 2509" in SQL Server Error Messages.
2510	16	Key mismatch between index page and data page in database '%.*s'. Drop and re-create the index. (index page %ld, row %d, data page %ld)
		See "Error 2510" in SQL Server Error Messages.
2511	16	Keys of index id %d for table '%.*s' in %S_MSG should be in ascending order. Drop and re-create the index. (index page %ld)
		See "Error 2511" in SQL Server Error Messages.

Table 5-21: 2501 to 2599, dbcc messages (continued)

Number	Severity	Message Text
2512	16	Table Corrupt: The specified row number %d in index page %ld cannot be found on data page %ld
2513	16	Table Corrupt: Object id %ld (object name = %S_OBJID) does not match between %.*s and %.*s
		See "Error 2513" in SQL Server Error Messages.
2514	16	Table Corrupt: Type id %ld (type name = %.*s) does not match between %.*s and %.*s
		See "Error 2514" in SQL Server Error Messages.
2516	16	Table Corrupt: Segment number %d does not match between %.*s and %.*s
2517	16	Table Corrupt: Procedure id %ld (procedure name = %S_OBJID) does not match between %.*s and %.*s
		See "Error 2517" in SQL Server Error Messages.
2518	16	Database Corrupt: Incorrect last checkpoint in syslogs
2519	16	Database Corrupt: The last checkpoint in sysdatabases is incorrect. Syslogs recorded a different checkpoint
		See "Error 2519" in SQL Server Error Messages.
2520	16	Database named %.*s not found; check sysdatabases
		See "Error 2520" in SQL Server Error Messages.
2521	16	Table Corrupt: Page is linked but not allocated. Run DBCC TABLEALLOC to correct the problem. (alloc page#=%ld, extent id=%ld, logical page#=%ld, object id in extent=%ld, index id in extent=%ld, object name=%S_OBJID)
		See "Error 2521" in SQL Server Error Messages.
2522	16	Table Corrupt: The object id %ld (object name = $\%$.*s) in page# %ld is different from the object id %ld (object name = $\%$.*s) in sysindexes
2523	16	Table Corrupt: Page number %ld is out of range for this database %S_DBID. The maximum page number in this database is %ld
2524	16	Table Corrupt: Row length is inconsistent between the computed row length and the recorded row length on page; check the following page and row: pageno=%ld row#=%d computed row length=%d row length on page=%ld
		See "Error 2524" in SQL Server Error Messages.
2525	16	Table Corrupt: Object id wrong; tables: alloc page %ld extent id=%ld l page#=%ld objid in ext=%ld (name = %S_OBJID) objid in page=%ld (name = %S_OBJID) objid in sysindexes=%ld (name = %S_OBJID)
		See "Error 2525" in SQL Server Error Messages.

Table 5-21: 2501 to 2599, dbcc messages (continued)

Number	Severity	Message Text
2526	16	Incorrect DBCC command: Please see the Commands Reference Manual for DBCC commands and options.
		See "Error 2526" in SQL Server Error Messages.
2527	10	DBCC detected internal database inconsistancy; contact a user with System Administrator (SA) role.
2528	10	DBCC execution completed. If DBCC printed error messages, contact a user wit System Administrator (SA) role.
2529	16	Table Corrupt: Attempted to get page %ld, object %ld; got page %ld, object %ld
		See "Error 2529" in SQL Server Error Messages.
2531	16	Table Corrupt: Index id on extent should be 0; check the following page and ids alloc page=%ld extent=%ld index id on extent=%d
2532	16	Table Corrupt: No syslogs entry in sysindexes.
2533	16	Table Corrupt: Incorrect index key length %d in internal (sarg) structure.
2534	16	Table Corrupt: No keys found on index page %ld. Offset for the free space: (freeoff=%ld)
2535	16	Table Corrupt: Page# %ld belongs to object id %ld (object name = %.*s) not object id %ld (object name = %.*s)
2536	10	Checking %.*s
2537	10	Checking %ld
2538	10	Alloc page %ld (# of extent=%ld used pages=%ld ref pages=%ld)
2539	10	Total (# of extent=%ld used pages=%ld ref pages=%ld) in this database
2540	16	Table Corrupt: Page is allocated but not linked; check the following pages and ids: allocation pg#=%ld extent id=%ld logical pg#=%ld object id on extent=%ld (object name = %S_OBJID) indid on extent=%ld
		See "Error 2540" in SQL Server Error Messages.
2541	16	Table Corrupt: object id does not match between extent in allocation page and sysindexes; check the following extent: alloc pg#=%ld extent#=%ld object id on extent=%ld (object name = %.*s) object id in sysindexes=%ld (object name = %.*
		See "Error 2541" in SQL Server Error Messages.
2542	16	Table Corrupt: Extent is linked in more than one chain. Check the following allocation page and extent: alloc pg#=%ld extent#=%ld status=%d
2543	16	Table Corrupt: Extent structures are linked incorrectly; check the following extent: alloc pg#=%ld extent#=%ld previous extent# on this extent=%ld previous extent should be=%ld
		See "Error 2543" in SQL Server Error Messages.

Table 5-21: 2501 to 2599, dbcc messages (continued)

Number	Severity	Message Text
2544	16	Table Corrupt: Extent id %ld on allocation pg# %ld had object id %ld (object name = %.*s) on but used bit off
		See "Error 2544" in SQL Server Error Messages.
2545	16	Table Corrupt: Extent#=%ld on allocation pg#=%ld was used but object id was 0,
2546	16	Table Corrupt: Extent id %ld on allocation pg# %ld has objid %ld and used bit on, but reference bit off.
		See "Error 2546" in SQL Server Error Messages.
2547	16	Table Corrupt: Segment number %d specified for use in the segment map in sysusages has no entry in syssegments. The entry in sysusages is for dbid %d (db name = $\%$ S_DBID), with a virtual starting address of %ld.
2548	16	There is no default segment specified in syssegments.
2549	16	There is more than one default segment specified in syssegments.
2550	16	Missing segment in sysusages segmap.
		See "Error 2550" in SQL Server Error Messages.
2551	10	The following segments have been defined for database %d (database name %S_DBID).
2552	10	virtual start addr size segments
2553	10	
2554	10	%ld %ld
2555	10	%d
2556	20	Page #%ld of sysindexes in database %d not found in cache after read.
2557	14	Only the owner of object '%.*s' or a user with System Administrator (SA) role can run DBCC %s on it.
2558	16	Extent not within segment: Object %ld, indid %d includes extents on allocation page %ld which is not in segment %d.
		See "Error 2558" in SQL Server Error Messages.
2559	16	Data page number %ld is empty but is not the first page. Status = $0x\%x$.
		See "Error 2559" in SQL Server Error Messages.
2560	16	Incorrect parameter passed to DBCC command.
2561	16	Unable to open log for database %d.
2562	16	%s cannot access object '%.*s' because it is not a table.
2563	14	Only the DBO of database %S_DBID or a user with System Administrator (SA) role can run the DBCC CHECKCATALOG command.

Table 5-21: 2501 to 2599, dbcc messages (continued)

Number	Severity	Message Text
2564	14	Only the DBO of database %S_DBID or a user with System Administrator (SA) role can run the DBCC CHECKDB command.
2565	14	Only the DBO of database %S_DBID or a user with System Administrator (SA) role can run the DBCC CHECKALLOC command.
2567	14	Only the DBO of database %S_DBID or a user with System Administrator (SA) role can run the DBCC DBREPAIR command.
2568	16	Page %ld is out of range for this database
2570	10	Warning - Page %ld has DEALLOC bit on - indid %d, status 0x%x
2571	14	Permission denied. Only a user with System Administrator (SA) role can use the DBCC command '%.*s'.
		See "Error 2571" in SQL Server Error Messages.
2572	10	Database '%S_DBID' is not in single user mode - may find spurious allocation problems due to transactions in progress.
		See "Error 2572" in SQL Server Error Messages.
2573	16	Database '%.*s' is not marked suspect. You cannot drop it with DBCC.
		See "Error 2573" in SQL Server Error Messages.
2574	16	Index page number %ld is empty. Status = 0x%x.
2575	16	The last page %ld in sysindexes for table '%.*s' has next page # %ld in its page header. The next page # should be NULL. Please check sysindexes.
2576	16	The %S_MSG page %ld specified in sysindexes for table '%.*s' can not be found. Please check sysindexes.
2577	16	The root page %ld in sysindexes for table '%.*s' has next page # %ld and previous page # %ld in its page header. Both the next page # and the previous page # should be NULL. Please check sysindexes.
2578	16	The first page %ld in sysindexes for table '%.*s' has previous page # %ld in its page header. The previous page # should be NULL. Please check sysindexes.
2579	10	The total number of data pages in this table is %ld.
2580	16	The clustered index page (%S_PAGE) has an unexpected key pointer to an overflow data page (%S_PAGE). Please check page status.
2581	16	Data page (%S_PAGE) indicates that an overflow page is linked to it; however, the next page (%S_PAGE) has not been marked as an overflow page. Please check page status.
2582	16	Data page (%S_PAGE) has been marked as an overflow page; however, the previous page (%S_PAGE) does not indicate that there is an overflow page linked to it.
2583	10	Number of data pages counted by DBCC differs from count in the data OAM.

Table 5-21: 2501 to 2599, dbcc messages (continued)

Number	Severity	Message Text
2584	16	The last key in the previous page (%S_PAGE) is equal to the first key in the current page (%S_PAGE); however, the status of current page does not indicate that it is an overflow page.
2585	16	The last key in the previouse page (%S_PAGE) is equal to the first key in the current page (%S_PAGE); however, the status of previous page indicates that there is a disconnected overflow page.
2586	16	The last key in the previouse page (%S_PAGE) is equal to the first key in the current page (%S_PAGE); however, the status of previous page indicates that there is no overflow page.
2587	16	The last key in the previouse page (%S_PAGE) is not equal to the first key in the current page (%S_PAGE); the current page is an overflow page; however, the status of previous page indicates that there is no disconnected overflow page.
2589	16	Object '%.*s' must have its status updated in sysobjects, to reflect the intent of repairing the index on it.
2590	16	DBCC option available for system tables only.
2591	16	Could not find index row which has id %d for table '%.*s'.
2592	10	%s index successfully restored for object '%.*s' in '%.*s' database.
2593	10	There are %d rows in %ld pages for object '%.*s'.
2594	16	Invalid index id specified (index id = %d).
2595	16	Database '%.*s' must be set to single user mode before executing this command.
2596	16	%S_PAGE has an incorrect pgfreeoff value of %d. The offset should be %d.
		See "Error 2596" in SQL Server Error Messages.
2597	16	The database is not open. Please issue a 'use %.*s' and re-run the DBCC command.
2598	16	Indexes on sysobjects and sysindexes cannot be recreated.
2599	16	Invalid monitor group specified: '%.*s'. Please re-enter.

Table 5-22: 2601 to 2628, insert messages

Number	Severity	Message Text
2601	14	Attempt to insert duplicate key row in object '%.*s' with unique index '%.*s'%S_EED
		See "Error 2601" in SQL Server Error Messages.

Table 5-22: 2601 to 2628, insert messages (continued)

Number	Severity	Message Text
2603	21	No space left on logical page %ld of index '%.*s' for object '%.*s' when inserting row on index page - this situation should have been taken care of while traversing the index.
2610	22	Could not find leaf row in nonclustered index '%.*s' that corresponds to data row from logical data page %ld, row offset %d during update index attempt after data page split.
		See "Error 2610" in SQL Server Error Messages.
2613	20	Attempt to remove resource lock on buffer holding logical page %ld failed - the buffer was not resource locked.
2615	14	Attempt to insert duplicate row in table '%.*s' with index '%.*s' in database '%.*s' Could drop and recreate index with ignore duprow or allow duprow.
		See "Error 2615" in SQL Server Error Messages.
2616	20	Buffer holding logical page %ld cannot move to slot 1 since buffer holding logica page %ld is already there.
2617	20	Buffer holding logical page %ld not found in keep pool in SDES for object '%.*s'
2618	20	Couldn't find dupkey group starting at offset %d on page %ld.
2619	20	Keys did not match overflow page when inserting row at end of page that has overflow page that is not disconnected.
2620	21	The offset of the row number at offset %d does not match the entry in the offset table of the following page: %S_PAGE.
		See "Error 2620" in SQL Server Error Messages.
2621	20	Process %d already has the buffer we are using for an allocation resource locked %S_PAGE.
2622	21	Insufficient room on this page to insert a row of length %d. %S_PAGE.
2623	21	The PG_DEALLOC bit is on in this page at runtime - should have been turned of by deallocating page in recovery. %S_PAGE.
2624	21	Insert into table %S_DES fails because rowlength %d is less than minlen %d.
2625	20	Deadlock encountered in log allocation for database '%.*s'. This state should not be reached.
2626	21	Illegal attempt to insert duplicate key row in the clustered index for object '%.*s' in database '%.*s'.
2628	21	In database '%.*s', page %ld is linked forward to page %ld, but that page is linked backward to page %ld. Please report this internal error to Sybase Technical Support.

Table 5-23: 2701 to 2790, create utilities messages

Number	Severity	Message Text
2701	10	Database name '%.*s' ignored, creating table in Tempdb.
2702	16	Database '%.*s' does not exist.
2703	16	Segment '%.*s' does not exist.
2705	16	Column names in each table must be unique. Column name '%.*s' in table '%.*s' is specified more than once.
2706	11	Table '%.*s' does not exist.
2710	16	You are not the owner specified for the object named '%.*s' in this command (CREATE, ALTER, TRUNCATE, UPDATE STATISTICS, or BULK INSERT). The database owner can use the SETUSER command to assume the identity of another user.
2714	16	There is already an object named '%.*s' in the database.
		See "Error 2714" in SQL Server Error Messages.
2715	16	Column or parameter #%d: Can't find type '%.*s'.
2716	16	Column or parameter #%d: can't specify a column width on type '%.*s'.
2717	16	Column or parameter #%d: specified column width too large for type '%.*s'.
2718	16	Column or parameter #%d: can't specify Null values on a column of type BIT.
2719	14	Only the owner of table '%.*s', or a user with System administrator (SA) role, can run UPDATE STATISTICS on it.
2721	11	Could not find a default segment to create the table on. Contact a user with System administrator (SA) role to specify a default segment in syssegments.
2724	10	Parameter '%.*s' has an invalid data type.
2727	11	Cannot find index '%.*s'.
2728	21	Could not find sysobjects row for table '%.*s'.
2729	16	Procedure '%.*s' group number 1 already exists in the database. Choose another procedure name or procedure number.
2730	11	Cannot create procedure '%.*s' with a group number of %d because a procedure with the same name and a group number of 1 does not currently exist in the database. Must CREATE PROCEDURE '%.*s';1 first.
2731	16	Column or parameter #%d: can't specify column width of zero for '%.*s'.
2732	16	User error number %ld is invalid. Number must be between %d and %d.
2734	16	User name %.*s does not exist in sysusers.
2735	16	Object text is too long - can only support 255 rows in syscomments. Shorten the object text or split into multiple objects. Text which caused overflow starts at: '%.*s'.

Table 5-23: 2701 to 2790, create utilities messages (continued)

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Table 5-23: 2701 to 2790, create utilities messages (continued)

Number	Severity	Message Text
2761	10	Failed to create declarative constraints on table '%.*s' in database '%.*s'.
2762	16	The '%s' command is not allowed within a multi-statement transaction in the '%.*s' database.
2763	16	An attempt to grant CREATE TABLE permission to PUBLIC in tempdb failed.
2764	16	Identity field '%.*s' must be a numeric with a scale of 0 and not null allowed.
2765	16	A table can only have one identity column. Since table '%.*s' already has one, you can't add the column '%.*s'.
2766	16	Cannot use logsegment to create a user table or an index.
2767	16	The table with id=<%ld> in dbid=<%d> does not exist. It may have been created in a concurrently running transaction that rolled back and is now inaccessible.
2768	16	SET label (CURREAD, CURWRITE) failed because new value is an invalid label or new value doesn't satisfy the dominance relationships among session labels.
2769	16	Invalid maxhold label specified for the table.
2770	16	Invalid minhold label specified for the table.
2771	16	Invalid hold label specified. A table's maxhold label should always dominate it minhold label.
2772	16	Invalid hold label specified. Only labels below your @@maxwrite are acceptable
2773	16	Invalid hold label specified. Only labels above your @@minwrite are acceptable
2774	16	Hold label provided is above database maxhold. Please provide a label below the database maxhold.
2775	20	Object is not a table, or table has NULL maxhold and/or minhold value.
2776	16	The 'set update_mode' command only takes in a CHAR or VARCHAR argument
2777	16	Invalid update_mode provided. The only allowable update modes are: reclassif over_range, and standard.
2778	12	The object '%.*s' is not a table. Update statistics can be used only on user tables of system tables
2779	20	Lock request count has overrun the lock request array boundary. This is an internal error.
2780	20	maxlen (%d) is less than length (%d)
2781	18	Internal Error. Master to DB SLID conversion failed.
2782	16	An untyped variable in the PREPARE statement '%.*s' is being resolved to a TEXT or IMAGE type. This is illegal in a dynamic PREPARE statement.
2783	14	The user's curwrite needs to be at the table's hurdle when updating a table's statistics.

Table 5-23: 2701 to 2790, create utilities messages (continued)

Number	Severity	Message Text
2784	18	Internal row labeling error occured.
2786	16	MAX_ROWS_PER_PAGE value of %d is invalid. It must be between 0 and %d.
2787	16	Cache, %s, cannot be found in sysconfigures.
2790	16	Setting maximum online engines to %d causes number of engine freelocks (%d) to fall below half the value of freelock transfer block size (%d). Please increase maximum engine freelocks to %d and reattempt this command.

Table 5-24: 2801 to 2838, procedure manager messages

Number	Severity	Message Text
2801	20	Bad procedure status: 0x%x.
2802	20	Both the tree and plan pointer are set; Ambiguous procedure.
2803	20	Bad pointer encountered during remapping: 0x%x.
2804	20	Stored procedure '%.*s' is out of sync with its own procedure header.
2805	20	Bad pointer 0x%lx encountered while remapping stored procedure '%.*s'. Must re-create procedure.
2806	20	Stored procedure '%.*s' is corrupted. Must re-create procedure.
2807	18	Process %d could not unlock stored procedure '%.*s' because the procedure is not currently locked by that process.
2808	18	Incorrect object structure returned from getobject.
2809	18	The request for %S_MSG '%.*s' failed because '%.*s' is a %S_MSG object.
2810	18	Cache reports negative usage count for procedure '%.*s'.
2811	18	Cannot create procedure dbid %d, objid %ld, with a group number of %d.
		See "Error 2811" in SQL Server Error Messages.
2812	16	Stored procedure '%.*s' not found. Specify owner.objectname or use sp_help to check whether the object exists (sp_help may produce lots of output).
		See "Error 2812" in SQL Server Error Messages.
2813	20	Procedure %.*s in procedure buffer 0x%lx not properly linked with procedure header 0x%lx.
2814	20	Procedure %.*s in procedure buffer $0x$ %lx does not contain the same object id as procedure header $0x$ %lx.

Table 5-24: 2801 to 2838, procedure manager messages (continued)

Number	Severity	Message Text
2815	20	Procedure %.*s in procedure buffer $0x$ %lx contains page address $0x$ %lx which is not aligned on a $2K$ boundary.
2816	20	Procedure %.*s in procedure buffer $0x$ %lx contains page address $0x$ %lx which is not within any memory map.
2817	20	Procedure %.*s in procedure buffer $0x$ %lx contains page address $0x$ %lx which should be allocated.
2818	20	You must provide both name and object id in order to install a procedure.
2819	20	You must provide both name and object id in order to remove a procedure.
2820	20	You must provide procedure buffer to remove the procedure %.*x.
2821	16	You must drop and recreate procedure %.*s.
2822	20	Bad version number encountered for procedure %.*s.
2823	20	Process %d tried to remove a PROC_BUF 0x%lx named '%.*s' that it does not hold in the hold procedure linked list.
2824	19	Process %d cannot hold PROC_BUF 0x%lx named '%.*s' because it holds another PROC_BUF 0x%lx named '%.*s'. A process can only hold one view, rule, or default at a time.
		See "Error 2824" in SQL Server Error Messages.
2825	20	Process %d tried to remove a PROC_BUF 0x%lx named '%.*s' that it does not hold.
2826	20	Process %d has held the PROC_BUF 0x%lx named '%.*s' in the hold procedure linked list already; Check your procedure cache.
2827	20	Procedure '%.*s' in procedure buffer 0x%lx is not properly hashed.
2832	17	There are no more available procedure buffers. Configure your system for more.
2833	26	While cleaning up descriptor for object %d, a procedure buffer was found in use (use count = %d)
2834	26	Expected to find procedure buffer with usage count of %d and not %d.
2835	16	The procedure tree is old. Use the sp_remap procedure to remap all the procedures in this database.
2836	26	The cursor '%.*s' is already tracking another procedure. This is an internal error.
2837	16	The object '%.*s' must be recompiled. Use 'sp_recompile %.*s', then rerun your command.
2838	16	Invalid procedure name

Table 5-25: 2901 to 2902, exception handling messages

Number	Severity	Message Text
2901	19	Exception stack limit (%d) exceeded.
2902	10	Simulating error %d, state %d, at line %d in file %.*s.

Table 5-26: 3001 to 3244, dump and load messages

		Table 3-20. 3001 to 3244, dump and road messages
Number	Severity	Message Text
3001	21	DUMP DATABASE for database '%.*s' failed: insufficient memory to allocate backout structure.
3002	23	Attempt to dump database %.*s found logical page %ld when logical page %ld expected.
		See "Error 3002" in SQL Server Error Messages.
3003	20	DUMP DATABASE failed to establish a connection to the Backup Server. Attempt to dump database '%.*s' has failed.
3004	14	You must be the DBO of database %.*s or have Operator (OPER) role to run DUMP DATABASE.
		See "Error 3004" in SQL Server Error Messages.
3005	10	DUMP DATABASE failed to end flushlist synchronisation. In database '%.*s', some transactions may be suspended and further DUMP DATABASEs blocked, requiring reboot of the SQLServer.
3008	17	There is not enough server memory available to complete this dump database.
3015	10	WARNING: In order to LOAD the master database, the SQL Server must run in single-user mode. If the master database dump uses multiple volumes, you must execute sp_volchanged on another SQL Server at LOAD time in order to signal volume changes
3016	17	DUMP DATABASE for '%S_DBID' cannot continue because of insufficient log space. Free some log space with DUMP TRANSACTION or turn off replication.
3101	16	Database in use. A user with System Administrator (SA) role must have exclusive use of database to run load.
		See "Error 3101" in SQL Server Error Messages.
3102	16	Specified file '%.*s' is not in valid dump database format.
3103	17	LOAD DATABASE for database '%.*s' failed: insufficient memory to allocate backout structure.
3104	16	LOAD DATABASE encountered page with invalid logical page number %ld.
		See "Error 3104" in SQL Server Error Messages.
3105	16	Data on dump will not fit into current database. Need %d Mbyte database.
		See "Error 3105" in SQL Server Error Messages.

Table 5-26: 3001 to 3244, dump and load messages (continued)

Number	Severity	Message Text
3108	16	LOAD DATABASE must be used in single user mode if trying to restore the Master database.
3109	16	This dump was created from the Master database. A dump from Master can only be loaded as part of the Restore Master procedure.
3110	14	You must be the DBO of database %.*s or have Operator (OPER) role to run LOAD DATABASE.
3111	16	This dump was not created from the Master database. Master can only be loaded from a dump of the Master database.
3112	16	Cannot load any database other than Master when server in single-user mode.
3113	21	Database %.*s does not have an entry in sysusers for the DBO.
3114	21	Database %.*s does not have an entry in sysdatabases.
3115	10	User %.*s in database %.*s has suid %d, which is the same as the suid of the DBO (as defined in Sysdatabases). User %.*s will be given suid %d.
3116	10	When all load transactions have been completed for database %.*s, user %.*s should be given a unique suid.
3117	10	Database %.*s already has a user with suid %d. Please call Technical Support.
3118	16	LOAD DATABASE has been interrupted by a USER ATTENTION signal. A LOAD DATABASE must be completed in this database before it will be accessible.
3120	16	The database you are attempting to LOAD was DUMPed under a different sort order ID (%d) or character set ID (%d) than the ones running on this server (SortOrd = %d, CharSet = %d). If the sort orders differ, at least one of them is non-binary.
		See "Error 3120" in SQL Server Error Messages.
3121	16	The %sCLUSTERED index %s.%s (objid = %ld, indid = %d) may be invalid. It uses CHAR or VARCHAR columns in its key and was created under a different sort order ID (%d) or charset ID (%d) than the ones running on this server (SortOrd = %d, CharSe
3122	21	Failed to patch the transaction log for database '%.*s'.
3123	16	The dump header contains an invalid dump type code: %ld. This is not a valid transaction log dump or database dump.
3124	10	This is a %S_MSG dump of database ID %d, name '%.*s', from %S_DATE. SQL Server version: %.*s. Backup Server version: %.*s.
3125	10	Database contains %ld pages; checkpoint RID=(%S_RID); next object ID=%ld; sort order ID=%d, status=%d; charset ID=%d.

Table 5-26: 3001 to 3244, dump and load messages (continued)

Number	Severity	Message Text
3126	10	Log begins on page %ld; checkpoint RID=%S_RID; previous BEGIN XACT RID=(%S_RID); sequence dates: (old=%S_DATE, new=%S_DATE); truncation page=%ld; %ld pages deallocated; requires database with %ld pages.
3127	10	All dumped pages have been loaded. SQL Server is now clearing pages above page %ld, which were not present in the database just loaded.
3128	10	SQL Server has finished clearing database pages.
3129	10	Failed to clear in-load status bit for database '%.*s'.
3130	16	Database maxhold label found in dump is an invalid security label. Discontinuing load.
3131	16	Database hurdle label found in dump is an invalid security label. Discontinuing load.
3132	16	Server Data Low label found in dump is an invalid sensitivity label. Discontinuing load.
3133	16	Server Data High label found in dump is an invalid sensitivity label. Discontinuing load.
3134	10	Security label consistency check failed. Please run DBCC SECURITY (LABEL_CHECK, '%S_DBID', {FULL NOREPORT}, FIX) after all loads have been performed in order to make this database usable.
3135	10	Please run DBCC SECURITY (LABEL_CHECK, , [FULL NOREPORT], FIX) after all loads have been performed.
3136	10	Database log version=%d; database upgrade version=%ld.
3201	16	No dump device has been specified.
		See "Error 3201" in SQL Server Error Messages.
3202	16	Received MULTARG is not for device name as expected.
		See "Error 3202" in SQL Server Error Messages.
3203	16	Backup Server has detected a SQL Server error.
		See "Error 3203" in SQL Server Error Messages.
3204	16	Operator aborted DUMP or LOAD. Please consult the SQL Server error log for more details.
3205	26	DUMP failed in database %d: attempt to add run to full run list.
3206	20	Backup Server has returned an unexpected status to SQL Server: %d.
3207	16	More parameters have been specified to DUMP or LOAD than can be passed to the Backup Server.

Table 5-26: 3001 to 3244, dump and load messages (continued)

Number	Severity	Message Text
3208	16	Unexpected end of file while reading beginning of dump. Please confirm that dump media contains a valid SQL Server dump. The SQL Server error log may contain more information on the problem.
3209	16	'%.*s' is not a DUMP or LOAD device. Please check sysdevices.
3210	20	DUMP or LOAD of database '%.*s' encountered lock denial on SYSDEVICES to prevent deadlock. Deadlock should not have been possible.
3211	20	DUMP failed in database %.*s: error occurred executing RPC.
3212	17	DUMP failed in database %.*s: unexpected status executing RPC: %d.
3213	0	An I/O error was detected while doing I/O on buffer 0x%x.
3214	21	%s: virtual page %ld does not belong to any valid disk device.
3216	10	Backup Server session id is: %ld. Use this value when executing the 'sp_volchanged' system stored procedure after fulfilling any volume change request from the Backup Server.
3217	17	%s for database '%.*s' failed to write the dump header.
3218	21	%s for database '%.*s' failed to write the dump trailer.
3219	21	The Backup Server encountered an invalid dump trailer page, so SQL Server is not able to correctly recover database '%.*s'. Because of this error, the database i now suspect.
3220	17	Could not establish communication with Backup Server '%.*s'. Please make surthat there is an entry in Sysservers for this server, and that the correct server is running.
3221	20	Could not install a function required to create a %s; returned error code is %ld.
3222	20	Attempt to write a %S_MSG failed; returned error code is %ld.
3223	20	Attempt to read a %S_MSG failed; returned error code is %ld.
3224	20	INTERNAL ERROR: function '%s' was passed an invalid dump type code: %d.
3225	21	I/O failed while attempting to clear pages starting at page %ld of disk number %ld.
		See "Error 3225" in SQL Server Error Messages.
3226	21	Attempt to allocate a %s failed there are none available. SQL Server is unable t clear unused pages in the database being loaded. Because of this error, the database is unusable.
3227	10	No extent-sized buffers were available, so pages are being cleared by writing eac page separately. Please be patient; %ld pages are being written, which may take substantial amount of time. (Rough estimate: %ld minutes.)
3228	17	Insufficient contiguous SQL Server memory to allocate DB disk status array; % bytes were required.

Table 5-26: 3001 to 3244, dump and load messages (continued)

Number	Severity	Message Text
3229	10	For logical disk device '%.*s', primary device '%.*s' is not active. Secondary device '%.*s' will be used.
3230	24	For logical disk device '%.*s', neither primary device '%.*s' nor secondary device '%.*s' is active. '%s cannot continue.
3231	20	Invalid disk side token: %d.
3232	17	For logical disk device '%.*s', %S_MSG physical disk device '%.*s' has become unmirrored since the start of %s. Resulting work is invalid.
3233	17	%s for database '%S_DBID' failed: an alarm function could not be installed.
3234	20	%s for database '%S_DBID' failed to remove alarm with ID = %d.
3235	20	For logical disk '%.*s', %S_MSG physical device is internally designated DB device for %s, but Sysdevices.status value '0x%x' conflicts.
3236	10	Remirroring the affected portions of the usage map that are on mirrored devices.
3237	20	%s failed to find disk status entry for virtual page '%ld'.
3238	20	Internal I/O error on %S_MSG pysical device on virtual page number '%ld' while %s was remirroring loaded database.
3239	17	%s could not allocate a large IO buffer. Try again later.
3240	20	Unable to obtain the SQL Server's current working directory. The SQL Server must have search permission on its current working directory and the name must be shorter than %d bytes.
3241	20	Unable to get IO access type for device '%.*s'.
3242	20	Internal sensitivity label inconsistency encountered during dump. Conversion of Data High, Data Low, database maxhold, or database hurdle to human-readable string failed.
3243	10	Loading a dump from a non-B1 SQL Server into a B1 SQL Server is not allowed.
3244	20	%s failed for database '%S_DBID' with an internal transaction logging system failure; returned error code is %ld.

Table 5-27: 3301 to 3317, undo and redo messages

Number	Severity	Message Text
3301	21	Invalid log record found in syslogs (logop %d).
3303	21	Failed to find SAVEPT in log for xact %S_RID, current number is %d, looking for %d.

Table 5-27: 3301 to 3317, undo and redo messages (continued)

Number	Severity	Message Text
3305	21	Page %ld in database '%.*s' read in during runtime or load xact was uninitialized.
3306	21	Process %d was expected to hold logical lock on page %ld instead of process %d.
3307	21	Process %d was expected to hold logical lock on page %ld in database %S_DBID for object %S_OBJID, index number %d.
		See "Error 3307" in SQL Server Error Messages.
3308	21	Page %ld was expected to have %s lock on it.
3309	21	While in backout, process %d was chosen as deadlock victim while waiting for a resource lock on page %ld.
3310	21	Cannot find log record with RID: (%ld, %d).
3311	22	No space left on page %ld to move data of %d length.
3312	22	Free offset %d is invalid on page %ld.
3313	10	Error while redoing log row in database '%S_DBID'. %S_RID.
3314	10	Error while undoing log row in database '%.*s'. %S_RID.
3315	21	While redoing a transaction, the end of the log was encountered before the endxact record.
3316	21	While redoing a transaction, an attempt to reget an XCMD row failed.
3317	16	ROLLBACK TRIGGER can only be executed when a trigger is executing. It may be called directly by the trigger, or from a stored procedure executed directly or indirectly from a trigger.

Table 5-28: 3401 to 3471, recovery messages

Number	Severity	Message Text
3401	21	Rec_init: getnext SCAN_RID of last checkpoint failed on Rid from sysdatabases. %S_RID.
3403	22	During recovery initialization, page %ld was encountered. This page belongs to object %ld, not the log.
		See "Error 3403" in SQL Server Error Messages.
3404	21	Rec_complete: Could not open controlling database (id %d) of controlling database in multi-db transaction.
3405	10	Recovering database '%.*s'.
3406	10	%d transactions rolled forward.

Table 5-28: 3401 to 3471, recovery messages (continued)

Number	Severity	Message Text
3407	10	%d transactions rolled back.
3408	10	Recovery complete.
3409	10	Roll forward transaction '%.*s'.
3410	10	Roll back transaction '%.*s' was aborted.
3411	10	Roll back transaction '%.*s' no 'end transaction'.
3412	21	Database %d, table %ld. Attempt to mark table as suspect. Getnext SCAN_CLUST on sysobjects.objid failed.
3413	21	Database %d. Attempt to mark database as suspect failed. Getnext NC scan on sysdatabases.dbid failed.
3414	10	Database '%.*s' (dbid %d): Recovery failed. Check the SQL Server errorlog for further information as to the cause.
		See "Error 3414" in SQL Server Error Messages.
3417	21	Cannot recover the master database, exiting.
3418	21	Not enough deses to open '%.*s'.
		See "Error 3418" in SQL Server Error Messages.
3419	16	Unable to proceed with the recovery of dbid <%d> because of previous errors. Continuing with the next database.
3421	21	Unable to recover database '%.*s' because of a failure to initialize the global timestamp. This indicates that a problem exists in the log for the current database. Please contact Technical support for assistance.
3423	21	Error recovering database '%.*s' - could not find expected BEGIN TRANSACTION record at location: %S_RID.
3424	21	No more room in transaction table for transaction (%ld, %d).
3425	21	Transaction (%ld, %d) not found in transaction table.
		See "Error 3425" in SQL Server Error Messages.
3426	10	Could not make log consistent during special recovery of database %d. Please contact Technical support for assistance.
3429	21	Error recovering database '%.*s' - could not connect to commit service to check completion status of xact: %S_RID.
3430	16	Could not add a checkpoint record during special recovery of database %d. If you intend to do updates in this database, first free up space by running DUMP TRANasction WITH NO_LOG, and then checkpoint the database.
3431	10	Could not build an allocation map for the database %.*s. It does not have a DBINFO structure
3432	0	Warning: syslanguages is missing.

Table 5-28: 3401 to 3471, recovery messages (continued)

Number	Severity	Message Text
3433	16	Name is truncated to '%.*s'. The maximum name length is %d.
3434	20	Cannot change sortorder. Server shutting down. Restart to continue with sortorder unchanged.
3435	20	Sortorder cannot be changed because user objects or user databases exist.
3436	20	Cannot rebuild index %d for the '%.*s' table in the '%.*s' database.
3437	10	Please run sp_dbupgrade in database %.*s to update system catalogs.
3438	21	Function %s was called by process %d, which is not the recovery process.
3439	10	Database '%S_DBID' has inconsistent security labels. Disabling use of database
3440	10	System stored procedures are not currently accessible due to a recovery error. Please consult the errorlog. You may need to drop and re-create the sybsystemprocs database and re-run the installmaster SQL script if the error is unrecoverable.
3443	16	Invalid log version found for database '%S_DBID': '%d'. A log version greater than '%d' is from an later, incompatible version of SQL Server. Database cannot be opened.
3444	10	Database '%.*s' is now online.
3445	10	SQL Server could not bring database '%.*s' online.
3446	16	You do not have privilege to bring database '%.*s' online.
3447	10	Database '%.*s' appears to be in the process of being loaded; SQL Server wil not bring it online automatically. Use the ONLINE DATABASE command to bring this database online.
3448	10	Database '%.*s' appears to be at an older revision than the present installation; SQL Server will assess it, and upgrade it as required.
3449	10	Database '%.*s': beginning upgrade step: %S_MSG %s [ID %d]
3450	20	Database '%.*s': upgrade item %d contains a bad action identifier, %d. Please report this internal error to Sybase technical support.
3451	20	Database '%.*s': upgrade has failed for this database. Please refer to previous messages for the cause of the failure, correct the problem and try again.
3452	20	Database '%.*s': upgrade item %d depends on item %d, which could not be installed. Please refer to previous messages for the cause of the failure, correct the problem and try again.
3453	20	Database '%.*s': upgrade failed to open table %d. This table should exist in ever database.
3454	10	Database '%.*s': SQL Server could not completely upgrade this database; upgrade item %d could not be installed.

Table 5-28: 3401 to 3471, recovery messages (continued)

		<u> </u>
Number	Severity	Message Text
3455	20	Database '%.*s': SQL Server could not find its internal description of system table '%.*s'. Please report this internal error to Sybase technical support.
3456	20	Database '%.*s': during an upgrade, SQL Server could not create table '%.*s'.
3457	20	Database '%.*s': the dependency list for upgrade item %d contains an invalid identifier, %d. Please report this internal error to Sybase technical support.
3458	20	Database '%.*s': upgrade was asked to locate column '%.*s' for table '%s'; this column does not exist. Please report this internal error to Sybase technical support.
3459	20	Database '%.*s': upgrade could not determine the name of table ID '%d'. Please refer to previous error messages to determine the problem. Fix the problem, then try again.
3460	20	Database '%.*s': upgrade could not record the installation of upgrade item '%d'. Please refer to previous error messages to determine the problem. Fix the problem, then try again.
3461	20	Database '%.*s': upgrade could not install required upgrade item '%d'. Please refer to previous error messages to determine the problem. Fix the problem, then try again.
3462	10	Database '%.*s': upgrade could not install optional upgrade item '%d'. Please refer to previous error messages to determine the problem. Upgrade will continue.
3463	20	Database '%.*s': upgrade was asked to create an index on table '%s'; this table does not exist. Please report this internal error to Sybase technical support.
3464	20	Database '%.*s': upgrade item %d has a bad format: info=%d, data='%s'. Please report this internal error to Sybase technical support.
3465	20	Database '%.*s': upgrade could not locate a row in systypes with usertype=%d and type=%d. Please report this internal error to Sybase technical support.
3466	20	Database '%.*s': upgrade could not locate systypes.name where usertype=%d and type=%d. Please report this internal error to Sybase technical support.
3467	20	Database '%.*s': Index '%s.%s' has id %d in Sysindexes, but %d in our internal description. Please report this internal error to Sybase technical support.
3468	20	Database '%.*s': upgrade was asked to create index %d on table '%s', but there is no such index. Please report this internal error to Sybase technical support.
3469	20	Database '%.*s': upgrade failed to create index %d on table '%s'. Please refer to previous error messages to determine the problem. Fix the problem, then try again.
3470	10	SQL Server could not completely upgrade database '%.*s', but the database was online when upgrade began, so it will be left online.

Table 5-28: 3401 to 3471, recovery messages (continued)

Number	Severity	Message Text
3471	10	Database '%.*s' can not be brought online because it has replicated tables that have not been completely transferred. It will come online automatically after replication is complete.

Table 5-29: 3501 to 3508, checkpoint messages

Number	Severity	Message Text
3501	21	Could not get sysdatabases row for database '%d' at checkpoint time.
3502	21	No checkpoint records found in syslogs for database '%.*s'.
3504	0	Sysindexes page # %ld in database '%.*s' is not in buffer cache at checkpoint after getindex call.
3505	14	Only the DBO of database %S_DBID or a user with System Administrator (SA) role may run the checkpoint command.
3508	25	Attempt to set '%.*s' database to single user mode failed because the usage count is %ld. Make sure that no other users are currently using this database and rerun CHECKPOINT.

Table 5-30: 3604 to 3629, error and exception handling messages

Number	Severity	Message Text
3604	10	Duplicate key was ignored.
		See "Error 3604" in SQL Server Error Messages.
3605	10	Duplicate row was ignored.
3606	10	Arithmetic overflow occurred.
3607	10	Divide by zero occurred.
3608	10	Null value used in an expression.
3612	10	Execution Time %ld.
3613	10	Parse and Compile Time %ld.
3614	10	Total writes for this command: %ld
3615	10	Table: %.*s scan count %ld, logical reads: %ld, physical reads: %ld
3616	22	Non-leaf page %ld in table %ld, index %d is empty - please rebuild the index.

Table 5-30: 3604 to 3629, error and exception handling messages (continued)

Number	Severity	Message Text
3618	10	Transaction has been aborted.
3619	10	Unable to write CHECKPOINT record in database %d because the log is out of space.
3620	10	Automatic checkpointing is disabled in database '%.*s' because the log is out of space. It will continue when the DBO successfully checkpoints the database. Please free up some space or extend the database and then run CHECKPOINT.
3621	10	Command has been aborted.
		See "Error 3621" in SQL Server Error Messages.
3622	10	Domain error occurred.
3623	10	A transaction on a no_log table was undone. Check the errorlog file in the SQL Server directory for details.
3624	10	Truncation error occurred.
3625	10	Table: %.*s scan count %.0lf, logical reads: %ld, physical reads: %ld
3626	17	The transaction was aborted because it used too much stack space. Either use sp_configure to increase the stack size, or break the query into smaller pieces. spid: %d, suid: %d, hostname: %.*s, application name: %.*s
		See "Error 3626" in SQL Server Error Messages.
3627	10	Conversion of char/varchar datatype to security label datatype failed.
3628	10	Conversion of security label datatype to char/varchar datatype failed.
3629	10	Statement: %d Subquery: %d cache size: %d hits: %d misses: %d

Table 5-31: 3701 to 3738, drop messages

Number	Severity	Message Text
3701	11	Cannot drop the %S_MSG '%.*s', because it doesn't exist in the system catalogs.
		See "Error 3701" in SQL Server Error Messages.
3702	16	Cannot drop the %S_MSG '%.*s' because it is currently in use.
		See "Error 3702" in SQL Server Error Messages.
3703	11	Cannot drop the %S_MSG with object-id %ld in database %d, because it doesn't exist in the system catalogs.
		See "Error 3703" in SQL Server Error Messages.
3704	16	Cannot drop the %S_MSG '%.*s' because you are not the owner or a user with System Administrator (SA) role.

Table 5-31: 3701 to 3738, drop messages (continued)

Number	Severity	Message Text
3705	16	Cannot use DROP %s with '%.*s' because '%.*s' is a %S_MSG. Use DROP %s.
3708	16	Cannot drop the %S_MSG '%.*s' because it is a system %S_MSG.
3709	16	Cannot drop '%.*s' because you are not currently in the master database.
3710	16	Cannot use DROP with '%.*s' because '%.*s' is a %S_MSG. Use ALTER TABLE.
3711	16	Cannot use ALTER TABLE with '%.*s' because '%.*s' is a %S_MSG. Use DROP %s.
3712	16	Cannot drop %S_MSG '%.*s' because it has dependent foreign key.
3716	16	The %S_MSG '%.*s' cannot be dropped because it is bound to one or more %S_MSG.
3718	11	Could not drop index '%.*s' because the table/clustered index entry cannot be found in the sysindexes system catalog.
3723	16	The table '%.*s' does not have the %S_MSG '%.*s'. Cannot drop.
3724	16	Level of table or object '%.*s' does not match user's curwrite level. Cannot drop.
3725	16	Level of index '%.*s' does not match user's curwrite level. Cannot drop.
3726	16	Level of database '%.*s' does not match user's curwrite level. Cannot drop.
3727	16	Can not drop the database '%.*s' because cursor '%.*s' is still open. Close the cursor(s) before dropping the database.
3728	16	Cannot drop this database '%S_DBID' as it has some dependencies (referential constraints) from database '%S_DBID'. Drop the referencing database first, before dropping the referenced database (dependent database).
3729	20	The dropo() function is trying to put too many lock requests in the lock_requests[] array.
3730	16	Can not drop index '%.*s' because cursor '%.*s' is open. Close the cursor(s) before dropping the index.
3731	16	Cannot drop table '%.*s' because it is partitioned.
3732	16	Cannot drop index '%.*s' because there are one or more isolation level 0 scans active on table.
3738	16	The object '%.*s' of type %S_MSG does not have any indices.

Table 5-32: 3801 to 3819, token datastream messages

Number	Severity	Message Text
3801	16	There is no host variable corresponding to the one specified by the PARAM datastream. This means that this variable '%.*s' was not used in the preceding DECLARE CURSOR or SQL command.
3802	18	There is no cursor information given with the current datstream. A cursor id of zero was specified and no name was specified. The current batch of commands is being aborted. This is an internal error.
3803	16	The statement used to define the cursor '%.*s' is neither a SELECT nor an EXECUTE.
3804	16	More than one SELECT statement is used to define the cursor '%.*s'.
3805	18	The token datastream length was not correct. This is an internal protocol error.
3806	16	Both the READ ONLY and the FOR UPDATE options have been specified for cursor '%.*s'.
3807	18	The datastream specifies a wrong option or command. The datastream is '%s'. This is an internal error.
3808	18	The column is not part of the RESDOM column list. This means the plan for the cursor is corrupted. This is an internal error.
3809	18	Unknown datatype token '%d' has been sent to the server. This is an internal error.
3811	18	A wrong datastream has been sent to the server. The server was expecting token %d but got the token %d. This is an internal error.
3812	18	The datastream for token %d should only be sent after other datastreams. It can not be a command datastream on it's own. This is an internal error.
3813	18	A wrong datastream has been sent to the server. The server was expecting a dynamic sql command token but got the token %d. This is an internal error.
3814	16	The parameter of type %d did not have a valid value.
3816	18	Internal Syslabels manager Error.
3819	16	The dynamic PREPARE statement '%.*s' failed because of an internal problem while sending the input parameters formats to the client.

Table 5-33: 3901 to 3917, transaction manager messages

Number	Severity	Message Text
3901	17	This transaction uses too many databases and/or aggregates. The maximum allowed is %d. The transaction must be split into smaller sections.
3902	13	The commit transaction request has no corresponding BEGIN TRANSACTION.
3903	13	The rollback transaction request has no corresponding BEGIN TRANSACTION.

Table 5-33: 3901 to 3917, transaction manager messages

Number	Severity	Message Text
3904	21	Can't unsplit logical page %ld in object '%S_OBJID' in database '%S_DBID' - both pages together contain more data than will fit on one page.
		See "Error 3904" in SQL Server Error Messages.
3905	21	Can't unsplit logical page %ld in object '%S_OBJID' in database '%S_DBID' - row number %d is used on both pages.
3906	16	Attempt to BEGIN TRANsaction in database '%.*s' failed because database is READ ONLY.
3907	21	Failed to receive results from PROBE. The distributed transaction named %.*s has not been committed and data may be inconsistent across databases.
3908	16	Attempt to BEGIN TRANsaction in database '%.*s' failed because database is in BYPASS RECOVERY mode.
3909	18	While closing transaction descriptor, server found it not marked as having a kept database.
3913	26	Attempt to use an inactive internal transaction. This is an internal system error.
3914	26	Illegal internal transaction status. This is an internal system error.
3915	26	Attempt to make a transaction in dbid %d internal. This is an internal system error.
3916	26	Internal transaction lock context chains mixed up. This is an internal system error
3917	16	An attempt was made to startup a multi-database update in database '%S_DBID' after starting up the master transaction in tempdb. This could render the database '%S_DBID' unrecoverable and this update is therefore not allowed.

Table 5-34: 4001 to 4025, dataserver messages

Number	Severity	Message Text
4001	11	Cannot open default database '%.*s'.
4002	14	Login failed.
		See "Error 4002" in SQL Server Error Messages.
4013	14	Login failed - not a secure SQL Server.
4016	16	Language name in login record '%.*s' is not an official name on this SQL Server. Using default '%.*s' from syslogins instead.
4017	16	Neither language name in login record '%.*s' nor language name in syslogins '%.*s' is an official language name on this SQL Server. Using server-wide default '%.*s' instead.
4018	16	Your default language name from syslogins '%.*s' is not an official language name on this SQL Server. Using server-wide default '%.*s' instead.

Table 5-34: 4001 to 4025, dataserver messages (continued)

Number	Severity	Message Text
4019	16	Default date order '%.*s' for language '%.*s' is invalid. Using 'mdy' instead.
4020	20	While reading characters from the client, the receiving buffer has been detected to be too small.
4022	10	Password has expired However, you are still allowed to login. You must change your password before you can continue.
4023	10	Your password will expire in %s days.
4024	10	The packet size (%d) specified at login time is illegal. Legal values are between 512 and %d.
4025	10	A serious error was encountered while attempting to increase the packet size specified for spid %d. The Network memory map maybe corrupt. Call Technical Support for further assistance.

Table 5-35: 4201 to 4322, dump and load messages

Number	Severity	Message Text
4201	17	DUMP TRANSACTION for database '%.*s' failed: insufficient memory to allocate backout structure.
4204	17	Unable to continue logged version of DUMP TRAN. No space left in database; use NO_LOG option or run ALTER DATABASE. Else, an old transaction may be active; see Syslogshold table.
		See "Error 4204" in SQL Server Error Messages.
4205	16	Syslogs does not exist in its own segment in database '%d' with segmap '%ld' with logical start page number of '%ld'. You may not use DUMP TRAN in this case, use DUMP DATABASE instead.
4206	16	You cannot run DUMP TRANsaction WITH NO_LOG inside a user transaction.
4207	16	Dump transaction is not allowed because a non-logged operation was performed on the database. Dump your database or use dump transaction with truncate_only until you can dump your database.
		See "Error 4207" in SQL Server Error Messages.
4208	16	DUMP TRANsaction to a dump device is not allowed while the trunc. log on chkpt. option is enabled. Disable the option with sp_dboption, then use DUMP DATABASE, before trying again.
4210	16	While attempting DUMP TRANsaction WITH NO_TRUNCATE, couldn't find database %.*s.
4211	23	Couldn't complete DUMP TRANsaction WITH NO_TRUNCATE on database '%.*s', because the log pointer in sysdatabases (page number %ld) is not accurate.

Table 5-35: 4201 to 4322, dump and load messages (continued)

Number	Severity	Message Text
4212	16	Page %ld in database '%.*s' cannot be used as a truncation page because the page belongs to object ID %ld and not to the log. Choose another page.
4213	16	Page %ld in database '%.*s' cannot be used as a truncation page because the page is not allocated. Choose another page.
4214	16	Cannot use page %ld in database '%.*s' as the trunc page because the LTM trunc state is not set to TRUNC_VALID. Set LTM trunc state to TRUNC_VALID with DBCC SETTRUNC.
4215	21	%s failed in database %.*s: %ld not first log page in serially allocated log extent or allocation page. Should be: %ld. Previous log record in scan: %ld.
4216	21	%s failed in database %.*s: unexpected end of log encountered on page %ld while scanning for page %ld.
4217	26	Failure during DUMP TRANSACTION in database %d: caller does not possess dump lock.
4218	21	Failure during DUMP of database '%.*s': serial log page allocation rules broken. Current page: %ld; next page: %ld; piece end: %ld; end-of-scan: %ld.
4219	21	DUMP TRANsaction encountered an unexpected end to the log page chain. Last page in log as scanned: %ld.
		See "Error 4219" in SQL Server Error Messages.
4220	14	You must be the DBO of database %.*s or have Operator (OPER) role to run DUMP TRANSACTION.
4221	16	DUMP TRANsaction to a dump device is not allowed where a truncate-only transaction dump has been performed after the last DUMP DATABASE. Use DUMP DATABASE instead.
4222	16	DUMP TRANsaction for dbid %d failed: log page (%ld) is on a data-only segment. This is probably due to an incomplete move of the log to a device separate from the data. Please complete the log migration, or contact the System Administrator.
4223	18	Deadlock occurred in SQL Process %d.
4224	16	An interruption occurred in process %d due to USER ATTENTION or connection failure.
4225	16	This database has not been dumped since it was created or upgraded. You must perform a dump database before you can dump its transaction log.
4226	16	Logged DUMP TRANSACTION cannot run in database %.*s, because that databases's log version (%d) disagrees with the SQL Server's log version (%d); use DUMP TRANSACTION WITH NO_LOG. Versions will agree once ONLINE DATABASE has run.
4227	17	No space left in database master; creating user objects in master database not recommended. Else, an old transaction may be active; see Syslogshold table.

Table 5-35: 4201 to 4322, dump and load messages (continued)

Number	Severity	Message Text
4228	17	No space left in database '%S_DBID'; Use ALTER DATABASE to increase size of database. Else, an old transaction may be active; see Syslogshold table.
4301	16	Database in use. A user with System Administrator (SA) role must have exclusive use of DB to load transaction.
4302	16	Specified file '%.*s' is not in valid dump transaction format.
4305	16	Specified file '%.*s' is out of sequence. Current time stamp is %S_DATE while dump was from %S_DATE.
		See "Error 4305" in SQL Server Error Messages.
4306	16	There was activity on database since last load, unable to load. Must restart load sequence with the load database to continue.
		See "Error 4306" in SQL Server Error Messages.
4312	14	You must be the DBO of database %.*s or have Operator (OPER) role to run LOAD TRANSACTION.
4313	16	Recreate index failed for table %ld, index %d. The table has been left in an inconsistent state, and the index is missing, so LOAD TRANSACTION errors may result. Run DBCC CHECKTABLE on the table if LOAD TRANSACTION succeeds.
4314	20	Cannot find table %ld to recreate index %d.
4315	20	Log scan for recreate index failed.
4316	16	Can only LOAD TRANsaction in master if SQL Server is in single-user mode.
4317	21	Could not read log page %ld for database '%*s'; the DBINFO structure for this database is invalid, or the page chain is corrupt. Cannot proceed with LOAD TRANSACTION.
4318	21	Last log page 'next free byte' value is out of range: %ld; should be no greater than %ld.
4319	21	Failed to patch the transaction log for database '%.*s'.
4320	16	Dump or load commands require a logical dump device name from the sysdevices system table. Use sp_addumpdevice to add '%.*s' to sysdevices.
4321	16	SQL Server can not load this transaction log dump because version information ir the dump does not match information in the database. Database: log version=%d upgrade version=%ld. Dump: log version=%d, upgrade version=%ld.
4322	16	SQL Server cannot load a dump of the master database that was dumped from ar older version of SQL Server. The current master database upgrade version is %ld the dump master database upgrade version is %ld.

Table 5-36: 4401 to 4425, view messages

Number	Severity	Message Text
4401	16	View '%.*s' no longer exists.
4402	16	Infinite loop in view definition. Cannot resolve the view definitions in the query to the underlying tables.
4403	16	View '%.*s' is not updatable because it contains external aggregates , or group by clauses , or internal aggregates . Internal aggregates may be generated by certain subqueries .
4404	16	View '%.*s' is not updatable because either the view definition contains DISTINCT or the view is built upon a view created with DISTINCT option.
4405	16	View '%.*s' is not updatable because the FROM clause names multiple tables.
4406	16	View '%.*s' is not updatable because a field of the view is derived or constant.
4408	19	The query and the views in it exceed the limit of %d tables.
4409	20	The columns in the query definition and the view definition do not match.
4411	16	View '%.*s' does not allow this UPDATE because either it was created WITH CHECK OPTION or it spans another view created WITH CHECK OPTION, and one of the update columns appears in a multi-table expression in the WHERE clause of a CHECK OPTION
4412	16	View '%.*s's definition contains '%.*s', which is a temporary object. Views can only be based on permanent objects.
4413	16	View resolution could not succeed because the previously mentioned objects, upon which the view directly or indirectly relies, do not currently exist. These objects need to be recreated for the view to be usable.
4414	16	View '%.*s' does not allow INSERT because it is derived from more than one object and it was either created WITH CHECK OPTION or it spans another view created WITH CHECK OPTION.
4415	18	Internal system error: corrupt sequence tree encountered while processing the DISTINCT view '%.*s'. Notify a user with System Administrator (SA) role.
4416	19	Could not allocate a work table while processing views. The total number of work tables generated by the query exceeds the limit (%d) of work tables. Simplify the query or the views referenced in the query.
4417	16	The view '%.*s' has one or more tables with any of the keywords HOLDLOCK/NOHOLDLOCK that conflicts with the query to be run AT ISOLATION 0.
4418	16	Query has too many subqueries when all views are taken into account. Error found on view '%.*s'. The limit is %d subqueries.
4420	16	View '%.*s' is not updatable, possibly due to an outer join being in the view, or due to a subquery being in the select list of the view.
4422	16	View '%.*s' cannot be updated since no underlying tables are referenced.
4422	16	View '%.*s' cannot be updated since no underlying tables are referenced.

Table 5-36: 4401 to 4425, view messages (continued)

Number	Severity	Message Text
4423	16	View '%.*s' cannot be updated since view is the inner table of an outer join.
4424	16	View '%.*s' contains a table being updated, and this table is referenced elsewhere in the query which is not allowed if create view WITH CHECK OPTION is used.
4425	16	View '%.*s' cannot have WITH CHECK OPTION applied since it contains subqueries.

Table 5-37: 4501 to 4509, create utilities messages

Number	Severity	Message Text
4501	16	View '%.*s' has more columns defined than column names given.
4502	16	View '%.*s' has more column names specified than columns defined.
4503	20	The create view tree has a resdom with no right hand side. View '%.*s', resdom '%.*s'.
4504	16	CREATE TABLE failed because there was not enough space to allocate memory for the table.
4505	16	CREATE VIEW failed because column '%.*s' in view '%.*s' exceeds the maximum of 250 columns.
4506	16	Column names in each view must be unique. Column name '%.*s' in view '%.*s' is specified more than once.
4507	16	Column '%.*s' specifies storage type %d, which does not currently exist.
4508	16	Views are not allowed on temporary tables. Table names that begin with '#' denote temporary tables.
4509	16	Column names in each view must be unique. An unnamed column is specified more than once in view '%.*s'.

Table 5-38: 4601 to 4622, grant and revoke messages

Number	Severity	Message Text
4601	14	This permission can only be GRANTed or REVOKEd by owner '%.*s' of object '%S_OBJID', or by a user with GRANTable privileges in database '%S_DBID'
4602	14	Permission denied. Only users with System Administrator (SA) role can GRANT/REVOKE CREATE DATABASE permission.
4603	14	Only owner of current database may GRANT/REVOKE this permission.
4604	16	There is no such user %.*s.
4605	25	Can't initiate update to sysprotects.

Table 5-38: 4601 to 4622, grant and revoke messages (continued)

Number	Severity	Message Text
4606	16	GRANTed/REVOKEd privilege %s not compatible with object.
4607	16	Privilege %s may not be GRANTed or REVOKEd.
4608	16	Only users with System Administrator (SA) role can GRANT/REVOKE ALTER DATABASE permission, and only to/from users with CREATE DATABASE permission.
4609	16	You cannot specify a column list with INSERT or DELETE.
4610	16	You may only GRANT or REVOKE permission on objects in the current database
4611	16	The user '%.*s' has granted this privilege to other users. You must use REVOKE WITH CASCADE to revoke privileges for '%.*s' as well as the other users.
4612	16	Too many users to revoke privileges from,due to cascading GRANT WITH GRANT. To continue, use REVOKE WITH CASCADE on user '%.*s'.
4613	16	WITH GRANT OPTION does not apply to group or public.
4614	16	Column list may be specified either with the privileges or with the table. It cannot be specified in both places.
4615	16	Permissions may not be revoked from either the DBO or the object owner.
4616	16	Public has been granted permission on the object with the grant option. Please revoke the GRANT WITH GRANT option from public before revoking from any user/group.
4617	16	Public has GRANT WITH GRANT permission on atleast one of the columns you are trying to revoke. Please revoke the GRANT WITH GRANT option from public before revoking from the users/groups.
4618	16	The user's curwrite must be at the security label of an object in order for that user to grant/revoke access to that object.
4619	16	The user's curwrite must be at Data Low in order to grant/revoke create database permission.
4620	16	The user must be in the master database in order to grant/revoke create database access.
4621	10	Warning. All permissions except CREATE DATABASE are granted/revoked. Only System Administrator can grant/revoke CREATE DATABASE permission.
4622	10	Some or all of the specified privileges were not revoked because, they were not granted, or they were granted by some other user.

Table 5-39: 4701 to 4716, truncate table messages

Number	Severity	Message Text
4701	11	Cannot truncate table '%.*s', because this table does not exist in database '%S_DBID'.
4706	17	Could not truncate table '%.*s' because there is not enough room in the log to record the deallocation of all of the index and data pages.
4708	16	Could not truncate object '%.*s' because it is not a table.
4709	16	You are not allowed to truncate the system table '%.*s'.
4710	16	Cannot truncate table '%.*s' because you are not the owner or a user with System Administrator (SA) role.
4711	14	Permission denied. @@curread does not dominate the maxhold of table '%.*s'.
4712	14	Permission denied. @@maxwrite does not dominate the maxhold of table '%.*s'.
4713	14	Permission denied. The minhold of table '%.*s' does not dominate @@minwrite.
4714	14	Permission denied. Only users possessing the SSO role can truncate the audit log.
4715	14	Permission denied. The hurdle of table '%.*s' does not equal @@curwrite.
4716	16	Cannot truncate table '%.*s' because it is partitioned.

Table 5-40: 4801 to 4837, bcp messages

Number	Severity	Message Text
4801	20	Bulk_main: opentable on BULK INSERT table failed. Dbid=%d name='%.*s'.
4802	21	Bulk_main: getindex of primary index row failed on BULK INSERT table.
4804	21	Premature end-of-message while reading current row from host. Host program may have died.
4805	17	The front end tool you are using does not support the feature of bulk insert from host, please use the proper tools for this command.
4806	16	You cannot run the non-logged version of bulk copy in this database. Please check with the DBO.
		See "Error 4806" in SQL Server Error Messages.
4808	10	The bulk copy of this table has been aborted because the CHECKPOINT record could not be written in the log. Please free up space in the database.
4809	20	Unable to open SYSCOLUMNS in dbid %d to retrieve table schema information.
4810	16	Expected TEXT token in data stream for bulk copy of text data.
4811	16	Expected column offset in data stream for bulk copy of text data.
4812	16	Expected row offset in data stream for bulk copy of text data.
4813	16	Expected text length in data stream for bulk copy of text data.

Table 5-40: 4801 to 4837, bcp messages (continued)

Number	Severity	Message Text
4814	20	Bulk_getschema: Unable to open the system catalog SYSCOLUMNS in database '%.*s' while attempting to retrieve table schema information. Run DBCC CHECKTABLE on sysobjects in '%.*s'.
4818	11	Error encountered while retrieving table schema information for object '%.*s' in database '%.*s'. Re-check the schema for the table.
4819	16	You cannot BCP into the sysaudits table.
4820	16	Illegal identity value specified for identity column in table '%.*s' through BCP.
4821	16	Identity value overflow while inserting into table '%.*s' through BCP.
4822	14	You do not have the role required to run bcp in with the labelled option.
4823	16	Sensitivity label out of range for some row(s).
4824	16	Invalid sensitivity label for some row(s).
4825	16	Some row(s) not copied.
4826	16	Expected sensitivity label length in data stream for bulk copy of sensitivity label data.
4827	16	Expected row offset in data stream for bulk copy of sensitivity label data.
4828	16	Expected sensitivity label data in data stream for bulk copy of sensitivity label data.
4829	16	Attempt to copy in row sensitivity labels without using bulk copy labelled option Labels will be overwritten.
4830	16	The labelled option was specified, but row sensitivity labels were not passed in.
4831	16	Expected TEXT or SENSITIVITY token in data stream for bulk copy of text or sensitivity label data.
4832	16	You cannot use a pre-10.0 client to bulk copy into a Secure SQL Server.
4833	16	Expected text data in data stream for bulk copy.
4834	17	Bulk copy failed due to insufficient SQL Server memory. Please retry later when there is less load/users on the SQL server, or ask your System Administrator to reconfigure SQL Server with more memory.
4835	18	Failed to update the identity pre-burn factor for table '%.*s' through BCP. Please re-try the operation or contact your SA for details.
4836	18	Error occurred while creating the identity value for table '%.*s' through BCP. Please re-try the operation or contact your SA for details.
4837	16	Bad row data received from the client while bulk copying into object %d in database %d. Received a row of length %d while maximum possible row length %d.

Table 5-41: 4901 to 4958, alter table messages

Number	Severity	Message Text
4901	16	ALTER TABLE only allows columns to be added which can contain nulls. Column '%.*s' cannot be added to table '%.*s' because it does not allow nulls.
4902	11	Cannot alter table '%.*s', because this table does not exist in database '%S_DBID'.
4905	21	ALTER TABLE failed because page %ld of the system catalog sysindexes in database '%.*s' is not in the cache.
4906	0	ALTER TABLE failed because adding all of the new columns to table '%.*s' would make the size of a row %d. %d is the maximum allowable size of a row in a table
4909	16	Can't alter %.*s because it is not a table.
4910	16	Cannot alter table '%.*s' because you are not the owner or a user with System Administrator (SA) role.
4912	16	Cannot replace default to '%.*s.%.*s' because it already has a default bound using sp_bindefault.
4913	16	Alter table command has unrecognized action. Cannot process.
4914	16	Cannot alter table '%.*s' because the alter table statement contains multiple identity fields.
4915	16	Cannot add new identity field to '%.*s' via alter table because the table already contains an identity field.
4916	16	Cannot add new identity field to '%.*s' via alter table because the number of existing rows (%ld) exceeds the maximum value for the specified precision (%d).
4917	20	Failure adding identity column '%.*s' to table '%.*s'.
4918	16	Maximum row width exceeded when adding identity column '%.*s' to table '%.*s'.
4919	16	Identity value overflow when adding column '%.*s' to table '%.*s'.
4920	16	Permission denied. A table can only be altered if the table's hurdle equals the user's curwrite.
4921	14	Permission denied. A table's labels cannot be altered while it is in use.
4922	14	Invalid hold label specified.
4923	14	Permission denied. A table's maxhold should always dominate its minhold.
4924	14	Permission denied. A table's maxhold should always be dominated by the maxhold of the database that contains it.
4925	14	Permission denied. User maxwrite does not dominate specified maxhold.
4926	14	Permission denied. User minhold does not dominate specified minwrite.
4927	14	Permission denied. Maxhold label specified is below previous table maxhold.
4928	14	Permission denied. Minhold label specified is above previous table minhold.

Table 5-41: 4901 to 4958, alter table messages (continued)

Number	Severity	Message Text
4929	14	Permission denied. User minwrite is not dominated by specified maxhold.
4930	14	Permission denied. User maxwrite does not dominate specified minhold.
4931	16	Cannot alter system table '%.*s' because ad-hoc updates to system catalogs are not enabled. A user with System Security Officer (SSO) role must reconfigure system to allow this.
4932	16	Dropping a column from a system table is not allowed.
4933	16	Dropping a column from a replicated table is not allowed.
4934	16	A column by this name doesn't exist in the table '%.*s'.
4935	16	Dropping the only column in a table is not allowed.
4936	17	Dropping the column failed while reformatting data on page %d, row %d. This command is being rolled back.
4937	17	Deleting text pages failed. This command is being rolled back.
4938	20	Cannot undo a drop column command because the number of rows on the log record does not match the number of rows on the data page.
4939	16	Dropping a column used by an index is not allowed. Drop the '%s' index before dropping this column.
4940	16	Dropping an identity column is not allowed.
4941	16	Dropping a column which has a constraint associated with it is not allowed. Drop the constraint (object id '%ld') before dropping this column.
4942	16	Dropping a column which has a default bound to it is not allowed. Unbind the default (object id '%ld') before dropping this column.
4943	16	Dropping a column which is a primary key is not allowed. Drop the constraint (object id '%ld') before dropping this column.
4944	16	Dropping a column which is a foreign key is not allowed. Drop the constraint (object id '%ld') before dropping this column.
4945	16	Cannot drop the column because cursor '%.*s' is still open. Close the cursor(s) before dropping the column.
4946	16	Dropping a column from a table which has a constraint associated with it is not allowed. Drop the constraint (object id '%ld') before dropping this column.
4947	16	Dropping an identity column from a table while identity_insert is 'on' is not allowed. Set identity_insert to 'off' before dropping this column.
4948	17	Dropping the column failed while logging data from page %d. This command is being rolled back.
4949	20	The alttab_begin() function is trying to put too many lock requests in the lock_requests[] array.

Table 5-41: 4901 to 4958, alter table messages (continued)

Number	Severity	Message Text
4950	16	Cannot partition table '%.*s' because it is a system table.
4951	16	Cannot partition table '%.*s' because it has a clustered index.
4953	16	Cannot partition table '%.*s' because it is already partitioned.
4954	16	Cannot unpartition table '%.*s' because it is not partitioned.
4955	16	Number of partitions must be greater than one
4956	16	Cannot alter table if level 0 scans are active.
4958	16	Cannot partition table '%.*s' because it is in a pre-System 11 database.

Table 5-42: 5001 to 5028, alter database messages

Number	Severity	Message Text
5001	16	User must be in Master Database.
5002	16	Database %.*s does not exist; check sysdatabases.
5004	16	ALTER DATABASE failed. The size request must be positive.
5005	10	Extending database by %ld pages on disk %.*s
5006	16	Could not find enough space on disks to extend database %.*s.
		See "Error 5006" in SQL Server Error Messages.
5008	16	System does not support Deextend Database currently.
5009	16	ALTER DATABASE failed. Some disk names listed in command were not found. Check that names exist and are spelled correctly before re-running command.
5011	14	Only the owner of database %.*s or a user with System Administrator (SA) role can ALTER it.
5013	16	Cannot extend the MASTER database onto any device other than 'master'. The ALTER DATABASE was aborted.
		See "Error 5013" in SQL Server Error Messages.
5015	16	ALTER DATABASE failed. The total size specified must be 1 megabyte or greater.
5016	10	ALTER DATABASE failed. The Model database may not be larger than the Temporary database. Alter tempdb first.
5017	16	ALTER DATABASE failed. Database %.*s not created with 'for load' option.
5018	17	Caution: You have set up this database to include space on disk %d for both data and the transaction log. This can make recovery impossible if that disk fails.
5020	14	Permission denied. @@curwrite has to be set equal to the database's hurdle in order for the alter to proceed.

Table 5-42: 5001 to 5028, alter database messages (continued)

Number	Severity	Message Text
5021	14	Too many dbmaxhold specifications made.
5022	16	Invalid dbmaxhold provided.
5023	14	Permission denied. The database maxhold you specified does not dominate your minwrite.
5024	14	Permission denied. The database maxhold you specified is not dominated by your maxwrite.
5025	14	Permission denied. The database maxhold you specified does not dominate the current database maxhold.
5026	10	Updating database maxhold.
5028	16	ALTER DATABASE failed. This command will not make changes to a database that would cause the number of device fragments to exceed the maximum of 128. Recreate the database and try again.

Table 5-43: 6001 to 6006, shutdown messages

Number	Severity	Message Text
6001	10	SHUTDOWN is waiting for %d process(es) to complete.
6002	10	A SHUTDOWN command is in progress. Please log off.
6003	10	This process terminated by SHUTDOWN command.
6004	14	Permission denied. Only users with System Administrator (SA) role can run the SHUTDOWN command.
6005	10	A SHUTDOWN is in progress.
6006	10	Server SHUTDOWN by request.

Table 5-44: 5101 to 5151, disk messages

Number	Severity	Message Text
5101	15	Must give parameters for 'DISK %s' command. Usage: %s.
5102	15	No such command: 'DISK %.*s'.
5103	16	Illegal disk address range. The sum of VSTART and SIZE must be less than 16777216 (0x1000000).

Table 5-44: 5101 to 5151, disk messages (continued)

Number	Severity	Message Text
5104	16	Device number %d already used.
5105	16	Device activation error. PHYSNAME '%.*s' may be incorrect.
5106	15	Parameter '%s' requires value of type '%s'.
5107	15	Value is wrong type for parameter '%s' (requires type '%s').
5108	15	Parameter '%s' does not take a value.
5109	16	No such parameter: '%.*s'.
5114	20	Could not yield.
5115	16	I/O error during disk initialization. PHYSNAME '%.*s' may be incorrect or %ld (VSTART + SIZE) may exceed the size of the device. Please consult the SQL Server error log for more details.
		See "Error 5115" in SQL Server Error Messages.
5116	14	Permission denied. Only users with System Administrator (SA) role can run DISK commands.
5117	16	Unable to run DISK command. Must be in master database to run this command
5118	16	Unable to run DISK REFIT. SQL Server must be booted with the -m option. Please see your System Administration guide about the Restore Master procedure.
5119	18	Unable to reserve a buffer, aborting DISK REFIT command. Please retry Restore Master procedure.
5120	10	Bad segment map (%d) in sysusages for row with Dbid = %d, Logical Start = 0x%lx, Virtual Start = 0x%lx, and Size = 0x%lx. Recommend you patch this value with correct information after Disk Refit completes.
5121	10	Warning: Disk Refit may not have the correct segment map information in sysusages. Please review these after the command completes to verify their accuracy.
5122	10	The disk size must be >= 512.
5123	16	DISK INIT encountered an error while attempting to open/create the physical file. Please consult the SQL Server error log (in the SQL Server boot directory) for more details.
		See "Error 5123" in SQL Server Error Messages.
5124	10	Activating disk '%.*s'.
5125	10	Failed to complete unmirror of logical device '%.*s' after recovery of the master database.
5126	16	The logical device '%.*s' does not exist in SYSDEVICES.
5127	16	The device '%.*s' is already mirrored and mirroring is enabled.

Table 5-44: 5101 to 5151, disk messages (continued)

Number	Severity	Message Text
5128	16	The device '%.*s' is already mirrored but mirroring is disabled. Use the DISK REMIRROR command to enable mirroring or unmirror the device.
5129	16	Syntax error detected in the value for parameter 'mirror'. You must provide a valid physical device/file name for this parameter.
5130	16	The value for parameter 'mirror' translates to the same name as that for the primary device. Use another physical device for the mirror.
5131	16	The device '%.*s' is not currently mirrored.
5132	10	DISK MIRROR encountered an error while attempting to create the physical file '%.*s'. Please consult the SQL Server error log for more details.
5133	10	Unable to start i/o to '%.*s'. Please consult the SQL Server error log for details.
5134	10	Dynamic mirroring failed for logical device '%.*s'. Check the SQL Server error log for more information.
5135	10	Starting Dynamic Mirroring of %ld pages for logical device '%.*s'.
5136	10	%*.d pages mirrored
5137	10	Failed to mirror device '%.*s'.
5138	10	Failed to unmirror device '%.*s'.
5139	10	Failed to remirror device '%.*s'.
5140	10	Creating the physical file for the mirror
5141	17	Unable to start Dynamic Mirroring because an i/o buffer is not currently available. Try the command again later.
5142	16	Mirroring for device '%.*s' is not currently enabled.
5143	10	The remaining %ld pages are currently unallocated and will be mirrored as they are allocated.
5144	16	You can't remove the secondary physical device for virtual device '%.*s' since it is currently the only operational device. Use the SIDE=PRIMARY qualifier for the DISK UNMIRROR COMMAND.
5145	16	Error re-initializing device '%.*s'. Check SQL Server errorlog for more information.
5146	16	The VDEVNO of %ld is out of range. The maximum VDEVNO allowed is %ld.
5147	10	Device size set to %ld blocks.
5148	16	Device '%.*s' already exists.
5149	16	You cannot remove the primary physical device for virtual device '%.*s' since it is currently the only operational device. Use the SIDE=SECONDARY qualifier for the DISK UNMIRROR COMMAND.

Table 5-44: 5101 to 5151, disk messages (continued)

Number	Severity	Message Text
5150	16	DISK UNMIRROR cannot be performed, because database '%S_DBID' is currently undergoing DUMP or LOAD. Either wait for that command to complete, or abort it.
5151	16	PHYSNAME '%.*s' is already in use.

Table 5-45: 5201 to 5217, dump database messages

Number	Severity	Message Text
5201	26	Failure concurrent with dump in database %d: DFL Manager caller must be DUMP DATABASE; instead, command token was %d.
5202	26	DUMP DATABASE for database %d failed: DFL synchronisation is prematurely set.
5203	17	DUMP DATABASE for database %d failed: insufficient memory to allocate DFL.
5204	26	DUMP DATABASE for database $\% d$ failed: initial DFL allocation will not fit in initial memory block.
5205	26	DUMP DATABASE for database %d failed: duplicate dflheader found.
5206	26	DUMP DATABASE for database %d failed: dump flushlist structures have not been allocated.
5207	26	DUMP DATABASE for database %d failed: DFL synchronisation is not set.
5208	10	Operator aborted DUMP DATABASE for database %d.
5209	26	Failure during concurrent dump in database %d: DFL Manager caller must not be DUMP DATABASE, but is.
5210	26	Failure during dump in database %d: caller does not possess dump lock.
5211	26	Failure concurrent with dump in database %d: caller does not possess flushlist lock.
5212	26	Failure concurrent with dump in database %d: no DFL pieces on not-full list.
5213	26	Failure concurrent with dump in database %d: caller improperly holds flushlist lock.
5214	20	During DUMP DATABASE for database %d, flushlist closure not complete at end of synchronisation.
5215	26	DUMP DATABASE for database %d failed: could not find dflinfohead to deallocate.
5216	26	DUMP DATABASE for database %d failed: trailing piece in not-full list proved not-empty.

Table 5-45: 5201 to 5217, dump database messages (continued)

Number	Severity	Message Text
5217	20	DFL Manager failed to sleep.

Table 5-46: 5701 to 5704, Open Client™ DB-Library™ messages

Number	Severity	Message Text
5701	10	Changed database context to '%.*s'.
5702	10	The SQL Server is terminating this process.
5703	10	Changed language setting to '%.*s'.
5704	10	Changed client character set setting to '%.*s'.

Table 5-47: 5803 to 5899, configuration messages

Number	Severity	Message Text
5803	10	Unknown config number in sysconfigures, config = %d.
5804	16	Too few databases specified, minimum = %d.
5805	16	Too few locks specified, minimum = %d.
5806	16	Too few descriptors specified, minimum = %d.
5807	16	Do not recommend recovery intervals above %d minutes - use override option to force this configuration.
5808	16	Do not recommend ad hoc updates to system catalogues, use override option to force this configuration.
		See "Error 5808" in SQL Server Error Messages.
5809	16	Do not recommend average time slices above %d milliseconds, use override option to force this configuration.
5810	16	Legal values for fill factor is 0 to 100.
5811	16	Legal values for percent allocated to procedure cache is 1 to 99.
5812	14	Permission denied. Only users with System Administrator (SA) role can run reconfigure.

Table 5-47: 5803 to 5899, configuration messages (continued)

Number	Severity	Message Text
5813	16	Unable to run with specified memory size of %ld. Please see the System Administration Guide for more information on how to calculate this number.
		See "Error 5813" in SQL Server Error Messages.
5814	16	Must configure with at least %d engine on-line.
5816	16	Legal values for the number of remote logins are 0 or positive numbers.
5817	16	Legal values for the number of remote sites are 0 or positive numbers.
5818	16	Legal values for the number of remote connections are 0 or positive numbers.
5819	16	Legal values for the number of pre-read packets per remote connection are 0 or positive numbers.
5820	16	Number of remote logins should be greater than the number of remote sites.
5821	16	Number of remote connections should be greater than the number of remote sites
5822	16	Version number should be between 0 and 10000.
5824	16	Cannot reconfigure server to use sort order ID %d, because the row for its underlying character set (ID %d) does not exist in syscharsets.
5825	16	Cannot reconfigure the server's sort order since the syscharsets table does not exist. You must upgrade your server prior to attempting this.
5826	10	You have just reconfigured SQL Server's default sort order. System table indexes will be rebuilt when you reboot the SQL server.
5827	10	In changing the default sort order, you have also reconfigured SQL Server's default character set.
5828	16	Legal values for number of user connections are 1 through %d.
5829	16	Do not recommend more than %d engines on-line. Use override option to force this option.
5830	16	Must configure with at least %d engine(s) on-line.
5831	16	Cannot reconfigure the server's character set with out of bounds character set ID %d.
5832	10	The stack size must be a multiple of the page size. It has been rounded from %d to %d.
5833	16	Cannot reconfigure the server with an out-of-bound, illegal value for Systemwide Password Expiration Interval.
5835	16	Cannot reconfigure the server with an out-of-range audit queue size. The valid range is %d to %d inclusive.
5836	10	The additional network memory size must be a multiple of SYBPAGESIZE(2048). It has been rounded down from %d to %d.

Table 5-47: 5803 to 5899, configuration messages (continued)

Number	Severity	Message Text
5837	10	The default network packet size must be a multiple of 512. It has been rounded down from %d to %d.
5838	10	The maximum network packet size must be a multiple of 512. It has been rounded down from %d to %d.
5839	16	The value of 'max network packet size', '%ld', must be greater than or equal to the value of the 'default network packet size', '%ld'.
5840	16	Illegal value (%ld) specified for the number of large extents.
5841	16	Cannot reconfigure the server's sort order with an out of bounds sort order set ID %d.
5842	16	Number of cleanup blocks should be at least as great as the number of users. The number of users currently configured is %d.
5843	16	Invalid Configuration: Cache alignment '%ld' is invalid. Alignment must be a power of 2 greater than or equal to 2048. Retry the command with a legal value.
5844	16	Cannot reconfigure the auto identity column size to be %d because the minimum precision of a numeric is 1.
5845	16	Invalid value configured for lock promotion threshold = %d. Configured value must be greater than or equal to %d.
5846	16	Illegal value '%ld' specified for configuration option '%s'. The legal values are between '%ld' and '%ld'.
5847	16	Configuration Error: Configuration file, '%s', does not exist.
5848	16	Warning: Unknown parameter '%s' found on line '%ld' of configuration file '%s'. This parameter is ignored. Edit the configuration file to remove or correct this parameter.
5849	16	Verification failed for parameter '%s'.
5850	16	Notification failed for parameter '%s'.
5851	16	Configuration Error: Configuration file '%s' has an unkown format on line %d.
5852	16	Changing the value of '%s' is not allowed since it is a static option.
5853	16	'%s' has been modified from '%ld' to '%ld' by the verification routine.
5854	18	Configuration Error: Cannot write out file '%s' due to system error '%s'.
5855	16	Cannot change any of the configuration parameters since the 'sysconfigures' table was not updated during startup.
5856	16	The configuration parameter '%s' can only be changed via the stored procedure 'sp_configure'.
5857	0	Changing the value of '%s' is not allowed since its value is calculated or is readonly

Table 5-47: 5803 to 5899, configuration messages (continued)

Number	Severity	Message Text
5858	10	The configuration option '%s' has been changed by '%s' from '%ld' to '%ld'.
5859	16	The configuration number '%d' is invalid.
5860	18	Invalid datatype encountered for parameter '%s'.
5861	16	The 'total memory', '%ld', is not enough to change the parameter '%s' to '%ld'. Run 'sp_helpconfig' to determine the required memory and increase the 'total memory'.
5862	18	Invalid portion encountered.
5863	18	Invalid group encountered.
5864	18	Invalide option encountered in '%s'.
5865	18	error in os_get_cpu_count: %d
5866	10	Configuration file '%s' has been written and the previous version has been renamed to '%s'.
5867	16	The wash size for the %dk buffer pool in cache %s has been incorrectly configured. It must be a minimum of %d buffers and a maximum of %d percent of the number of buffers in the pool.
5868	16	Invalid type configured for cache %s. Cache type may be one of mixed OR log only but NOT both.
5869	16	Invalid buffer size of %dk for cache %s. Valid buffer sizes are powers of 2 between %dk and %dk inclusive.
5870	16	An invalid buffer size of %dk was encounterd in MIXED cache %s. Valid buffer sizes for MIXED caches are powers of 2 between %dk and %dk inclusive.
5871	16	Invalid pool size of %dk (%d buffers) encountered for the %dk pool in cache %s. Buffer pools must have a minimum total size of %dk or %d buffers, whichever is greater.
5872	16	The total size of the configured pools (%dk) in cache %s is greater than the total size (%dk) of the cache.
5873	16	Invalid configuration for the default %dk pool in cache %s. The default %dk pool must be a minimum of %dk.
5874	16	The total size of all configured caches (%dk) is greater than the memory available for caches (%dk).
5875	16	The cache type for the default data cache cannot be modified.
5876	16	Multiple pools containing buffer sizes of %dk encountered in cache %s. Buffer sizes in a cache must be unique.
5877	16	Bad alignment value of %d encountered. Valid cache alignment values are powers of 2 in between %dK and %dK inclusive. The units of this value are in bytes.

Table 5-47: 5803 to 5899, configuration messages (continued)

Number	Severity	Message Text
5878	14	Permission denied. Only users with role '%.*s' can change this configuration option.
5879	16	The 'reconfigure' command is no longer needed and supported since its functionality has been migrated into the 'sp_configure' command'. Please refer to the Reference Manual for details.
5880	16	Warning: The operating system setting for file descriptors, %d, is not large enough to configure 'user connections' to %d, 'devices' to %d, and 'remote sites' to %d.
5881	16	The value of 'default network packet size', '%ld', must be less than or equal to the value of the 'max network packet size', '%ld'.
5882	16	A cache alignment factor of %dk was specified but no buffer pool containing %dk buffers has been configured. An attempt will be made to create this pool with extra memory (%dk bytes) from cache %s.
5883	16	The value of 'number of locks', '%ld', is not enough to configure 'user connections' to '%ld'. 'number of locks' should be atleast twice the value of 'user connections'.
5884	10	%s
5885	16	The 'lock promotion HWM' = '%d' cannot be less than 'lock promotion LWM' = '%d'.
5886	16	The 'lock promotion LWM'= '%d', cannot be greater than the 'lock promotion HWM'= '%d'.
5887	16	Configuration Error: Duplicate Named Cache '%s' found around line '%ld' in the configuration file.
5888	16	Configuration Error: Two Named Caches with the 'cache status' defined as 'default data cache' is not allowed.
5889	16	Configuration Error: Unknown cache status '%s' defined for cache '%s'.
5890	16	Configuration Error: A Named Cache with 'cache status=default data cache' does not exist in the configuration file.
5891	16	Named cache '%s' has been configured too small. The minimum size of a named cache is %d Kilobytes.
5893	16	The sum of '%s' and '%s' must be no greater than '%s' minus '%ld'. The current values are: %s: %ld, %s: %ld, %s: %ld.
5894	16	Configuration Error: Duplicate pool size definition of '%s' for Named Cache '%s'
5895	16	Configuration Error: Duplicate wash size definition of '%s' for Named Cache '%s
5898	10	WARNING!!! %dK buffer pool has been deleted. The log I/O size for the following data bases have been set to %dk. You must change the log I/O size to an existing pool size.

Table 5-47: 5803 to 5899, configuration messages (continued)

Number	Severity	Message Text
5899	16	The value of the 'total memory' parameter (%ld) defined in the configuration file is not high enough to set the other parameter values specified in the configuration file.

Table 5-48: 5901 to 5903, checkpoint messages

Number	Severity	Message Text
5901	20	Was unable to get an alarm, the background checkpoint process is unable to run.
5902	20	Serious kernel error reported on upsleep call, unwilling to continue. Aborting the background checkpoint process.
5903	16	Unable to open database with id = %d, suspect inconsistency in sysdatabases table.

Table 5-49: 6001 to 6006, shutdown messages

Number	Severity	Message Text
6001	10	SHUTDOWN is waiting for %d process(es) to complete.
6002	10	A SHUTDOWN command is in progress. Please log off.
6003	10	This process terminated by SHUTDOWN command.
6004	14	Permission denied. Only users with System Administrator (SA) role can run the SHUTDOWN command.
6005	10	A SHUTDOWN is in progress.
6006	10	Server SHUTDOWN by request.

Error Messages 6101 to 13120

Table 5-50: 6101 to 6108, process kill messages

Number	Severity	Message Text
6101	16	Process '%d' is not a valid process number. Choose a number between 1 and '%d'.
6102	14	Permission denied. Only users with System Administrator (SA) role can run the KILL command.
6103	17	Unable to do cleanup for the killed process; received Msg %d.
		See "Error 6103" in SQL Server Error Messages.
6104	16	You cannot use KILL to kill your own process.
6106	16	Process '%d' is not an active process number.
6107	14	Only User processes can be KILLed or SYB_TERMINATEd.
6108	16	Process '%d' is not sleeping under a valid KILL condition, and therefore cannot be KILLed.

Table 5-51: 6201 to 6291, showplan messages

Number	Severity	Message Text
6201	10	STEP %d
6202	10	The type of query is SELECT (into Worktable%d).
6203	10	The type of query is %s.
6204	10	The update mode is direct.
6205	10	The update mode is deferred.
6206	10	GROUP BY
6207	10	Vector Aggregate
6208	10	Scalar Aggregate
6209	10	This step involves sorting.
6210	10	Worktable%d created for ORDER BY.
6211	10	Worktable%d created for DISTINCT.
6212	10	Worktable%d created for REFORMATTING.
6213	10	Worktable%d created for SELECT_INTO.

Table 5-51: 6201 to 6291, showplan messages (continued)

Number	Severity	Message Text
6214	10	TO TABLE
6215	10	FROM TABLE
6216	10	Worktable%d.
6217	10	%.*s
6218	10	DISJOINT TABLE : nested iteration.
6219	10	Nested iteration.
6220	10	EXISTS TABLE : nested iteration.
6221	10	Using GETSORTED
6222	10	Using Dynamic Index.
6223	10	Table Scan.
6224	10	Using Clustered Index.
6225	10	Index: %.*s
6226	10	Index name not found.
6227	10	Log Scan.
6228	10	Cursor name '%.*s' is declared on procedure '%.*s'.
6229	10	Cursor name '%.*s' is declared at nesting level '%d'.
6230	10	The cursor is positioned after the last row.
6231	10	The current cursor position has been deleted.
6232	10	The cursor is positioned before the next row.
6233	10	The cursor is positioned on a row.
6234	10	There have been %d rows read, %d rows updated and %d rows deleted through this cursor.
6235	10	The cursor is not open.
6236	10	The cursor will be closed if the current position is deleted.
6237	10	The cursor will be closed when a transaction is committed or rolled back.
6238	10	The cursor will remain open when a transaction is committed or rolled back.
6239	10	The number of rows returned for each FETCH is %d.
6240	10	The cursor is read only.
6241	10	The cursor is updatable.
6242	10	There are %d columns returned by this cursor.
6243	10	The result columns are:

Table 5-51: 6201 to 6291, showplan messages (continued)

Number	Severity	Message Text
6245	10	Name = '%.*s', 'Expression Result', Type = %s, Length = %d (%S_MSG)
6246	10	Name = '%.*s', Table = '%.*s', Type = %s, Length = %d (%S_MSG)
6247	10	The cursor was opened with these parameters:
6248	10	%s
6249	10	There are no active cursors.
6250	10	There are no active cursors that match the search criteria.
6251	10	This cursor is declared within a stored procedure. The cursor's memory usage cannot be distinguished from that of the procedure as a whole.
6252	10	This cursor is declared on a stored procedure. It is presently using '%d' bytes. However, the memory usage will increase when the cursor is opened because the query plan will be associated with the cursor at that time.
6253	10	This cursor is declared on a stored procedure. It is using %ld bytes of memory. The procedure's plan (%ld bytes) will be returned to the procedure cache when the cursor is closed.
6254	10	This cursor is using %ld bytes of memory.
6255	10	The cursor id is %ld.
6256	10	The cursor has been successfully opened %d times.
6257	10	The cursor was closed by a CLOSE CURSOR statement.
6259	10	The cursor was closed because its current scan position could not be maintained following a delete, update or insert.
6260	10	The cursor was closed because it was declared on a join and its current position was deleted.
6261	10	The cursor was closed due to an error on the OPEN CURSOR statement.
6262	10	The cursor was closed because CLOSE ON ENDTRAN was SET ON and the transaction containing the cursor ended.
6263	10	The cursor is read only because it is declared on a union.
6264	10	The cursor is read only because it is declared on a group by or its plan includes a group by operation.
6265	10	The cursor is read only because it contains a DISTINCT.
6266	10	The cursor is read only because it contains an aggregate.
6267	10	The cursor is read only because it contains an ORDER BY clause.
6268	10	Showplan output for the cursor:
6269	10	The cursor is currently scanning at isolation level 0.

Table 5-51: 6201 to 6291, showplan messages (continued)

Number	Severity	Message Text
6270	10	The cursor is currently scanning at a nonzero isolation level.
6271	10	The cursor was compiled at isolation level %d.
6272	10	Using I/O Size %d Kbytes.
6273	10	With %S_MSG Buffer Replacement Strategy.
6274	10	Evaluate Grouped %s.
6275	10	Evaluate Ungrouped %s.
6276	10	Ascending scan.
6277	10	Descending scan.
6278	10	Positioning at start of table.
6279	10	Positioning at end of table.
6280	10	Positioning by Row IDentifier (RID).
6281	10	Positioning by key.
6282	10	Positioning at index start.
6283	10	Positioning at index end.
6284	10	Scanning only the last page of the table.
6285	10	Scanning only up to the first qualifying row.
6286	10	Index contains all needed columns. Base table will not be read.
6287	10	Keys are:
6288	10	%.*s
6289	10	QUERY PLAN FOR STATEMENT %u (at line %u).
6290	10	MRU
6291	10	LRU

Table 5-52: 6401 to 6403, abort transaction messages

Number	Severity	Message Text
6401	16	Cannot rollback %.*s - no transaction or savepoint of that name found.
6402	20	Inconsistency in rollback logic. ROLLBACK finds no matching SAVE TRANsaction or BEGIN TRANsaction. ROLLBACK aborted.
6403	20	No matching savexact record found when rolling back the subordinate transaction %.*s.

Table 5-53: 6501, buffer manager message

Number	Severity	Message Text
6501	21	Logical page %ld in database '%.*s' missing from buffer cache after fetching the index row.

Table 5-54: 6701 to 6702, protection module messages

Number	Severity	Message Text
6701	16	Could not open dbid %d, object %ld.
6702	20	Protection hash chain corrupt: element of type UNUSED found in hash chain (dbid %d, object %ld, protection type %d, protection status %d, column map %ld)

Table 5-55: 6901 to 6904, timestamp messages

Number	Severity	Message Text
6901	21	Overflow on High component of timestamp occurred in database %d. Database table possibly corrupt.
6902	21	Page timestamp value falls between the old and new timestamps from log. Page $\#=\%$ ld, object id = $\%$ ld, page timestamp= $\%04x$ $\%08$ lx. Log: old timestamp= $\%04x$ $\%08$ lx, new timestamp= $\%04x$ $\%08$ lx.
		See "Error 6902" in SQL Server Error Messages.
6903	21	High order of timestamp indicates that timestamp structure may be incorrect.
6904	21	Mismatch between database table passed and the one found in the system structure when requesting new database timestamp. Database id passed in : %d. System database id : %d.

Table 5-56: 7001 to 7026, external table messages (Stratus VOS)

Number	Severity	Message Text
7001	16	A transaction attempted on external table.
7002	16	Attempt to open VOS file failed
7003	16	Attempt to close VOS file failed
7004	16	Attempt to sequential_read VOS file failed
7005	16	Segment name must be non-null; holds fully qualified VOS file path name
7006	16	External table file name error
7007	16	Illegal datatype for external table
7008	16	NULL not allowed for external table
7009	16	Create unique index and create clustered index are not allowed for external tables
7010	16	No index named '%.*s' exists on the OS file for external table '%.*s'.
7011	16	Attempt to get file status for external table failed.
7012	16	External table - skipped.
7013	10	Create database feature is disabled.
7014	10	Drop database feature is disabled.
7015	10	Alter database feature is disabled.
7016	10	Only money(19, 4) is allowed for non-external tables.
7017	10	The %s (%d) for column '%.*s' in external table '%.*s' must be within the range %d to %d.
7018	20	Bad offset (%d) should be (%d) for external table column.
7019	20	No conversion buffer available for conversion, fatal error.
7020	16	Attempt to bulk copy into an external table.
7021	16	The embedded_key index type must be used when creating a VOS index for external tables.
7022	16	Descending order not allowed in the VOS index used for external tables, use ascending order.
7023	16	The argument duplicates_allowed must be true in the VOS index for external tables.
7024	16	The collation_code argument must be ascii or numeric when creating a VOS index for extgernal tables.
7025	20	Process not running on engine with attached ports for external table during external table scan.
7026	16	External tables index file name '%.*s' is too long. Maximum length is %d.

Table 5-57: 7101 to 7142, text manager messages

Number	Severity	Message Text
7101	17	Unable to allocate new text value, dbid %d.
7105	22	TEXT/IMAGE page %d does not have a next page, although it should.
7109	22	Unexpected log record of type %d found while processing TEXT/IMAGE data.
7112	17	Deadlock occurred while trying to lock page %ld, which is held by SQL Server process %d.
7114	22	Page %ld is not a valid text page.
7120	22	Log record %ld:%d was not found in the LOG.
7121	22	Free offset %d is invalid on page %ld.
7123	16	Invalid text pointer value %s.
7124	16	The offset and length specified in the READTEXT command is greater than the actual data length of %ld.
7125	16	Text pointer value conflicts with the column name specified.
7126	16	Text pointer value references a data page with an invalid text status.
7127	16	Text pointer value references a data page with an invalid time stamp.
7128	16	Text pointer value references a data page which is no longer allocated.
7129	16	Synchronization time stamp does not agree with text data page value.
7130	16	WRITETEXT with no log is not valid at this time. Database %s must first be configured for this.
		See "Error 7130" in SQL Server Error Messages.
7131	16	Invalid table and column name specified in textvalid function.
7132	16	Selection of TEXT and IMAGE datatypes require DBLIB 4.0 or greater.
7133	16	NULL textptr passed to %s function.
7134	16	The text table and the table referenced by the text pointer disagree.
7135	25	Failed to acquire lock for objid %ld.
7136	16	SQL Server is now using a multi-byte character set, and the TEXT character counts have not been re-calculated using this character set for table '%.*s'. Use DBCC FIX_TEXT on this table before running the query again.
7137	20	Textptr Write Failed: An error occured while attempting to write text/image replication information for database %.*s, table %.*s, column %.*s. Please contact Sybase Technical Support for assistance. (page %ld, datapage %ld, datarow %d)
7138	20	Text/Image Replication Failure: A memory allocation error occured during replication of table %.*s, in database %.*s. Try restarting the Sql Server with a larger procedure cache, or contact Sybase Technical Support.

Table 5-57: 7101 to 7142, text manager messages (continued)

Number	Severity	Message Text
7139	16	Insert to a TEXT/IMAGE column from a non TEXT/IMAGE field which involves internal worktable (eg. orderby, groupby) processing is not supported. Rewrite your query to avoid conversion from non TEXT/IMAGE datatype to TEXT/IMAGE datatype.
7140	16	A deadlock was detected while attempting to lock the first text page for text pointer %s.
7141	16	A lock request was interrupted while attempting to lock the first text page for text pointer %s.
7142	16	The text pointer %s refers to a TEXT/IMAGE page that has been allocated to a different row. This occurred because the original row was updated or deleted during an internal deadlock avoidance manuever.

Table 5-58: 7201 to 7233, distributed database network messages

Number	Severity	Message Text
7201	17	Can't open a connection to site '%S_SRVID' because there are no remote sites available. Rerun when there are fewer active remote sites, or contact a user with System Administrator (SA) role.
7202	17	Can't open a connection to site '%S_SRVID' because there are no available PSS structures.
7203	17	Can't open a connection to site '%.*s' because SQL Server is not configured for enough user connections. See the error log file in the SQL Server boot directory.
7204	18	Can't open a connection to site '%.*s' because the site is already active.
7205	18	Can't open a connection to site '%S_SRVID'. See the error log file in the SQL Server boot directory.
		See "Error 7205" in SQL Server Error Messages.
7206	17	Can't open a connection to site '%S_SRVID' because all channel numbers are in use.
7207	17	Can't open a connection to site '%S_SRVID' because there are no remote connections available. Rerun when there are fewer remote users and/or fewer local users making remote accesses, or contact a user with System Administrator (SA) role.
7208	17	Can't open a connection to site '%S_SRVID' because there are no remote logins available. Rerun when there are fewer local users making remote accesses, or contact a user with System Administrator (SA) role.
7209	17	Cannot open a connection to site '%S_SRVID' because %S_MSG buffer could not be initialized.

Table 5-58: 7201 to 7233, distributed database network messages (continued)

Number	Severity	Message Text
7210	18	Can't open a connection to site '%S_SRVID' because 'set up channel' message could not be sent.
7211	18	Can't open a connection to site '%S_SRVID' because 'set up channel' message was not acknowledged.
		See "Error 7211" in SQL Server Error Messages.
7212	11	Can't close connection %d on site '%S_SRVID' because it is not active.
		See "Error 7212" in SQL Server Error Messages.
7213	18	Can't remove site '%.*s' from list of active sites because it is missing.
7214	11	No site name received in server login packet. Server login rejected.
		See "Error 7214" in SQL Server Error Messages.
7215	18	Can't send to site '%S_SRVID'.
		See "Error 7215" in SQL Server Error Messages.
7216	18	Can't read from site '%.*s'.
7217	18	Echo failed from site '%.*s'.
7218	11	Site '%.*s' not found in sysservers.
		See "Error 7218" in SQL Server Error Messages.
7219	11	Site %d not found in sysservers.
7220	11	Site '%s' not found in interfaces file.
		See "Error 7220" in SQL Server Error Messages.
7221	14	Login to site '%S_SRVID' failed.
7222	18	Received bad token 0x%x from site '%S_SRVID'.
7223	16	Cannot %S_MSG site '%S_SRVID'.
7224	16	Unexpected end-of-message encountered in RPC response from site '%S_SRVID'
7225	16	Unknown datatype token %d '%s' encountered.
7226	16	Alternate row received for id %d with no corresponding format information.
7227	17	Can't open a connection to site '%S_SRVID' because SQL Server is not configured for remote access. Ask a user with System Administrator (SA) role to reconfigure SQL Server to allow remote access.
		See "Error 7227" in SQL Server Error Messages.
7228	18	Received a final DONE packet with DONE_ACK on site '%.*s'.
7229	18	Unable to obtain the remote Server's OS Session Label.

Table 5-58: 7201 to 7233, distributed database network messages (continued)

Number	Severity	Message Text
7230	18	The OS Session Label of the remote Server process does not equal the connection level assigned to it.
7231	18	The OS Session Label, curread and curwrite labels of the Client do not equal the connection level for the remote Server.
7232	18	Internal MAC Subsystem error. OS Binary to Master SLID Conversion failed.
7233	18	Internal MAC Subsystem error. Master SLID to OS Binary Conversion failed.

Table 5-59: 7301 to 7389, parser messages

Number	Severity	Message Text
7301	15	FOR UPDATE has been incorrectly specified for a READ ONLY cursor.
7302	15	The row number specification for a SET CURSOR ROWS statement must be an integer value greater than 0.The given value is '%d'.
7303	15	FOR BROWSE can not be used in the declaration of a cursor.
7304	15	FOR READ ONLY can not be used in a SELECT which is not part of the declaration of a cursor or which is not inside a stored procedure.
7305	15	FOR UPDATE can not be used in a SELECT which is not part of the declaration of a cursor or which is not inside a stored procedure.
7307	15	COMPUTE clause can not be used in the declaration of a cursor.
7308	15	SELECT-INTO can not be used in the declaration of a cursor.
7309	10	SQL statement on line number %d contains %S_MSG. The error is caused due to the use of %s.
7310	10	SQL statement on line number %d contains %S_MSG. The error is caused due to the use of non-ANSI option: %S_MSG.
7311	10	Line number %d contains %S_MSG. The error is caused due to the use of Sybase declared global/local variables.
7312	10	Line number %d contains %S_MSG. The error is caused due to the use of Sybase built-in function: %.*s.
7313	10	Line number %d contains %S_MSG. The error is caused due to the use of non-standard control flow: %s.
7314	10	Line number %d contains %S_MSG. The error is caused due to the use of non-standard transaction key word(s): %S_MSG.
7315	10	Line number %d contains %S_MSG. The error is caused due to the use of Non-ANSI conversion function(s).
7316	10	Line number %d contains %S_MSG. The error is caused due to the use of database prefix.

Table 5-59: 7301 to 7389, parser messages (continued)

Number	Severity	Message Text
7317	10	Line number %d contains %S_MSG. The error is caused due to the use of %S_MSG %S_MSG.
7318	10	Line number %d contains %S_MSG. The error is caused due to the use of Non-ANSI drop object functionality: %S_MSG.
7319	10	Line number %d contains %S_MSG. The error is caused due to the use of Non-ANSI operator: %S_MSG.
7320	10	Line number %d contains %S_MSG. The error is caused due to the use of Non-ANSI pattern matching character(s).
7321	10	Line number %d contains %S_MSG. The error is caused due to the use of column name(s) in a select list with aggregates but column name(s) not in group by list.
7322	10	Line number %d contains %S_MSG. The error is caused due to the use of set operations in an insert select: %S_MSG.
7323	10	Line number %d contains %S_MSG. The error is caused due to the use of column headings.
7324	10	Line number %d contains %S_MSG. The error is caused due to the use of compute statement.
7325	16	Nulls not allowed in a primary key column.
7326	10	Line number %d contains %S_MSG. The error is caused due to the use of Non-ANSI escaping of '[' or ']' in a LIKE ESCAPE.
7327	10	Length specification %d is zero or negative.
7328	10	Specified scale %d is negative.
7329	15	There are too many parameters given with function '%.*s'. The maximum number of parameters allowed is %d.
7330	15	Within %s, you are not allowed to specify the database name prefix for the new object name in %s. All new objects must be created in the current database.
7331	15	Within %s, you can't create an object owned by another user. The specified object owner is '%.*s', but the schema authorization id is '%.*s'.
7332	15	%S_MSG is allowed only in %S_MSG
7333	15	%s does not allow specifying the user name as a prefix to the object name.
7334	16	Subqueries are not allowed in a RAISERROR.
7335	15	A SELECT statement that assigns a value to a variable must not be combined with a COMPUTE clause.
7336	10	Line number %d contains non-ANSI identifier. Length of identifier '%.*s' is greater than 18.
7337	10	FIPS WARNING: Truncation when inserting long char/varchar into shorter char/varchar.

Table 5-59: 7301 to 7389, parser messages (continued)

Number	Severity	Message Text
7338	10	FIPS WARNING: Union of exact numeric with different precision or scale.
7339	10	FIPS WARNING: Union of chars or of literals with different lengths.
7340	10	FIPS WARNING: Union of chars with literal.
7341	10	FIPS WARNING: Inserted approximate numeric into exact numeric.
7342	15	Keyword SHARED can not be used in a SELECT statement which is not part of the declaration of a cursor.
7343	15	The value (%d) given to the %S_MSG is not within the allowed range. The allowed range is between %d and %d.
7344	16	DECLARE CURSOR must be the only statement in a query batch.
7345	16	SELECT is not allowed in a dynamic EXECUTE IMMEDIATE statement.
7346	16	Invalid arguments for RAISERROR extended error data.
7347	16	The IDENTITY function should be used only when the SELECT statement has an INTO clause.
7348	16	Select expression results in more than one column having same name. Column name '%.*s' is specified more than once
7349	16	FIPS WARNING: Due to usage of the name of an expression in the ORDER BY clause which has a correlation name in the select list
7350	16	FIPS_WARNING: Use of implicit or explicit ALL in COUNT aggregate function. Only COUNT(*) or COUNT(DISTINCT <expression>) is allowed.</expression>
7351	16	Local or global variables not allowed in view definition
7352	16	The SET option with ARITH_OVERFLOW is allowed only in SET ARITHABORT or SET ARITHIGNORE.
7353	16	The SET option with NUMERIC_TRUNCATION is allowed only in SET ARITHABORT.
7354	16	The SET can have option restrictions only when there is one option in the command.
7355	16	Table (or view) '%.*s' created by SELECT INTO or CREATE VIEW results in a column with no name. Please specify a column name for computed columns.
7356	16	Aggregates or subqueries are not allowed in check constraints.
7357	15	Label options (CURREAD, CURWRITE) cannot be used with non-label SET options in a single SET commmand.
7358	16	Invalid type argument specified for the %s builtin function. Argument must either be SENSITIVITY or SENSITIVITY_BOUNDARY.
7359	16	SYB_IDENTITY is not allowed in READ or WRITE TEXT commands.
7360	16	Explicit updates/inserts cannot be done on sensitivity or information columns.

Table 5-59: 7301 to 7389, parser messages (continued)

Number	Severity	Message Text
7361	16	FIPS WARNING: GROUP BY clause specified when all the items in select list are aggregate functions or none of the items in select list are aggregate functions.
7362	16	FIPS WARNING: Select list contains aggregate function(s) but GROUP BY clause not specified.
7363	16	You can not have variable assignments in a SELECT statement with the UNION operation.
7364	16	Tables '%.*s' and '%.*s' have same exposed names. Use correlation names to distinguish them.
		See "Error 7364" in SQL Server Error Messages.
7365	16	A column in the FOR UPDATE OF list can only be qualified by a table or correlation name. Column '%.*s' is qualified by an table owner and/or database name.
7366	16	A column in the FOR UPDATE OF list can only be qualified by an exposed table or correlation name. '%.*s' is not an exposed name in the select statement.
7368	16	Can not create column by name 'SYB_IDENTITY_COL'. This name has special meaning when 'auto_identity' option is ON.
7369	15	Procedure Grouping is not allowed.
7370	16	Specified precision %d is more than the maximum precision %d.
7371	16	Specified scale %d is more than the specified precision %d.
7372	15	Cursor FOR UPDATE cannot be specified at isolation level 0.
7373	15	Browse mode cannot be specified at isolation level 0.
7374	15	Invalid isolation level specified.
7375	15	SELECT INTO cannot be specified with isolation level clause.
7376	15	Select in a CREATE VIEW cannot be specified with isolation level clause.
7377	15	SELECT INSERT cannot be specified with isolation level clause.
7378	15	HOLDLOCK/NOHOLDLOCK/SHARED conflicts with AT ISOLATION LEVEL 0.
7379	14	Permission denied. You must have the 'Replication' role to set %.*s ON or OFF. Please contact a user with System Security Officer (SSO) role for help.
7380	10	WARNING: Line %d. Invalid value for '%S_MSG' specified. This value will be ignored, default value will be used instead.
7381	10	prefetch size
7382	16	Subqueries are not allowed in an ORDER BY clause.
7383	16	Subqueries are not allowed in a GROUP BY clause.

Table 5-59: 7301 to 7389, parser messages (continued)

Number	Severity	Message Text
7384	16	Subqueries are not allowed in a COMPUTE clause.
7385	16	The number of subqueries in the query exceeds the maximum allowed (%d).
7386	10	Set dup_in_subquery is no longer supported. To get similar performance and semantics, rewrite the subquery as a join.
7388	16	An aggregate of an aggregate produces a scalar value. Any further nesting of aggregates has no effect. Remove the aggregates beyond level two.
7389	16	A HAVING clause with aggregates of different levels is not allowed.

Table 5-60: 7401 to 7415, threshold messages

Number	Severity	Message Text
7401	10	Could not allocate memory for the threshold task's argument list; threshold task cannot be spawned for database %d, segment %d, free space %ld.
		See "Error 7401" in SQL Server Error Messages.
7402	10	Could not spawn the threshold handler procedure for database %d, segment %d when only %ld free pages were left in the segment.
		See "Error 7402" in SQL Server Error Messages.
7403	10	Threshold task could not use database %d, and so cannot execute the threshold procedure for segment %d, free space %ld.
		See "Error 7403" in SQL Server Error Messages.
7404	10	Could not find row in systhresholds for database %.*s describing segment %d, free space %ld.
		See "Error 7404" in SQL Server Error Messages.
7405	10	Threshold procedure name is missing from the systhresholds row in database %.*s for segment %d, free space %ld.
		See "Error 7405" in SQL Server Error Messages.
7406	16	%s: unknown option: %.*s
		See "Error 7406" in SQL Server Error Messages.
7407	10	Failed to execute the threshold procedure for database %d, segment %d, free space %ld.
		See "Error 7407" in SQL Server Error Messages.
7408	20	Could not find a dbtable for database %d.
		See "Error 7408" in SQL Server Error Messages.

Table 5-60: 7401 to 7415, threshold messages (continued)

Number	Severity	Message Text
7409	20	This task tried to sleep waiting for space to become available in the log, but could not. The current command is being aborted because no further database changes can be logged.
		See "Error 7409" in SQL Server Error Messages.
7410	26	%s: function called with invalid argument.
		See "Error 7410" in SQL Server Error Messages.
7411	21	Table 'systhresholds' in database '%.*s' is not in its correct sort order. Either the clustered index is missing or there is data corruption in the table.
		See "Error 7411" in SQL Server Error Messages.
7412	10	Space available in the log segment has fallen critically low in database '%.*s'. All future modifications to this database will be %S_MSG until the log is successfully dumped and space becomes available.
		See "Error 7412" in SQL Server Error Messages.
7413	10	%d task(s) are sleeping waiting for space to become available in the log segment for database %.*s.
		See "Error 7413" in SQL Server Error Messages.
7414	10	Threshold procedure '%.*s' returned an error indication (@status=%d) when called for database '%.*s', segment '%.*s', free_space %ld.
		See "Error 7414" in SQL Server Error Messages.
7415	10	The transaction log in database %.*s is almost full. Your transaction is being %S_MSG until space is made available in the log.
		See "Error 7415" in SQL Server Error Messages.

Table 5-61: 7601 to 7620, auditing module messages

Number	Severity	Message Text
7601	14	Permission denied. System Security Officer (SSO) role is required to open an auditing system table.
7602	16	There is no such audit option. If you received this message while executing a Sybase-supplied auditing stored procedure, this is a system error, and you should contact a user with System Administrator (SA) role.
7603	14	The ad_hoc_audit builtin function cannot be called directly. You must use sp_addauditrecord to send an ad-hoc audit record.
7604	20	An unknown audit event type was received. This is a system error. Contact a user with System Security Officer (SSO) role.

Table 5-61: 7601 to 7620, auditing module messages (continued)

Number	Severity	Message Text
7605	20	An attempt to send a message to the audit process has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7606	20	An attempt to allocate memory for the audit queue has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7607	20	An attempt to establish a system mailbox for the audit process has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7608	20	An attempt to open the sybsecurity database has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7609	20	An attempt to load the global audit options into sysauditoptions has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7610	20	An attempt to open the sysaudits table has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7611	20	An attempt to awaken the server initialization process has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7612	20	An attempt to get an audit record from the audit queue has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7613	14	Permission denied. System Security Officer (SSO) role is required to create or drop the sybsecurity database.
7614	14	Permission denied. System Security Officer (SSO) role is required to create an auditing system table.
7615	16	The auditing system tables can only be created in the sybsecurity database.
7616	16	You can only use SELECT or SELECT INTO with the sysaudits table.
7617	20	An attempt to get a free audit record buffer from the audit queue has failed. This is a system error. Contact a user with System Security Officer (SSO) role.
7618	20	The audit process is not currently active. Contact a user with System Administrator (SA) or System Security Officer (SSO) role.
7619	20	An insert to the sysaudits table has failed. This is a serious error, and you should contact a user with System Administrator (SA) or System Security Officer (SSO) role.
7620	14	You must use one of the Sybase-supplied auditing stored procedures to change audit options.

Table 5-62: 7701 to 7797, sequencer messages

Number	Severity	Message Text
7701	16	Overflow when converting from char to type %s, value = '%.*s'.
7702	16	Overflow when converting from numeric (%d,%d) to type %s'%.*s', value = '%.*s'.
7703	16	Overflow when converting from decimal($\%d,\%d$) to type $\%s'\%.*s'$, value = $\%.*s'$.
7704	16	Truncation error when converting to exact numeric (%d,%d) from type %s'%.*s', value = '%.*s'.
7705	10	Invalid pattern string. The character following the escape character must be percent sign, underscore, left square bracket, right square bracket, or the escape character.
7706	10	Pattern string is too long. The given pattern string '%.*s' is converted using the escape character '%.*s'. The converted string is longer than 255 bytes.
7707	10	Illegal escape character found. There are fewer bytes than necessary to form a valid character.
7708	10	Pattern string is too complex. There are too many blocks requiring special attention for right bracket (]), circumflex (^), or dash (-).
7709	20	Server-initiated remote procedure call state error.
7710	20	Attempt to retrieve a returned parameter length from a server-initiated stored procedure without specifying the parameter name.
7711	20	Parameter not found while trying to retrieve the returned parameter length from a server-initiated stored procedure.
7712	16	Stored procedure '%.*s' may be run only in chained transaction mode. The 'SET CHAINED ON' command will cause the current session to use chained transaction mode.
7713	16	Stored procedure '%.*s' may be run only in unchained transaction mode. The 'SET CHAINED OFF' command will cause the current session to use unchained transaction mode.
7714	16	In a CREATE SCHEMA statement, the authorization id must match the current user name. The supplied authorization id, '%.*s', does not match the current user name, '%.*s'.
7715	18	Object '%d' specified as a rule for tabid '%d', colid '%d' does not have a variable node in the tree.
7716	16	Cannot convert CHAR value to REAL. The CHAR value has incorrect syntax.
7717	20	Attempted to drop temporary table with object id %ld, which is not in the temporary object lists for this task.
7718	16	The '%s' command is not allowed within a multi-statement transaction in the '%.*s' database.
7719	17	There is no memory available to save the current sequencer state cannot continue processing this query.

Table 5-62: 7701 to 7797, sequencer messages (continued)

Number	Severity	Message Text
7720	16	Update/Delete from a table which is the inner table of an outerjoin is not allowed. Command aborted.
7725	16	Cursor '%.*s' was declared with a FOR UPDATE clause. This cursor was found to be read only.
7726	16	Execute cursor '%.*s' is declared on a procedure which has more than one SQL statment. For the declaration of this cursor to be legal the procedure should have single SELECT statement clause.
7727	26	An internal error occurred for the cursor variable '%.*s'. It could not be found on any variable list of the procedure.
7728	14	Permission denied. You must have the following role(s) to execute $\%.*s: `\%.*s'$. Please contact a user with the appropriate role for help.
7729	16	Invalid role string '%.*s' entered.
7730	14	SET ROLE fails. The caller is not granted with the specified '%.*s' role. Please contact a user with System Security Officer (SSO) role for help.
7731	16	SET ROLE fails. The caller cannot assume the new user identity (uid) in the current database. Please contact a user with System Security Officer (SSO) role fo help.
7732	16	The UPDATE/DELETE WHERE CURRENT OF failed for cursor '%.*s' because the cursor is read only.
7733	18	Unable to locate the base procedure header (Pss->phdr) which had been switched earlier.
7734	18	The search for table name when adding a resdom in s_addident() failed. The resdom for the column '%.*s' did not contain the table name. This is an internal error.
7735	16	The specfied row count '%d' for the cursor '%.*s' is invalid. The rowcount should always be greater than zero.
7736	20	Unable to find lock request for tabid %ld dbid %d. This is an internal error.
7739	18	Internal error - SELECT INTO not found, perhaps tree corrupted.
7740	18	The declaration for cursor '%.*s' has the column '%.*s' in it's FOR UPDATE list which is not part of the SELECT list for the cursor. Either select that column or remove it from the FOR UPDATE list.
7741	18	Internal error - Both SHARED AND UPDLOCK have been set on table '%.s'.
7742	16	You must change your password using the sp_password system stored procedur before you can continue.
7743	16	An explicit value for the identity field in table '%.*s' can only be specified in an insert statement when a field list is used.
7744	16	Illegal attempt to update identity field '%.*s'.

Table 5-62: 7701 to 7797, sequencer messages (continued)

		Message Text
7745	16	Attempting to add a new identity field to a table '%.*s', via select into, which would have a field '%.*s' that inherits the identity property.
7746	16	Attempting to add more than 1new identity field to a table '%.*s', via select into.
7747	16	Unable to SET IDENTITY_INSERT to ON for table '%.*s' because it is already on for tabid %ld dbid %d.
7748	16	Pseudo-column 'SYB_IDENTITY' used incorrectly. No table in the query has the identity property.
7749	16	Pseudo-column 'SYB_IDENTITY' used ambiguously. Multiple tables in the query have the identity property.
7750	16	Argument type '%s' is invalid for argument %d of '%s' function.
7751	16	Unable to SET IDENTITY_INSERT to ON/OFF for table '%.*s' because the object either does not exist or cannot be opened.
7752	16	Unable to SET IDENTITY_INSERT to ON/OFF for table '%.*s' because you are neither the DBO nor the object owner.
7753	16	Unable to SET IDENTITY_INSERT to ON/OFF for object '%.*s' because the object is not a user table.
7754	16	Operand data type '%s' is invalid for '%s' operator.
7755	18	Attempt to switch base procedure header (Pss->phdr) more than once. This is an internal error.
7756	16	Unable to SET IDENTITY_INSERT to ON/OFF for table '%.*s' because the table does not have the identity propery.
7757	16	The order-by position number '%ld' is out of range of the number of items in the select-list.
7758	16	The declaration for cursor '%.*s' has the column '%.*s' in it's FOR UPDATE OF list which is not updatable after view resolution.
7759	16	The declaration for cursor '%.*s' has the column '%.*s' in it's FOR UPDATE OF list which is not updatable because it has the identity property.
7760	16	Conversion of security label datatype to char/varchar datatype failed.
7761	16	The data type '%s' is invalid for the %s function. Allowed types are: CHAR/VARCHAR and SENSITIVITY/SENSITIVITY_BOUNDARY.
7762	16	Trigger label configuration incompatible with user's profile.
7763	16	Procedure label configuration incompatible with user's profile.
7764	23	Sysobjects entry NOT found for procedure buffer entry.
7765	23	Invalid owner curread for view, procedure, or trigger in sysobjects entry.
7766	16	A conversion from '%s' label to character string resulted in an overflow.

Table 5-62: 7701 to 7797, sequencer messages (continued)

Number	Severity	Message Text
7767	16	THe user's curread label does not dominate the converted label.
7768	16	Invalid label syntax.
7769	18	Internal conversion error detected while converting to/from '%s' label datatypes.
7770	10	Warning: There are other roles currently active.
7771	16	Insert into the sensitivity column of table '%.*s' attempted. Explicit inserts into the sensitivity column are not allowed.
7772	18	Internal error encountered while processing @@update_mode global variable.
7773	16	Execute cursor '%.*s' is declared on a procedure which contains a non-SELECT or a SELECT with a COMPUTE clause. For the declaration of this cursor to be legal in should have a single SELECT statement without a COMPUTE clause.
7774	16	The procedure '%.*s' contains a select statement with FOR UPDATE clause. This should be the only statement in the procedure.
7775	16	The column '%.*s' in FOR UPDATE list is not part of the SELECT list. Either select that column or remove it from the FOR UPDATE list.
7776	16	Transaction to update certification state of object %S_OBJID, database %S_DBID failed.
7777	16	Changing certification state of object %S_OBJID, database %S_DBID to SUSPECT because of change in state of dependent object %.*s (previous object id %ld), database %S_DBID.
7778	16	Suspect procedure %S_OBJID, database %S_DBID found. Cannot execute query.
7779	16	UNCERTIFIED object %S_OBJID, database %S_DBID accessed by CERTIFIED object %S_OBJID, database %S_DBID. Cannot execute query.
7780	16	Procedure %S_OBJID, database %S_DBID with labels found UNCERTIFIED. Cannot execute query.
7781	16	Suspect view %S_OBJID, database %S_DBID found. Cannot execute query.
7782	16	Remote procedure call from within CERTIFIED stored procedure %S_OBJID, database %S_DBID not allowed. Cannot execute query.
7783	10	Internal error server failed to do garbage collection on this procedure, id = %ld. Please save the query tree and procedure text and inform the technical support. This is not a critical error, so server continues processing.
7784	16	Illegal escape character found. There are fewer bytes than necessary to form a valid character.
7785	16	Attempting to create a table '%.*s', via select into, with column '%.*s' whose numeric precision, %d, exceeds the maximum allowed precision (%d).
7786	16	Unable to turn role off since user is not a valid user in the current database.

Table 5-62: 7701 to 7797, sequencer messages (continued)

Number	Severity	Message Text
7787	16	Sensitivity column of view '%.*s' accessed. A view's sensitivity column is not user accessible.
7788	10	WARNING: An explicit or implicit HOLDLOCK or NOHOLDLOCK was specified for table '%.*s'; however, since this is an isolation level 0 scan, the HOLDLOCK or NOHOLDLOCK is ignored.
7789	16	Unable to allocate work table for processing group by or distinct clause during query optimization. Maximum limit (%d) of work tables is exceeded. Simplify the query and retry.
7790	18	Internal error - Unable to remap cursors during recompilation. This is a non-fatal internal error.
7791	16	Unable to remap lockid for table %.*s in database %S_DBID. Printing diagnostic information: tobjp: 0x%x, lkr: 0x%x, rgtabid: %d.
7792	16	An isolation level 0 scan is being attempted on cursor '%.*s', but the cursor was declared at a nonzero isolation level. You must re-declare the cursor at isolation level 0.
7793	16	An isolation level 0 scan is being attempted by an ad-hoc query, but the query was compiled in the batch at a nonzero isolation level.
7794	16	You cannot scan table '%.*s' at isolation level 0 because another process is running a DROP INDEX or ALTER TABLE command on that table. Please retry later.
7795	17	Internal error - Unable to process subqueries during transformations. Maximum limit (%d) of subqueries is exceeded. Please save the DBCC TRACE(100) output and inform technical support.
7796	18	Internal error - Unable to process subqueries during transformations due to a corrupt query tree. Please save the output from DBCC TRACE(100) and inform technical support.
7797	25	Error from subquery transformations module

Table 5-63: 7901 to 7999, dbcc messages

Number	Severity	Message Text
7901	16	Page %ld was expected to be the first page of a TEXT/IMAGE value.
7902	16	Data size mismatch occurred while checking TEXT/IMAGE values. The first page for this value is: %ld. There were %ld bytes found, which is different from the expected data length of %ld bytes.
		See "Error 7902" in SQL Server Error Messages.
7903	16	Page %ld was expected to be a TEXT/IMAGE page. This occurred when link number %ld was examined.
7904	10	The total number of TEXT/IMAGE pages in this table is %ld.

Table 5-63: 7901 to 7999, dbcc messages (continued)

Number	Severity	Message Text
7905	10	The number of rows in sysindexes for this table was %ld. It has been corrected to %ld.
7906	10	The number of data pages in sysindexes for this table was %ld. It has been corrected to %ld.
7907	16	The status in the first page (%ld) of the no_log table %.*s and the status in the sysobjects row, do not match.
7908	10	The table %.*s was created with the no_log option.
7909	10	A transaction involving the no_log table %.*s was undone. This may have left the table in an inconsistent state. Rebuild the table.
7910	16	Page %ld allocated (Alloc page: %ld Extent ID: %ld Alloc mask: 0x%x)
7911	16	Page %ld deallocated (Alloc page: %ld Extent ID: %ld Alloc mask: 0x%x)
7912	16	EXTID:%ld (Alloc page: %ld) is initialized. Extent follows:
7913	16	NEXT=%ld PREV=%ld OBJID=%ld ALLOC=0x%x DEALL=0x%x INDID=%d STATUS=0x%x
7914	10	Allocation page %ld extid %ld is not referenced, but there are referenced pages within this extent. Contact Technical Support for assistance on object %ld.
7915	10	Allocation page %ld extid %ld is referenced, but there are no referenced pages within this extent. Contact Technical Support for assistnace on object %ld.
7916	10	Total (# alloc pages = %ld, # of alloc pages modified = %ld).
7917	16	Total (# pages allocated=%ld pages deallocated=%ld extents deleted=%ld).
7918	16	Alloc page %ld (pgs allocated=%ld pgs deallocated=%ld extents deleted=%ld).
7919	16	Fix_al not processed. Database needs to be in SINGLE USER mode.
7920	16	Processed %ld entries in the sysindexes for dbid %d.
7921	16	Found %ld bad entries in the sysindexes.
7922	16	**********
7923	16	TABLE: %.*s OBJld
7924	16	INDID=%ld FIRST=%ld ROOT=%ld SORT=%d
7925	16	Indid : %d. %ld Index Pages in %ld extents.
7926	16	Data level: %d. %ld Data Pages in %ld extents.
7927	16	TOTAL # of extents = %ld
7928	16	Index %.*s is not consistent; found %ld leaf rows. Drop and recreate the index.
7929	16	Table has %ld data rows.

Table 5-63: 7901 to 7999, dbcc messages (continued)

Number	Severity	Message Text
7930	16	Table Corrupt: keys in left child is not less than the parent key; check left child page %ld.
		See "Error 7930" in SQL Server Error Messages.
7931	16	Table Corrupt: keys in right child is less than parent key; check right child page %ld.
7932	16	The indexes for '%.*s' are already correct. They will not be rebuilt.
7933	16	One or more indexes are corrupt. They will be rebuilt.
7934	16	The table '%.*s' has no indexes.
7935	16	REINDEX received an exception - command aborted.
7936	10	Checktable on sysgams is not allowed.
7937	16	The data in table '%.*s' is possibly corrupt - DBCC REINDEX aborted. Run DBCC CHECKTABLE and report errors to a user with System Administrator (SA) role.
7938	16	Table Corrupt: The oam entry for object %ld, indid %ld, alloc pg %ld, has a used count of %d and an unused count of %d. The used count should be %d and the unused count should be %d.
7939	16	Table Corrupt: The entry is missing from the OAM for object id %ld indid %d for allocation page %ld.
		See "Error 7939" in SQL Server Error Messages.
7940	22	The counts in the OAM are incorrect. This implies that there are entries missing. Run tablealloc utility with the FIX option on the table with the inaccurate OAM counts.
		See "Error 7940" in SQL Server Error Messages.
7941	16	Couldn't find table %.*s.
7942	10	The missing OAM entry has been inserted.
7943	10	Attempt to insert missing OAM entry failed.
7944	10	*** NOTICE: Space used on the log segment is %s Mbytes, %s%%.
7945	10	*** NOTICE: Space free on the log segment is %s Mbytes, %s%%.
7946	10	*** NOTICE: Notification of log space used/free cannot be reported because the log segment is not on its own device.
7947	16	The sortorder and character set ID's for index %d on this table were %d:%d in sysindexes. They have been corrected to %d:%d.
7948	16	Page %ld, object %ld, index %d, level %d, was found with fixed-row status improperly set. That status has been cleared by DBCC.
		See "Error 7948" in SQL Server Error Messages.

Table 5-63: 7901 to 7999, dbcc messages (continued)

Number	Severity	Message Text
7949	16	The number of pages used and unused for object %ld index %d on allocation page %ld do not match the counts in the OAM entry.
		See "Error 7949" in SQL Server Error Messages.
7950	16	Unable to %.*s engine. Check sysengines count and max online engines config value.
7951	16	Data size mismatch occurred while checking a TEXT value. The first page for this value is: %ld. There were %ld characters found, which is different from the expected length of %ld characters.
7952	10	A TEXT value with an invalid MAGIC NUMBER has been found on page %ld. TEXT values will no longer be checked for this table. Note because of this, the TEXT page count will be inaccurate. Use DBCC FIX_TEXT to fix the TEXT values
7953	10	Unable to acquire an exclusive lock on text page %ld. This text value has not been recalculated. In order to recalculate those TEXT pages you must release the lock and reissue the DBCC FIX_TEXT command.
7954	10	There are no TEXT pages in table %.*s to be updated.
7955	10	Not all of the TEXT pages in table %.*s have been successfully updated, however DBCC FIX_TEXT is restartable. Please issue the command again once any other errors have been addressed.
7956	16	Remapping utility - Column descriptor should have been remapped earlier. This is an internal system error.
7957	18	Remapping utility - procedure is corrupted in Sysprocedures. Recreate this procedure.
7958	16	Remapping utility - a pointer exists in a tree when it should not.
7959	16	Remapping utility - unable to locate the given procedure %.*s in Sysprocedures.
7960	16	Remapping utility - Procedure needs to be recreated for this port.
7961	16	Remapping utility - Wrong kind of node passed to tree remapping. This is an internal system error.
7962	16	Upgrade requires the SQL Server to be booted in single user mode. Reboot the SQL Server with the -m flag.
7963	16	Upgrade encountered a fatal error. Please check the SQL Server errorlog.
7964	14	Permission denied. You do not have the necessary role to run this command. Please contact Sybase Technical Support for assistance in running this command.
7965	10	The 'fix' option has been ignored for this command. To use the 'fix' option with system tables, run the command from the database where the table is located. The database must be in single user mode.
7966	20	The global space allocation report requires an exclusive lock on object 99. This process does not hold this lock in database %d. This report is cancelled.

Table 5-63: 7901 to 7999, dbcc messages (continued)

Number	Severity	Message Text
7967	20	Allocation page %ld in database %d does not hold the address lock required for initializing the diagnostic bitmaps or correcting its allocation errors.
7968	20	The object allocation map for tabid %ld indid %d is corrupt, therefore the optimized report cannot be generated. Contact Technical Support for assistance.
7969	10	Allocation reports cannot be generated for object %ld in database %d.
7970	10	The default report option of %.*s is used for this run.
7971	10	The default fix option of %.*s is used for this run.
7972	10	The oam counts for objid %ld indid %d are corrected.
7973	10	The optimized report may generate erroneous messages due to the missing OAN entry. Run the optimized report with the fix option, to correct this error.
7974	16	ILLEGAL use of module %.*s. See the errorlog for detail information.
7981	16	The new transaction mode must be unchained, chained or anymode.
7982	16	The specified object '%.*s' is not a stored procedure in database '%.*s'.
7983	16	You must be either the system administrator (SA), the database administrator (dbo), or the owner of this stored procedure to change its transaction mode.
7985	16	Server name '%*.s' not found in system catalog.
7986	16	You can not change the mode of a remote stored procedure.
7987	16	User named '%.*s' not found; check sysusers.
7988	16	The specified object '%.*s' is not found in database '%.*s'. Check sysobjects to make sure you own the object.
7989	16	The serial allocation flag was found to be improperly set in allocation unit %ld, a extent ID %ld, with alloc map = %d and objid = %ld. This flag has been cleared by DBCC.
7990	16	Permission denied. User's operating system session label must dominate database maxhold to use the DBCC command '%.*s'.
7991	18	Label consistency check for database '%S_DBID' failed.
7992	14	The user needs to be in the master database to execute this command.
7993	18	One or more databases have been detected to have inconsistent security labels.
7994	16	Database '%.*s' has references to other databases. Drop those references and try again
7995	14	Permission denied. Only the Database Owner (DBO) or a user with the System Administrator (SA), System Security Officer (SSO), or Oper role can execute this command for database '%S_DBID'.
7996	14	Permission denied. Object '%S_OBJID' not found.

Table 5-63: 7901 to 7999, dbcc messages (continued)

Number	Severity	Message Text
7997	14	Permission denied. User's curwrite does not match the sensitivity label of object '%S_OBJID'.
7998	14	Permission denied. Database '%S_DBID' not found.
7999	14	Permission denied. User's curwrite does not match the sensitivity label of database '%S_DBID'.

Table 5-64: 8002 to 8011, remote procedure call messages

Number	Severity	Message Text
8002	15	Parameter number %d and subsequent parameters must be passed as '@name = value'. Once the form '@name = value' has been used, all subsequent parameters must be passed in the form '@name = value'.
8003	15	There are too many parameters in this CREATE PROCEDURE statement. The maximum number is %d.
8004	16	Received an unrecognized datatype %d from TDS datastream.
8005	15	Received a procedure name length of %d. The TDS datastream is incorrect.
8006	20	SQL Server error detected by %S_MSG. Refer to the preceding %S_MSG message.
8007	20	Unknown token returned by %S_MSG: %d.
8008	16	Parameter no. %d, of type %d, did not have a valid value.
8009	16	Error encountered by %S_MSG. Please refer to %S_MSG messages for details.
8010	16	datalen (%d) must be less than maxlen (%d) for rpc parameter %d
8011	16	Parameter %d has datatype %s. This datatype is not valid for use in parameters for an RPC.

Table 5-65: 8201 to 8221, descriptor manager messages

Number	Severity	Message Text
8201	26	Keep count of descriptor was expected to be %d. Instead %d was found
		See "Error 8201" in SQL Server Error Messages.
8203	26	Expected to find the descriptor in %s state.
		See "Error 8203" in SQL Server Error Messages.
8204	20	Expected to receive system catalog id. Instead %d was received.
		See "Error 8204" in SQL Server Error Messages.
8205	20	Invalid field token passed to descriptor (id = %d).

Table 5-65: 8201 to 8221, descriptor manager messages (continued)

Number	Severity	Message Text
8206	21	Object %d was not found in %s.
8207	17	Couldn't find an available descriptor for an object.Configure your system for more descriptors.
		See "Error 8207" in SQL Server Error Messages.
8208	21	Descriptor for object %d in database %d was notfound in the expected dbtable.
8209	26	Descriptor found was not expected to have %s state.
8210	21	Duplicate of work table descriptor found in the id hash table for temporary object %d.
8211	26	Mismatch found between the name and id descriptor hash table. Descriptor hashed by name = $0x\%0x$ and hashed by id = $0x\%0x$.
		See "Error 8211" in SQL Server Error Messages.
8213	20	Failed to acquire address lock on object %.*s
8215	14	An attempt was made to drop the DES of object %ld, which is not a user-defined object.
8216	20	Failed to acquire table lock on object %.*s
8219	18	Couldn't compute lock promotion level in DES for object %d in database %d. Using default level = %d.
8221	20	Couldn't find the identity column for object %.*s.

Table 5-66: 8401 to 8416, sysindexes manager messages

Number	Severity	Message Text
8401	21	Object with id of %ld was not found in database number %d.
8402	21	Index row for object %ld (index id %d) was not found in database %d.
		See "Error 8402" in SQL Server Error Messages.
8403	21	Index tag structure doesn't contain the search mode executed.
8404	21	Index tag structure indicates fast and slow search modes.
8405	21	No modify lock was acquired for an index row %s.
8406	21	Insert of sysindexes row failed.
8407	21	Delete of sysindexes row failed.
8408	21	Didn't expect to find active modify lock for sysindexes.

Table 5-66: 8401 to 8416, sysindexes manager messages (continued)

Number	Severity	Message Text
8409	21	Invalid status found in sysindexes tag structure. Expected status: %s.
8410	21	Expected to find search lock during sysindexes scan.
8411	21	Invalid setup status found in sysindexes Manager during a call to: %s.
8412	21	No object id specified in sysindexes Manager call to: %s.
		See "Error 8412" in SQL Server Error Messages.
8413	25	Update of sysindexes failed.
8414	21	Copy of sysindexes row failed.
8415	21	Unexpected value '%d' returned from lock manager after waiting for lock on page %ld, dbid %d.
8416	20	Invalid scan type %d specified

Table 5-67: 8501 to 8502, abort messages

Number	Severity	Message Text
8501	26	Object id's are not the same during an abort: %d and %d.
8502	21	Invalid record type passed to abort: %d.

Table 5-68: 8601, process status structure message

Number	Severity	Message Text
8601	20	Process %d tried to keep the PSS for process %d when it already had the PSS for process %d kept.

Table 5-69: 8701 to 8706, site buffer manager messages

Number	Severity	Message Text
8701	26	Sitebuf has invalid state or keepcount. sitebuf=0x%lx, state=%d, keepcount=%ld.
8702	26	Sitebuf has invalid state. sitebuf=0x%lx, state=%d.

Table 5-69: 8701 to 8706, site buffer manager messages (continued)

Number	Severity	Message Text
8703	26	Invalid keep count in sitebuf. sitebuf=0x%lx, keepcount=%ld.
8704	26	Could not get the address lock. address=0x%lx, status=%d.
		See "Error 8704" in SQL Server Error Messages.
8705	26	Remotely started site handler.
8706	26	Invalid keep count in sitebuf. sitebuf=0x%lx, keepcount=%ld, lcfreed=%d.

Table 5-70: 8801 to 8806, login connection messages

Number	Severity	Message Text
8801	26	Logconn has invalid state or keepcount. logconn=0x%lx, state=%d, keepcount=%d.
8802	26	Logconn has invalid state. logconn=0x%lx, state=%d.
8803	26	Missing sitebuf for siteid %d.
8804	26	Packet acknowledgment is neither read nor write. rdwr=%d.
8805	26	Invalid set parameter to lc_wconnstat. set=%d.
8806	26	Corrupted pre-read data list in lc_flush. logconn=0x%lx, dtbeg=0x%lx, dtend=0x%lx.

Table 5-71: 8901 to 8904, data buffer manager messages

Number	Severity	Message Text
8901	26	Databuf has invalid state. databuf=0x%lx, state=%ld.
8902	26	Logconn has invalid state or keepcount. logconn=0x%lx, state=%d, keepcount=%d.
8903	26	Invalid state in logconn. logconn=0x%lx, state=%d.
8904	26	Invalid state in databuf or corrupted databuf chain. databuf= $0x\%lx$, state= $\%ld$, dnext= $0x\%lx$.

Table 5-72: 9001 to 9006, diskmanager messages

Number	Severity	Message Text
9001	20	Process %d has requested a memory size %d that is greater than the memory size %d in the disk buffer 0x%X, dbid %d.
9002	20	Process %d is accessing disk buffer $0x\%X$, in dbid %d that has been freed. The current status of the DSKBUF is $0x\%X$.
9003	20	Could not start I/O for request %S_BLKIOPTR.
9004	20	I/O error detected on disk buffer 0x%X for page request %ld, dbid %d.
9005	20	Process %d is requesting an illegal I/O type of 0x%x.
9006	20	Process %d is attempting to free a disk buffer that is already freed. Disk buffer address 0x%X, dbid %d.

Table 5-73: 9101 to 9148, log transfer manager

Number	Severity	Message Text
9101	16	This is the correct text after Tech Pubs approval.
9102	16	Failed to convert the %s log record into row format for database '%.*s', XACT ID %S_RID, RID %S_RID. Information associated with the %s log record is not replicated.
9103	16	Failed to send the %s log record for database '%.*s', XACT ID %S_RID, RID %S_RID. Information associated with the %s log record is not replicated.
9104	16	Cannot identify the object on the %s log record for database '%.*s', XACT ID %S_RID, RID %S_RID. Information associated with the %s log record is not replicated.
9105	16	A missing log record indicates a prematurely truncated log or a corrupt log. The %s log record in database '%.*s', XACT ID %S_RID, is not replicated.
9106	10	The deferred insert (INOOP) log record referenced by the insert indirect (INSIND) log record was not found as expected at RID %S_RID.
9107	16	Unexpected function return value %d while processing the %s log record of database '%.*s', XACT ID %S_RID, RID %S_RID. The %s log record may not have been replicated.
9108	10	Number of qualifiers supplied to the DBCC LOGTRANSFER command exceeds limit of %d. The DBCC LOGTRANSFER command is not executed.
9109	10	Cannot find user name for user ID %d while sending the %s log record for database '%.*s', XACT ID %S_RID, RID %S_RID. The user ID will be used instead of the user name.
9110	10	Found an ENDXACT log record before finding an expected INSERT log record in database '%.*s', XACT ID %S_RID, RID %S_RID.

Table 5-73: 9101 to 9148, log transfer manager (continued)

Number	Severity	Message Text
9111	10	Failed to send the LTM truncation point information for database '%.*s'. The DBCC GETTRUNC command fails during execution.
9112	16	The DBCC LOGTRANSFER command must be invoked with at least %d parameters. The DBCC LOGTRANSFER command is not executed.
9113	16	'%.*s' is not a valid QUALIFIER for the DBCC LOGTRANSFER command. The DBCC LOGTRANSFER command is not executed.
9114	16	'%.*s' is not a valid VERB for the DBCC LOGTRANSFER command. The DBCC LOGTRANSFER command is not executed.
9115	16	'%.*s' is not a valid COMMAND for the DBCC LOGTRANSFER command. The DBCC LOGTRANSFER command is not executed.
9116	16	'%d' is not a valid numeric value for the specified QUALIFIER. The DBCC LOGTRANSFER command is not executed.
9117	16	The DBCC LOGTRANSFER command was invoked with an invalid combination of QUALIFIERs. The DBCC LOGTRANSFER command is not executed.
9118	16	The specified COMMAND requires additional QUALIFIERS. The DBCC LOGTRANSFER command is not executed.
9119	17	Execution of the the %s command fails due to insufficient memory.
9120	16	The log transfer context for database '%.*s' has not been reserved with the DBCC LOGTRANSFER ('reserve', 'context') command. The specified DBCC command is not executed.
9121	16	The log transfer context for the current database is already reserved by SQL Server process %d. The log transfer context for the current database is not reserved.
9122	21	The log transfer process finished scanning the complete database '%.*s', but failed to flush the communication channel. Trailing log transfer information may be lost.
9123	17	Unable to set a wakeup alarm for the log transfer process. The log transfer scan o database '%S_DBID' will not honor the specified timeout of %d seconds.
9124	16	INTERNAL CODING ERROR. Log record ID %d is not valid. Please contact Sybase Technical Support.
9125	16	Usage: DBCC SETTRUNC('ltm', { 'valid' 'ignore' 'pageid', page number })
9126	16	Usage: DBCC GETTRUNC()
9127	16	INTERNAL CODING ERROR. The building of an internal data structure required more memory than anticipated. Please contact Sybase Technical Support.
9128	16	Ran out of memory trying to send an UPDATE command's DELETE/INSERT log record pair for database '%.*s', XACT ID %S_RID, RID %S_RID. The %s log record is not replicated.

Table 5-73: 9101 to 9148, log transfer manager (continued)

Number	Severity	Message Text
9129	16	Unable to determine the end of the log for database '%.*s'. The log transfer scan of database '%.*s' is aborted.
9130	16	The BEGINXACT log record referenced by the CHECKPOINT log record for database '%.*s', XACT ID %S_RID, RID %S_RID, was not found at RID %S_RID as expected.
9131	21	The log transfer context for the current database is already reserved by your SQL Server process. The DBCC LOGTRANSFER ('reserve', 'context') command is ignored.
9132	16	Failed to write the log record for the execution of stored procedure '%.*s' in database '%.*s'. Stored procedure '%.*s' is not replicated.
9133	16	The SQL Server was not started with the proper command line option to enable Replication Server support. The DBCC command is not executed.
9134	16	The DBCC LOGTRANSFER ('setqual',) command was invoked with parameters of incorrect type. The DBCC LOGTRANSFER ('setqual',) command is not executed.
9135	16	Usage: DBCC LOGTRANSFER('scan', { 'normal' 'repeat' 'continue' })
9136	16	Unable to find the RID of the last ENDXACT or CHECKPOINT log record. The log transfer context for the current database is not reserved.
9137	16	LTM trunc. point not yet established with DBCC SETTRUNC(). Until the LTM trunc. point is established, changes to the object '%.*s' may not be replicated.
9138	16	Even though Replication Server support is disabled, database '%S_DBID' contains a valid LTM trunc. point which prevents the complete truncation of all expendable log pages.
9139	17	Failed to free allocated but unused memory in order to satisfy memory allocation request. Memory allocation request fails.
9140	17	Memory allocator used for Replication Server support failed to fulfill memory allocation request.
9141	16	The stored proc. '%.*s' associated with the %s log record in database '%.*s', XACT ID %S_RID, RID %S_RID, was dropped after the log record was written. The %s log record is not replicated.
9142	16	Usage: DBCC REPLICATE_TXTCOL (objid, colid, { always_replicate replicate_if_changed do_not_replicate })
9143	16	'%.*s' is not a valid replication status. The DBCC REPLICATE_TXTCOL command is not executed.
9144	16	The requested column cannot be located. Check the objid and colid specified. The DBCC REPLICATE_TXTCOL command is not executed.
9145	16	The datatype of the specified column must be TEXT or IMAGE. The DBCC REPLICATE_TXTCOL command is not executed.

Table 5-73: 9101 to 9148, log transfer manager (continued)

Number	Severity	Message Text
9146	20	The excution of DBCC REPLICATE_TXTCOL failed due to an internal error. Please contact your System Administrator (SA) for help.
9147	16	Replication Not Enabled: Replication on table %.*s in database %.*s, has not been enabled yet. Run sp_setreplicate or sp_setrepcol before calling DBCC REPLICATE_TXTCOL, the DBCC REPLICATE_TXTCOL command is not executed. (objid %ld)
9148	20	Replication server could not send log records for log version change processing in database '%.*s' because the log processing functions returned internal error %d.

Table 5-74: 9301 to 9336, syslabels manager messages

Number	Severity	Message Text
9301	23	Inconsistent SLID representation in object metadata.
9302	18	Unexpected EX_CONTROL exception has been raised inside the Syslabels Manager: error = %d, severity = %d, state = %d
9303	18	Syslabels Manager: Insert into '%S_DBID.dbo.syslabels' failed during call to %s().
9304	20	Internal MAC sub-system error. Corrupted master SLID value found. DO NOT USE THIS SERVER AND ITS ASSOCIATED DEVICES UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.
9305	20	Internal MAC sub-system error. Corrupted database SLID value found in database '%d'. DO NOT USE THIS DATABASE UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.
9306	20	Bad database id ('%d') found. Run DBCC checktable on sysdatabases and DBCC checkdb on all databases used by this query.
9307	20	Internal MAC sub-system error. MSLID to DBSLID conversion failed in database '%d'. DO NOT USE THIS DATABASE UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.
9308	20	Internal MAC sub-system error. DBSLID to MSLID conversion failed in database '%d'. DO NOT USE THIS DATABASE UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.
9309	20	Internal MAC sub-system error. DO NOT USE THIS SERVER AND ITS ASSOCIATED DEVICES UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.
9310	20	Internal MAC sub-system error. Label comparison failed. DO NOT USE THIS SERVER AND ITS ASSOCIATED DEVICES UNTIL THE CAUSE OF THIS ERROR HAS BEEN ELIMINATED.

Table 5-74: 9301 to 9336, syslabels manager messages (continued)

Number	Severity	Message Text
9311	21	Syslabels Manager: Trying to boot the server without initializing values of Data_High and Data_low.
9312	21	Syslabels Manager: Current process label, or label of the MASTER DEVICE do not match with value of Data_High stored in the server.
9313	21	Syslabels Manager: Attempt to change values of Data_High and/or Data_Low is not allowed.
9314	14	Only a user with the System Administrator (SA), System Security Officer (SSO), or Oper role or the Database Owner (DBO) can execute this command.
9315	18	Security label specified in the syslabels row with db_slid '%d' is not a valid label in the underlying trusted OS.
9316	18	Security label specified in the syslabels row with db_slid '%d' is not dominated by Data High.
9317	18	Security label specified in the syslabels row with db_slid '%d' does not dominate Data Low.
9318	10	Database '%S_DBID' passed Syslabels Check.
9319	10	Database '%S_DBID' passed Database Maxhold Consistency Check.
9321	18	Corrupt security label encountered in database '%S_DBID'. Marking database as having inconsistent labels and checking the master database for possible related corruption.
9322	18	Maxhold inconsistency detected in database '%S_DBID'.
9324	21	Corrupt security labels found in the master database. Shutting down the server.
9325	18	Internal error. Failed to clear database '%S_DBID' of its security label inconsistency status.
9326	18	Internal error. Failed to mark database '%S_DBID' as having inconsistent security labels. Marking it as suspect instead.
9328	16	Inconsistency found in Syslabel Manager Cache. Contact a user with System Administrator (SA) role.
9329	16	There are other current users of database '%S_DBID'. Discontinuing execution.
9330	16	Unsupported report or fix option requested. Available report options are: FULL, NOREPORT. Available fix options are: FIX, NOFIX.
9331	18	Master SLID mismatch identified in syslabels row with db_slid '%d'.
9332	10	Beginning security label consistency of database '%S_DBID'.
9333	10	Security label consistency check of database '%S_DBID' done.
9334	10	Skipping checking of security label consistency for database '%S_DBID' as it hasn't been initialized with the proper Data High and Data Low values.

Table 5-74: 9301 to 9336, syslabels manager messages (continued)

Number	Severity	Message Text
9335	16	A security label consistency fix can only be performed on the master database if the server was booted up in single-user mode.
9336	18	Row corruption detected in syslabels row with db_slid '%d'.

Table 5-75: 9501 to 9526, query processor messages

Number	Severity	Message Text
9501	10	Warning - null value eliminated in set function
9502	16	Data exception - string data right truncated
9503	14	You must have one of the following role(s) to execute this command/procedure: '%.*s'. Please contact a user with the appropriate role(s) for help.
9504	16	An isolation level 0 cursor scan has failed on an attempted restart for cursor '%.*s', table '%.*s', index id '%d'. The cursor is being closed.
9505	16	An isolation level 0 scan has failed on an attempted restart on table '%.*s', index id '%d'.
9506	10	Warning: Using only the first %d characters for password
9515	16	The UPDATE/DELETE WHERE CURRENT OF to the cursor '%.*s' failed because the isolation level is at 0.
9516	16	%d is an invalid spid. You could use sp_who to identify the correct spid.
9517	16	Table '%.*s' does not exist in the database.
9518	17	Insert into work table (for deferred processing) failed while enforcing referential constraints. Check previous errors for possible causes. dbname = '%.*s', table name = '%.*s', constraint name = '%.*s'.%S_EED
9519	18	Failed to update the identity pre-burn factor for field '%.*s' in table '%.*s'. Please re-try the operation or contact your SA for details.
9520	18	Error occurred while creating the identity value for field '%.*s' in table '%.*s'. Please re-try the operation or contact your SA for details.
9521	16	The parameter that specifies the number of rows in a SET CURSOR ROWS statement must be an integer with a value greater than 0.
9522	16	The parameter that specifies the number of rows in a SET ROWCOUNT statement must be an integer with a value greater than 0.
9524	16	SELECT is not allowed in a dynamic EXECUTE IMMEDIATE statement. This SELECT may have been part of a stored procedure or a trigger.

Table 5-75: 9501 to 9526, query processor messages (continued)

Number	Severity	Message Text
9525	16	Attempt to update or delete a non existing row in the table '%.*s' failed. The table may be participating in the inner or outer join with in the query associated with the cursor '%.*s'.
9526	16	The positioned delete/update operation is not allowed with cursor '%.*s'. You may be referring the cursor in a dynamically prepared statement.

Table 5-76: 9601 to 9602, cleanup messages

Number	Severity	Message Text
9601	10	A %.*s error occurred during %.*s cleanup. Cleanup will proceed for %.*s.
9602	17	SQL Server has run out of CLEANUP ITEM BLOCKS. Re-run your command when there are fewer active users, or contact a user with System Administrator (SA) role to reconfigure SQL Server with more CLEANUP ITEM BLOCKS.

Table 5-77: 9701 to 9732, security messages

Number	Severity	Message Text
9701	16	Parameter '%.*s' has an invalid type.
9702	16	Parameter '%.*s' is invalid.
9703	16	'%.*s' is not a valid account name.
9704	16	Unable to get SQL Server security information.
9705	16	Unable to set SQL Server security information.
9706	16	SQL Server's user account cannot be modified.
9707	16	No privilege to revoke.
9708	16	The account name provided is a domain. Unable to grant privileges to a domain.
9709	16	The account name provided is a deleted account. Unable to grant privileges to a deleted account.
9710	16	There must be at least one account with '%.*s' privilege.
9711	16	There must be at least one account with '%.*s' privilege other than the '%.*s'.
9712	16	Access granted.
9713	16	Access revoked.

Table 5-77: 9701 to 9732, security messages (continued)

Number	Severity	Message Text
9714	16	login mode
9715	16	default account
9716	16	default domain
9717	16	set host
9718	16	key _
9719	16	key \$
9720	16	key @
9721	16	key #
9722	16	name
9723	16	config_item
9724	16	standard
9725	16	integrated
9726	16	mixed
9727	16	unknown mode
9728	16	true
9729	16	false
9730	16	space
9731	16	domain separator
9732	16	null

Table 5-78: 9802 to 9816, partition manager messages

Number	Severity	Message Text
9802	10	Deletion of partition number %d for object id %d in SYSPARTITIONS failed.
9803	21	For object id %d a row corresponding to partition number %d does not exist in SYSPARTITIONS.
9805	10	Partition number %d for object id %d does not exist.
9807	10	Deadlock occured in SQL process %d
9809	21	Control page %d specified for partition number %d of object id %d does not exist.
9810	21	Control page %d specified for partition number %d for object id %d is corrupt.

Table 5-78: 9802 to 9816, partition manager messages (continued)

Number	Severity	Message Text
9816	17	Unable to allocate in-memory partition structures. To increase the number of available partitions update the 'partition groups' configuration parameter.

Table 5-79: 9901 to 9928, dbcc messages

Number	Severity	Message Text
9901	14	Permission denied. Only a user with curread set to @@data_high can perform the DBCC command '%.*s'.
9902	14	Only users with SA and SSO roles can run this dbcc dbrepair command for the database %S_DBID.
9903	14	Only users with SA and SSO roles having their curread dominating the maxhold of the database can run this dbcc dbrepair command for the database '%S_DBID'.
9904	10	Total (# of text chains = %ld text pages = %ld) in this table.
9905	10	Processed %ld tables. Found %ld good text entries, %ld bad text entries in this database
9906	16	Unrecognized option. Available options: dbcc engine(net, show, engine#), dbcc engine(net, showall), dbcc engine(net, netengine)
9908	16	Syspartitions system table does not exist in database id %S_DBID.
9909	10	The total number of pages in partition %ld is %ld.
9911	10	Object %ld has one row in Syspartitions
9912	10	Object %ld has partition %ld instead of %ld in Syspartitions
9913	16	MAX_ROWS_PER_PAGE value of %d is invalid. It must be between 0 and %d.
9914	16	Amount of memory transferred (%dk) is less than the amount of memory requested (%dk).
9915	16	I/O size must be a power of 2.
9916	16	I/O size must be a power of 2.
9917	16	Can't find database id for %.*s. Check that this database exists and re-run the command.
9918	16	Encountered error using dbid %d.
9919	16	Can't find object id for %.*s. Check the object name and re-run this command.
9920	16	Index id %d not found for object id %d, dbid %d.
9921	16	Index %.*s not found for object id %d dbid %d.

Table 5-79: 9901 to 9928, dbcc messages (continued)

Number	Severity	Message Text
9922	16	The first page %ld in sysindexes for table '%.*s' does not match with first page %ld for the table's first partition in Syspartitions.
9923	16	The first page %ld in syspartitions for partition %ld of table '%.*s' has previous page # %ld in its page header. The previous page # should be NULL.
9924	16	The last page %ld in syspartitions for partition %ld of table '%.*s' has next page # %ld in its page header. The next page # should be NULL.
9926	16	This option has been converted to the configuration parameter '%s'. Use 'sp_configure' to set it.
9927	16	This option requries a table name as the third parameter. Use 'sp_configure '%s' to set the option serverwide.
9928	16	This option has been disabled. Use 'sp_poolconfig' instead.

Table 5-80: 10101 to 10109, sysattributes messages

Number	Severity	Message Text
10101	16	The object_type column cannot be NULL.
10102	16	The attrib_notify() function can only be used from a system stored procedure or with ad hoc updates enabled.
10104	16	Class %d is not a valid attribute class.
10105	16	Attribute %d is not a valid attribute within class %d.
10106	16	Class cannot be NULL.
10107	16	Attribute cannot be NULL.
10108	16	The 'action' parameter cannot be NULL.
10109	16	The value of the parameter '%s' is '%d'. The value should be between %d and %d.

Table 5-81: 10201 to 10214, showplan messages

Number	Severity	Message Text
10201	10	NESTING LEVEL %u SUBQUERIES FOR STATEMENT %u.
10202	10	QUERY PLAN FOR SUBQUERY %u (at nesting level %u and at line %u).
10203	10	Subquery under an IN predicate.
10204	10	Subquery under an ANY predicate.
10205	10	Subquery under an ALL predicate.
10206	10	Subquery under an EXISTS predicate.
10207	10	Subquery under an EXPRESSION predicate.
10208	10	Correlated Subquery.
10209	10	Non-correlated Subquery.
10210	10	END OF QUERY PLAN FOR SUBQUERY %u.
10211	10	Run subquery %u (at nesting level %u).
10212	10	The cursor is read only because it contains a subquery.
10213	10	The update mode is deferred_varcol.
10214	10	The update mode is deferred_index.

Table 5-82: 10401 to 10485, configuration help messages

Number	Severity	Message Text
10401	10	additional network memory allocates additional memory for clients which request packet sizes that are larger than the default packet size for the server.
10402	10	address lock spinlock ratio specifies the number of rows in the address locks hash table protected by one spinlock (rows per spinlock).
10403	10	allow nested triggers is a toggle that controls the use of nested triggers. When the value is set to 1, data modifications made by triggers can fire other triggers.
10404	10	allow remote access determines whether users from remote servers can access this SQL Server. The default is 1, to allow SQL Server to communicate with Backup Server.
10405	10	allow sql server async i/o is a toggle that enables SQL Server to run with asynchronous disk I/O.
10406	10	allow updates to system tables allows system tables to be updated directly. The default is 0 (off).
10407	10	audit queue size determines the number of audit records that the audit queue can hold. The default is 100.
10408	10	configuration file specifies the location of the configuration file you want to use.

Table 5-82: 10401 to 10485, configuration help messages (continued)

Number	Severity	Message Text
10409	10	cpu accounting flush interval specifies how many machine clock ticks to accumulate before adding cpu usage data to syslogins for use in chargeback accounting statistics.
10410	10	cpu grace time specifies the maximum amount of time (in milliseconds) a user process can run without yielding the CPU before SQL Server infects it.
10411	10	deadlock checking period specifies the minimum amount of time (in milliseconds) a process must wait for a lock before SQL Server initiates a deadlock check.
10412	10	deadlock retries specifies the number of times a transaction will retry to acquire a lock after it has become a deadlock victim.
10413	10	default character set id is the number of the default character set used by the server.
10414	10	default database size sets the default number of megabytes allocated to each new user database. The default run value is 2(megabytes)
10415	10	default fill factor percent sets how full SQL Server makes each page when creating a new index on existing data (unless user gives other value in create index statement).
10416	10	default language id is the number of the language that is used to display system messages unless a user has chosen another language from those available on the server.
10417	10	default network packet size sets the default size of network packets for all users on SQL Server.
10418	10	default sortorder id is the number of the current default sortorder on SQL Server. Do not change this parameter. See the System Administration Guide for more information.
10419	10	disk i/o structures specifies the initial number of disk I/O control blocks SQL Server allocates on startup.
10420	10	event buffers per engine specifies the number of events per SQL Server engine that can be simultaneously monitored. Events are used for observing SQL Server performance.
10421	10	executable code size reports the size of the SQL Server executable.
10422	10	freelock transfer block size specifies the number of locks moved between the engine freelock cache and the global freelock list.
10423	10	housekeeper free write percent sets the maximum percentage that database writes can increase because of free writes started by the housekeeper process.
10424	10	i/o accounting flush interval specifies how many disk I/Os to accumulate before flushing the data to syslogins for use in chargeback accounting.
10425	10	i/o polling process count specifies the number of tasks the scheduler will run before checking for disk and/or network I/O completions.

Table 5-82: 10401 to 10485, configuration help messages (continued)

Number	Severity	Message Text
10426	10	identity burning set factor sets the percentage of potential IDENTITY column values made available in each block.
10427	10	identity grab size allows each SQL Server process to reserve a block of IDENTITY column values for inserts into tables that have an IDENTITY column.
10428	10	lock promotion HWM sets the maximum number of page locks allowed before SQL Server escalates to a table lock. The default value is 200.
10429	10	lock promotion LWM sets the minimum number of page locks allowed before SQL Server escalates to a table lock. The default value is 200.
10430	10	lock promotion PCT sets the percentage of page locks allowed before SQL Server escalates to a table lock. The default value is 100.
10431	10	lock shared memory disallows swapping of SQL Server pages to disk, and allowing the operating system kernel to avoid the server's internal page locking code.
10432	10	max async i/o 's per engine specifies the maximum number of asynchronous disk I/O requests that can be outstanding for a single engine at one time.
10433	10	max async i/o 's per server specifies the maximum number of asynchronous disk I/O requests that can be outstanding for SQL Server at one time.
10434	10	max engine freelocks specifies the maximum number of locks available in an engine freelock cache.
10435	10	max network packet size sets the maximum network packet size that a client program can request.
10436	10	max number of network listeners specifies the maximum number of network listeners that can be open at one time.
10437	10	max online engines controls the number of engines in a symmetric multiprocessor environment.
10438	10	memory alignment boundary determines on which boundary buffer caches are aligned.
10439	10	min online engines is not currently used.
10440	10	number of alarms specifies the number of alarms allocated by SQL Server. Alarms are used with the Transact-SQL waitfor command.
10441	10	number of devices controls the number of database devices SQL Server can use. I does not include devices used for database dumps.
10442	10	number of extent i/o buffers allocates the specified number of extents (8 data pages) for use by create index. Do not set this value to more than 100.
10443	10	number of index trips specifies the number of times an aged index page recycles itself onto the MRU chain.

Table 5-82: 10401 to 10485, configuration help messages (continued)

Number	Severity	Message Text
10444	10	number of languages in cache is the maximum number of languages that can simultaneously be held in the language cache. The default is 3.
10445	10	number of locks sets the number of available locks. The default run value is 5000.
10446	10	number of mailboxes sets the number of mailbox structures SQL Server allocates on start-up. Mailboxes are use for process-to-process communication and synchronization.
10447	10	number of messages specifies the number of message structures allocated by SQL Server at start-up time. Messages are used in conjunction with mailboxes for process-to-process communication and synchronization.
10448	10	number of oam trips specifies the number of times an aged OAM page recycles itself onto the MRU chain.
10449	10	number of open databases sets the maximum number of databases that can be open at one time on SQL Server. The default run value is 12.
10450	10	number of open objects sets the maximum number of database objects that can be open at one time on SQL Server. The default run value is 500.
10451	10	number of preallocated extents specifies the number of extent structures allocated in a single trip to the page manager.
10452	10	number of remote connections controls the limit on active connections initiated to and from this SQL Server. The default is 20.
10453	10	number of remote logins controls the number of active user connections from this SQL Server to remote servers. The default is 20.
10454	10	number of remote sites controls the number of simultaneous remote sites that can access this SQL Server. The default is 10.
10455	10	number of sort buffers specifies the number of buffers used to hold pages read from input tables.
10456	10	number of user connections sets the maximum number of user connections that can be connected to SQL Server at one time.
10457	10	page lock spinlock ratio specifies the ratio of spinlocks protecting the internal page locks hash table.
10458	10	page utilization percent controls when SQL Server performs an OAM (Object Allocation Map) scan to find unused pages. The default run value is 95.
10459	10	partition groups sets how many partition groups to allocate for the server. Partition groups are used by SQL Server to control access to individual partitions of tables.
10460	10	partition spinlock ratio sets the number of partition caches each spinlock protects. These spinlocks keep processes from using partition caches used by other processes.
10461	10	permission cache entries determines the number of cache protectors per task.

Table 5-82: 10401 to 10485, configuration help messages (continued)

Number	Severity	Message Text
10462	10	print deadlock information enables printing of deadlock information to the error log.
10463	10	print recovery information determines what information SQL Server displays on the console during recovery.
10464	10	procedure cache percent specifies the amount of memory allocated to the procedure cache after SQL Server's memory needs are met. The default run value is 20.
10465	10	recovery interval in minutes sets the maximum time per database that SQL Server uses to complete its recovery procedures in case of a system failure.
10466	10	remote server pre-read packets controls the number of packets that a site handler will pre-read in connections with remote servers. The default is 3.
10467	10	runnable process search count specifies the number of times an engine will loop looking for a runnable task before relinquishing the CPU.
10468	10	sort page count specifies the maximum amount of memory a sort operation can use.
10469	10	sql server clock tick length specifies the duration of the server's clock tick, in microseconds.
10470	10	stack guard size specifies the size of the stack guard area.
10471	10	stack size sets the size of SQL Server's execution stack.
10472	10	systemwide password expiration is the number of days that passwords remain in effect after they are changed. The default is 0 (passwords do not expire).
10473	10	table lock spinlock ratio specifies the number of spinlocks protecting the table locks hash table.
10474	10	tape retention in days sets the number of days you want to retain each tape after it has been used for a database or transaction log dump.
10475	10	tcp no delay disables TCP packet batching.
10476	10	time slice sets the number of milliseconds that SQL Server's scheduler allows a user process to run. The default run value is 100 milliseconds.
10477	10	total data cache size represents the amount of memory currently available for use as a data cache. It is a calculated value that is not directly user-configurable.
10478	10	total memory sets the size of memory, in 2K units, that SQL Server allocates from the operating system.
10479	10	upgrade version is changed by the upgrade program provided with new releases.
10480	10	user log cache size specifies the size (in bytes) for each user's log cache.
10481	10	user log cache spinlock ratio specifies the number of user log caches per user log cache spinlock.

Table 5-82: 10401 to 10485, configuration help messages (continued)

Number	Severity	Message Text
10482	10	shared memory starting address determines the virtual address at which SQL Server starts its shared memory region. Most users do not need to modify this.
10483	10	size of auto identity column sets the precision of IDENTITY columns automatically created with the sp_dboption 'auto identity' option.
10484	10	os async i/o enabled is a read-only parameter that indicates whether or not asynchronous I/O has been enabled at the operating system level.
10485	10	os file descriptors is a read-only parameter that indicates how many file descriptors have been allocated to SQL Server. It is not user-configurable.

Table 5-83: 13001 to 13120, message components

Number	Severity	Message Text
13001	10	data page
13002	10	index page
13003	10	leaf page
13004	10	last
13005	10	root
13006	10	read from
13007	10	send to
13008	10	receive
13009	10	send
13010	10	read
13011	10	wait
13012	10	A USE DATABASE statement
13013	10	a procedure or trigger
13014	10	A DISTINCT clause
13015	10	a view
13016	10	An INTO clause
13017	10	An ORDER BY clause
13018	10	A COMPUTE clause
13019	10	a SELECT INTO statement
13020	10	option

Table 5-83: 13001 to 13120, message components (continued)

Number	Severity	Message Text
13021	10	offset option
13022	10	statistics option
13023	10	parameter option
13024	10	built-in function name
13025	10	field
13026	10	parameter
13027	10	convert specification
13028	10	index
13029	10	table
13030	10	database
13031	10	procedure
13032	10	trigger
13033	10	view
13034	10	default
13035	10	rule
13036	10	system
13037	10	unknown type
13038	10	SET command
13039	10	column
13040	10	type
13041	10	character string
13042	10	integer
13043	10	identifier
13044	10	number
13045	10	integer value
13046	10	floating point value
13047	10	object
13048	10	column heading
13049	10	constraint
13050	10	Non-ANSI text

Table 5-83: 13001 to 13120, message components (continued)

Number	Coverity	Macage Tout
Number	Severity	Message Text
13051	10	ANSI text procesed in non-ANSI way
13052	10	a non-ANSI data type usage
13053	10	Non-standard datatype TIMESTAMP
13054	10	Non-standard or user datatype:
13055	10	ON <segment></segment>
13056	10	Alternate column names in CREATE VIEW
13057	10	UNION in INSERT SELECT
13058	10	FOR BROWSE
13059	10	HOLD LOCK in SELECT statement
13060	10	transaction name
13061	10	Use of TRANSACTION key word instead of WORK
13062	10	FROM clause in an UPDATE statement
13063	10	More than one table in a from clause for DELETE statement
13064	10	Named columns in an ORDER BY included in a UNION
13065	10	Comparison operator !=
13066	10	Comparison operator !<
13067	10	Comparison operator !>
13068	10	left equi-join operator
13069	10	right equi-join operator
13070	10	bitwise operator
13071	10	bitwise operator &
13072	10	bitwise operator ^
13073	10	bitwise operator ~
13074	10	modulo operator %
13075	10	temporary table usage
13076	10	a statement with assigned variables in the select list
13077	10	aborted
13078	10	data
13079	10	log
13080	10	A SYB_RESTREE statement

Table 5-83: 13001 to 13120, message components (continued)

Number	Severity	Message Text
13081	10	A CREATE SCHEMA statement
13082	10	dynamic PREPARE statement
13083	10	The untyped variable?
13084	10	in a WHERE clause or the SET clause of an UPDATE statement or the VALUES list of an INSERT statement
13085	10	Optional procedure number
13086	10	Parameter declaration list
13087	10	Procedure option
13088	10	owner
13089	10	object type
13090	10	Backup Server
13091	10	dump header
13092	10	dump trailer
13093	10	deadlock
13094	10	user interrupt
13095	10	suspended
13096	10	explicit
13097	10	implicit
13098	10	A pseudo table
13099	16	IDENTITY function
13101	16	WITH <option> [=] <value></value></option>
13102	10	remote server
13103	10	primary
13104	10	secondary
13105	10	updatable
13106	10	not updatable
13108	10	AT ISOLATION
13109	10	because table scans cannot be restarted
13110	10	due to an internal error
13111	10	initializing new column sysindexes.maxrowsperpage to zero
13112	10	checking database references in sysreferences

Table 5-83: 13001 to 13120, message components (continued)

Number	Severity	Message Text
13113	10	modifying index syscomments.syscomments
13114	10	recalculating sysindexes.maxlen
13115	10	dropping index
13116	10	creating table
13117	10	creating index
13118	10	noting the present database upgrade level
13119	10	adding column
13120	10	changing column name

Error Messages 17000 to 18177

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17000	0	timeouts
17001	0	no timeouts
17002	0	net password encryption
17010	0	no
17011	0	yes
17037	0	default sortorder id
17046	0	stack size
17050	0	select into/bulkcopy
17051	0	trunc log on chkpt
17052	0	no chkpt on recovery
17053	0	don't recover
17054	0	not recovered
17055	0	ddl in tran
17056	0	read only
17057	0	dbo use only
17058	0	single user
17059	0	ALL SETTABLE OPTIONS
17060	0	dbname has changed
17061	0	failed upgrade
17062	0	abort tran on log full
17063	0	no free space acctg
17069	0	allow nulls by default
17070	0	trusted
17075	0	Channel Devices
17080	0	showplan
17081	0	noexec
17082	0	arithignore

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17083	0	arithabort
17084	0	background
17085	0	control
17086	0	offsets
17087	0	statistics io and time
17088	0	parseonly
17089	0	procid
17090	0	rowcount
17091	0	nocount
17100	0	trigger
17101	0	system table
17102	0	view
17103	0	user table
17104	0	stored procedure
17105	0	default
17106	0	rule
17110	0	data only
17111	0	log only
17112	0	data and log
17120	0	default disk
17121	0	physical disk
17122	0	logical disk
17123	0	skip header
17124	0	dump device
17125	0	serial writes
17126	0	device mirrored
17127	0	reads mirrored
17128	0	half-mirror only
17129	0	mirror enabled
17130	0	os_session_label

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17131	0	maximum write
17132	0	current write
17133	0	minimum write
17134	0	maximum read
17135	0	current read
17136	0	maxhold
17137	0	minhold
17138	0	clearance
17139	0	check constraint
17140	0	referential constraint
17142	0	You need to be able to set curwrite label to data_high. This script will continue in spite of failure to set curwrite. Please rerun after setting your labels correctly.
17144	0	identity in nonunique index
17145	0	auto identity
17200	0	Message number must be greater than or equal to 17000.
17201	0	'%1!' is not an official language name from syslanguages.
17202	0	Message number %1! does not exist in the %2! language.
17210	0	Message number must be at least 20000.
17211	0	Cannot add message until sysusermessages system table is created properly by Upgrade.
17212	0	A message with number %1! in the specified language already exists.
17213	0	Drop the old message first if you still wish to add this one.
17214	0	The message has been inserted.
17215	0	The message has not been inserted.
17220	0	Message number %1! does not exist.
17221	0	Message deleted.
17222	0	User '%1!' does not have permission to drop message number %2!.
17223	0	User '%1!' does not have permission to drop message number %2! in the %3! language.
17230	0	You must be the System Administrator (SA) or the Database Owner (dbo) to execute this procedure.
17231	0	No login with the specified name exists.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17232	0	No user with the specified name exists in the current database.
17233	0	'%1!' is already a user in the current database.
17234	0	The specified user name is already aliased.
17235	0	Alias user added.
17240	0	'%1!' is not a valid name.
17241	0	A user with the specified group name already exists.
17242	0	A group with the specified name already exists.
17243	0	New group added.
17250	0	'%1!' already exists in syslanguages.
17251	0	'%1!' is not a valid date order.
17252	0	'%1!' is not a valid first day.
17253	0	'%1!' alias already exists in syslanguages.
17254	0	Language not inserted.
17255	0	New language inserted.
17260	0	Can't run %1! from within a transaction.
17261	0	Only the System Administrator (SA) may execute this procedure.
17262	0	A user with the specified login name already exists.
17263	0	Database name not valid login not added.
17264	0	New login created.
17270	0	There is not a server named '%1!'.
17271	0	'%1!' is the local server - remote login not applicable.
17272	0	There is already a default-name mapping of a remote login from remote server '%1!'.
17273	0	New remote login created.
17274	0	'%1!' isn't a local user remote login denied.
17275	0	There is already a remote user named '%1!' for remote server '%2!'.
17276	0	Usage:sp_addremotelogin remoteserver [, loginame [,remotename]]
17280	0	No such device exists run sp_helpdb to list the devices for the current database.
17281	0	The specified device is not used by the database.
17282	0	The specified device is not a database device.
17283	0	'%1!' is reserved exclusively as a log device.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17284	0	'%1!' is not a valid identifier.
17285	0	There is already a segment named '%1!'.
17286	0	The maximum number of segments for the current database are already defined.
17287	0	Segment created.
17288	0	You must execute this procedure from the database in which you wish to add a segment. Please execute 'use %1!' and try again.
17289	0	Set your curwrite to the hurdle of current database.
17290	0	There is already a server named '%1!', physical name '%2!'.
17291	0	sp_addserver servername [, local NULL] [, physical_name]
17292	0	There is already a local server.
17293	0	Server added.
17294	0	Changing physical name of server '%1!' from '%2!' to '%3!'
17295	0	Adding server '%1!', physical name '%2!'
17300	0	Usage: sp_addtype name, 'datatype' [,null nonull identity]
17301	0	'%1!' is not a valid type name.
17302	0	A type with the specified name already exists.
17303	0	Physical datatype does not exist.
17304	0	User-defined datatypes based on the 'timestamp' datatype are not allowed.
17305	0	Physical datatype does not allow nulls.
17306	0	Physical type is fixed length. You cannot specify the length.
17307	0	You must specify a length with this physical type.
17308	0	Illegal length specified must be between 1 and 255.
17309	0	Type added.
17310	0	Unknown device type. Use 'disk' or 'tape'.
17311	0	device_name may not be NULL.
17312	0	physicalname may not be NULL.
17314	0	Device with same logical name already exists.
17317	0	Please specify media capacity in megabytes (1 MB minimum).
17318	0	WARNING: specified size parameter is not used for the disk device type.
17319	0	'Disk' device added.
17320	0	'Tape' device added.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17321	0	WARNING: physical device name '%1!' is not unique.
17330	0	A user with the same name already exists in the database.
17331	0	User already has a login under a different name.
17332	0	User already has alias access to the database.
17333	0	No group with the specified name exists.
17334	0	All user ids have been assigned.
17335	0	New user added.
17340	0	Default and table or usertype must be in current database.
17341	0	Usage: sp_bindefault defaultname, objectname [, 'futureonly']
17342	0	No such default exists. You must create the default first.
17343	0	You can't bind a default to a timestamp datatype column.
17344	0	You do not own a column of that name.
17345	0	Default bound to column.
17346	0	You do not own a datatype of that name.
17347	0	Default bound to datatype.
17348	0	The new default has been bound to columns(s) of the specified user datatype.
17349	0	You cannot bind a declared default. The default must be created using create default.
17350	0	Rule and table or usertype must be in current database.
17351	0	Usage: sp_bindrule rulename, objectname [, 'futureonly']
17352	0	No such rule exists. You must create the rule first.
17353	0	You can't bind a rule to a text, image, or timestamp datatype column.
17354	0	Rule bound to table column.
17355	0	You can't bind a rule to a text, image, or timestamp datatype.
17356	0	Rule bound to datatype.
17357	0	The new rule has been bound to column(s) of the specified user datatype.
17358	0	You cannot bind a declared constraint. The rule must be created using create rule.
17360	0	Only the System Administrator (SA) or the Database Owner (dbo) can change the owner of a database.
17361	0	Can't change the owner of the master database.
17362	0	The proposed new db owner already is a user in the database.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17363	0	The proposed new db owner already is aliased in the database.
17364	0	The dependent aliases were mapped to the new dbo.
17365	0	The dependent aliases were dropped.
17366	0	Database owner changed.
17368	0	Your curwrite label needs to be set correctly before you attempt to change the database owner.
17370	0	Group changed.
17373	0	List of %1! names contains spaces, which are not allowed.
17374	0	List of %1! names has too few names.
17375	0	List of %1! names has too many names.
17376	0	List of %1! names has name(s) which are too long.
17377	0	List of %1! names contains name(s) which have '%2!' non-alphabetic characters.
17380	0	Commit service xact id doesn't exist.
17390	0	Table or view name must be in current database.
17391	0	First table in the common key doesn't exist.
17392	0	Second table in the common key doesn't exist.
17393	0	Only the table owner may define its common keys.
17394	0	The tables have no such first column or the columns are of different types.
17395	0	The tables have no such second column or the columns are of different types.
17396	0	The tables have no such third column or the columns are of different types.
17397	0	The tables have no such fourth column or the columns are of different types.
17398	0	The tables have no such fifth column or the columns are of different types.
17399	0	The tables have no such sixth column or the columns are of different types.
17400	0	The tables have no such seventh column or the columns are of different types.
17401	0	The tables have no such eighth column or the columns are of different types.
17402	0	New common key added.
17410	0	Configuration option doesn't exist.
17411	0	Configuration option is not unique.
17412	0	Only the System Administrator (SA) may change configuration parameters.
17413	0	The value of the 'number of devices' must be greater than the highest VDEVNO '%1!', defined in sysdevices.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17414	0	You can't set the default language to a language ID that is not defined in syslanguages.
17415	0	Configuration option value is not legal.
17416	0	Configuration option changed. Run the RECONFIGURE command to install.
17417	0	Maximum file descriptors or FILLM process quota too low to support requested number of user connections. Configuration variable 'user connections' will not be modified.
		See "Error 17417" in SQL Server Error Messages.
17418	0	'%1!' is an invalid file command. The valid commands are 'verify', 'read', 'write', and 'restore'.
17419	0	Configuration option changed. The SQL Server need not be rebooted since the option is dynamic.
17420	0	Settable database options.
17421	0	No such database run sp_helpdb to list databases.
17422	0	The 'master' database's options can not be changed.
17423	0	Usage: sp_dboption [dbname, optname, {true false}]
17424	0	Database option doesn't exist or can't be set by user.
17425	0	Run sp_dboption with no parameters to see options.
17426	0	Database option is not unique.
17427	0	Only the System Administrator (SA) or the owner of the database may set db options.
17428	0	You must be in the 'master' database in order to change database options.
17429	0	The database is currently in use 'read only' option disallowed.
17430	0	Run the CHECKPOINT command in the database that was changed.
17431	0	true
17432	0	false
17433	0	Database option '%1!' turned ON for database '%2!'.
17434	0	Database option '%1!' turned OFF for database '%2!'.
17435	0	The 'single user' option is not valid for the 'sybsecurity' database.
17440	0	Database name not valid default not changed.
17441	0	You can't change someone else's default database.
17442	0	Default database changed.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17443	0	Error in updating the default database.
17450	0	Only the System Administrator (SA) or '%1!' can change %2!'s default language.
17451	0	This user does not exist. Run sp_addlogin to add this user in.
17452	0	%1!'s default language has been changed to %2!.
17453	0	Error in changing the default language.
17460	0	Object must be in the current database.
17461	0	Object does not exist in this database.
17462	0	Things the object references in the current database.
17463	0	Things inside the current database that reference the object.
17464	0	Object doesn't reference any object and no objects reference it.
17470	0	No such device exists run sp_helpdevice to list the SQL Server devices.
17471	0	No such device exists run sp_helpdevice to list the DataServer devices.
17472	0	Usage: sp_diskdefault logicalname {defaulton defaultoff}.
17480	0	Alias user dropped.
17481	0	No alias for specified user exists.
17482	0	Device is being used by a database. You can't drop it.
17483	0	Device dropped.
17484	0	No device with specified logical name exists.
17485	0	Device is not a dump device and may not be dropped.
17486	0	Can't drop the group 'public'.
17487	0	You cannot drop group because it owns objects in database.
17488	0	Group has members. It must be empty before it can be dropped.
17489	0	Group has been dropped.
17490	0	Usage: sp_dropkey {primary foreign common}, tabaname [, tabbname]
17491	0	Type must be 'primary', 'foreign', or 'common'.
17492	0	The table or view named doesn't exist in the current database.
17493	0	You must be the owner of the table or view to drop its key.
17494	0	No primary key for the table or view exists.
17495	0	Primary key for the table or view dropped.
17496	0	Dependent foreign keys were also dropped.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17497	0	You must supply the dependent table or view as the third parameter.
17498	0	The dependent table or view doesn't exist in the current database.
17499	0	No foreign key for the table or view exists.
17500	0	Foreign key dropped.
17501	0	No common keys exist between the two tables or views supplied.
17502	0	Common keys dropped.
17505	0	Can't drop '%1!' because there are associated entries in master.dbo.sysmessages. Run sp_droplanguage with the 'dropmessages' flag.
17506	0	The only legal value for the second parameter is 'dropmessages'.
17507	0	Language deleted.
17509	0	User exists or is an alias or is a database owner in at least one database. Drop the user or the alias, or change the database ownership before dropping the login.
17511	0	Login dropped.
17512	0	Remote login dropped.
17513	0	There is no remote user '%1!' mapped to local user '%2!' from the remote server '%3!'.
17520	0	There is no such segment as '%1!'.
17521	0	Can't drop the '%1!'segment completely.
17522	0	The segment '%1!' is being used.
17523	0	Segment '%1!' does not reference device '%2!'.
17524	0	There is only one device mapping for the segment '%1!' use sp_dropsegment with no device argument.
17525	0	Segment dropped.
17526	0	Segment reference to device dropped.
17527	0	WARNING: There are no longer any segments referencing device '%1!'. This device will no longer be used for space allocation.
17528	0	WARNING: There are no longer any segments referencing devices '%1!'. These devices will no longer be used for space allocation.
17530	0	There are still remote logins for the server '%1!'.
17531	0	Remote logins for remote server '%1!' have been dropped.
17532	0	Usage: sp_dropserver server [, droplogins]
17533	0	Server dropped.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17540	0	The type doesn't exist or you don't own it.
17541	0	Type is being used. You cannot drop it.
17542	0	Type has been dropped.
17543	0	You cannot drop the 'database owner'.
17544	0	You cannot drop the 'guest' user from master or tempdb.
17545	0	You cannot drop user because user '%1!' owns objects in database.
17546	0	You cannot drop user because user '%1!' owns types in database.
17547	0	The dependent aliases were also dropped.
17548	0	User has been dropped from current database.
17549	0	You cannot drop user because user '%1!' owns grantable privileges and granted them to other users. The user has granted the following privileges:
17550	0	Segment extended.
17551	0	Device '%1!' is now exclusively used by '%2!'
17552	0	This command has been ignored. Extending the log segment on device '%1!' would leave no space for creating objects in database '%2!'.
17560	0	Foreign key table doesn't exist.
17561	0	Primary key table doesn't exist.
17562	0	Only the owner of the table may define a foreign key.
17563	0	The table does not have a column named '%1!'.
17564	0	Primary key does not exist with the same number of columns as the foreign key.
17565	0	Primary key does not exist.
17566	0	Datatypes of the column '%1!' in the keys are different.
17567	0	New foreign key added.
17570	0	Operating System File
17571	0	
17590	0	The specified database does not exist.
17591	0	no options set
17592	0	unused by any segments
17594	0	offline
17610	0	No such i/o device exists.
17611	0	special

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17612	0	disk
17613	0	tape
17614	0	UNKNOWN DEVICE
17615	0	MIRROR ENABLED
17616	0	MIRROR DISABLED
17617	0	mirror =
17618	0	only device '%1!' of mirror is enabled device '%2!' is disabled
17619	0	channel
17620	0	nonserial writes
17640	0	Object does not have any indexes.
17650	0	First table doesn't exist.
17651	0	Second table doesn't exist.
17652	0	Object must be in your current database.
17660	0	No defined keys for this object.
17661	0	none
17662	0	For information on declarative integrity features: PRIMARY KEY, UNIQUE, FOREIGN KEY, CHECK CONSTRAINT, REFERENTIAL CONSTRAINT, NULL/NOT NULL, and DEFAULT, use sp_helpconstraint, a new system stored procedure.
17670	0	No alternate languages are available.
17671	0	us_english is always available, even though it is not in master.dbo.syslanguages.
17672	0	In database '%1!', the log starts on device '%2!'.
17673	0	All
17674	0	No such object or user exists in the database.
17675	0	Illegal string found where the keyword grant is expected.
17676	0	This may be a temporary object. Please execute procedure from tempdb.
17677	0	sp_helprotect [name [, name_in_db [, 'grant']]]
17679	0	There is no text for object '%1!'.
17680	0	There are no remote servers defined.
17681	0	There are no remote logins for the remote server '%1!'.
17682	0	There are no remote logins defined.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17683	0	There are no remote logins for '%1!'.
17684	0	There are no remote logins.
17685	0	There are no remote logins for '%1!' on remote server '%2!'.
17686	0	** mapped locally **
17687	0	** use local name **
17690	0	Character Set =
17691	0	Sort Order =
17692	0	Sort Order Description
17693	0	Characters, in Order
17694	0	Class 2 Character Set
17700	0	Users aliased to user.
17701	0	The name supplied is a group name.
17702	0	The name supplied is aliased to another user.
17703	0	The name supplied is not a user, group, or aliased.
17710	0	This command has been ignored. The device specified is the only non-log device available for the database and cannot be made log-only.
17711	0	syslogs moved.
17712	0	Report must be in your current database.
17713	0	No such report exists.
17714	0	not applicable
17715	0	The last-chance threshold for database %1! is now %2! pages.
		See "Error 17715" in SQL Server Error Messages.
17716	0	Could not update the last-chance threshold for database %1!
		See "Error 17716" in SQL Server Error Messages.
17720	0	Error: Unable to set the Password.
17721	0	Password correctly set.
17730	0	Use sp_logdevice to move syslogs table.
17731	0	You can't move system tables.
17732	0	You do not own table '%1!'.
17733	0	There is no table named '%1!'.
17734	0	There is no index named '%1!' for table '%2!'.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17735	0	'%1!' is now on segment '%2!'.
17736	0	You can't place a user table/index to logsegment.
17737	0	Partitioned objects cannot be moved.
17740	0	Only the owner of the table may define a primary key.
17741	0	Primary key already exists on table drop key first.
17742	0	The table has no such first column.
17743	0	The table has no such second column.
17744	0	The table has no such third column.
17745	0	The table has no such fourth column.
17746	0	The table has no such fifth column.
17747	0	The table has no such sixth column.
17748	0	The table has no such seventh column.
17749	0	The table has no such eighth column.
17750	0	New primary key added.
17751	0	Illegal precision specified must be between 1 and 38.
17752	0	Illegal scale specified must be less than precision.
17753	0	The column already has a default. Bind disallowed.
17754	0	Illegal precision specified must be between 1 and 48.
17755	0	User types with the identity property must be numeric with a scale of 0.
17760	0	'%1!' is a system table. Cannot use sp_recompile on system tables.
17761	0	Object '%1!' is not a table.
17762	0	Each stored procedure and trigger that uses table '%1!' will be recompiled the next time it is executed.
17770	0	Settable remote login options.
17771	0	There is no remote user '%1!' mapped to local user '%2!' on remote server '%3!'.
17772	0	Usage: sp_remoteoption [remoteserver, loginame, remotename, optname, {true false}]
17773	0	Remote login option doesn't exist or can't be set by user.
17774	0	Run sp_remoteoption with no parameters to see options.
17775	0	Remote login option is not unique.
17776	0	Only the System Administrator (SA) may set remote login options.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17777	0	Option '%1!' turned on.
17778	0	Option '%1!' turned off.
17780	0	There is already a column named '%1!' in table '%2!'.
17781	0	Column name has been changed.
17782	0	You do not own a table, column or index of that name in the current database.
17783	0	There is already an index named '%1!' for table '%2!'.
17784	0	Index name has been changed.
17785	0	Table or view names beginning with '#' are not allowed.
17786	0	Object name cannot be changed either because it does not exist in this database, or you don't own it, or it is a system name.
17787	0	Newname already exists in systypes.
17788	0	Newname already exists in sysobjects.
17789	0	Object name has been changed.
17790	0	Only the System Administrator (SA) can change the name of a database.
17791	0	A database with the new name already exists.
17792	0	The databases 'master', 'model', and 'tempdb' cannot be renamed.
17793	0	System Administrator (SA) must set database '%1!' to single-user mode with sp_dboption before using sp_renamedb.
17794	0	Database is renamed and in single-user mode.
17795	0	System Administrator (SA) must reset it to multi-user mode with sp_dboption.
17796	0	Legal request codes are as follows:
17800	0	No such server run sp_helpserver to list servers.
17801	0	Usage: sp_serveroption [server, optname, {true false}]
17802	0	Server option doesn't exist or can't be set by user.
17803	0	Run sp_serveroption with no parameters to see options.
17804	0	Server option is not unique.
17805	0	Only the System Administrator (SA) may set server options.
17806	0	Option can be set for remote servers only not the local server.
17807	0	Settable server options.
17810	0	Language alias not changed.
17811	0	Language alias reset.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17830	0	Object is stored in 'sysprocedures' and has no space allocated directly.
17831	0	Views don't have space allocated.
17832	0	Not avail.
17840	0	Column or usertype must be in current database.
17841	0	Default unbound from table column.
17842	0	The specified column has no default.
17843	0	You do not own a table with a column of that name.
17844	0	You do not own a user datatype of that name.
17845	0	The specified user datatype has no default.
17846	0	Default unbound from datatype.
17847	0	Columns of the user datatype specified had their defaults unbound.
17848	0	You cannot unbind a declared default. Use ALTER TABLE command.
17850	0	Rule unbound from table column.
17851	0	The specified column has no rule.
17852	0	The specified user datatype has no rule.
17853	0	Rule unbound from datatype.
17854	0	Columns of the user datatype specified had their rules unbound.
17855	0	You cannot unbind a declared constraint. Use ALTER TABLE command.
17860	0	Suspect indexes in database %1!:
17861	0	There are no suspect indexes in database %1!.
17862	0	Table must be in the current database.
17863	0	There is no table named %1! in the current database.
17864	0	Suspect indexes on table %1!:
17865	0	There are no suspect indexes on table %1!.
17870	0	Table '%1!' does not exist in database '%2!' cannot add thresholds.
		See "Error 17870" in SQL Server Error Messages.
17871	0	There is no segment named '%1!'.
		See "Error 17871" in SQL Server Error Messages.
17872	0	This threshold is too close to one or more existing thresholds. Thresholds must be no closer than 128 pages to each other.
		See "Error 17872" in SQL Server Error Messages.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17873	0	Adding threshold for segment '%1!' at '%2!' pages.
		See "Error 17873" in SQL Server Error Messages.
17874	0	A threshold at %1! pages is logically impossible for segment '%2!'. Choose a value between %3! and %4! pages.
		See "Error 17874" in SQL Server Error Messages.
17875	0	Only the DBO of database '%1!' or a user with System Administrator (SA) role may add, delete, or modify thresholds in that database.
		See "Error 17875" in SQL Server Error Messages.
17876	0	Warning: The specified threshold level is greater than the existing number of free pages on this segment.
17880	0	No such account nothing changed.
17881	0	Invalid role nothing changed.
17882	0	Invalid role nothing changed. The user must already have System Administrator (SA) role before being granted the Sybase Technical Support role.
17883	0	Cannot revoke System Security Officer (SSO) role from the last remaining unlocked System Security Officer (SSO) account.
17884	0	Neither 'grant' or 'revoke' is specified nothing changed.
17885	0	Authorization updated.
17886	0	Error in updating role.
17887	0	Cannot revoke System Administrator (SA) role from the last remaining unlocked System Administrator (SA) account.
17888	0	You must possess either the System Administrator (SA) or System Security Officer (SSO) role to execute %1!.
17890	0	Constraint name must be in `current' database.
17891	0	Constraint name must belong to the current user.
17892	0	Message id must be a user defined message.
17893	0	No such message exists. Please create the message first using sp_addmessage.
17894	0	No such referential or check constraint exists. Please check whether the constraint name is correct.
17895	0	Constraint is bound to a message. You must unbind the message first.
17896	0	Binding message failed unexpectedly. Please try again.
17897	0	Message bound to constraint.
17900	0	%1! login account(s) cleared.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17903	0	Table '%1!' does not exist in database '%2!' cannot drop thresholds.
		See "Error 17903" in SQL Server Error Messages.
17904	0	Segment '%1!' does not have a threshold at '%2!' pages.
		See "Error 17904" in SQL Server Error Messages.
17905	0	You may not drop the log's last-chance threshold.
		See "Error 17905" in SQL Server Error Messages.
17906	0	Dropping threshold for segment '%1!' at '%2!' pages.
		See "Error 17906" in SQL Server Error Messages.
17910	0	Database '%1!' has no thresholds table '%2!' does not exist.
		See "Error 17910" in SQL Server Error Messages.
17911	0	Segment '%1!' does not exist.
17912	0	Error in locking the account.
17913	0	Locked account(s):
17914	0	Account unlocked.
17915	0	Warning: the specified account is currently active.
17916	0	Cannot lock the last remaining unlocked SSO login.
17917	0	Error: locktype must either be 'lock' or 'unlock'.
17918	0	Nothing changed.
17919	0	Account locked.
17920	0	The given security label value is syntactically wrong.
17921	0	The given maxwrite value cannot dominate the minwrite value from syslogins nothing changed.
17922	0	The given minwrite value is not dominated by the maxwrite value from syslogins nothing changed.
17923	0	The given security label is not dominated by the clearance value from syslogins nothing changed.
17924	0	The given clearance value cannot dominate the %1! value from syslogins nothing changed.
17925	0	Column name invalid nothing changed.
17926	0	Column changed.
17927	0	Error in changing the value of the specified column.
17935	0	Error in updating checkauths in memory nothing changed.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17936	0	Neither 'on' or 'off' is specified nothing changed.
17937	0	Error in updating checkauths in Sysobjects.
17940	0	Constraint is not bound to any message.
17941	0	Unbinding message failed unexpectedly. Please try again.
17942	0	Message unbound from constraint.
17943	0	Suid: %1!
17944	0	Loginame: %1!
17945	0	Fullname: %1!
17946	0	Maximum Write Level: %1!
17947	0	Minimum Write Level: %1!
17948	0	Maximum Read Level: %1!
17949	0	Locked: %1!
17950	0	Date of Last Password Change: %1!
17951	0	Configured Authorization:
17960	0	Replication Server support is not enabled. Replication Server support must be enabled before you can change the replication status of '%1!'.
17961	0	Usage: sp_setreplicate object_name, {true false}
17962	0	The replication status for '%1!' is already set to %2!. Replication status for '%3!' does not change.
17963	0	An object with the same name, but owned by a different user is already being replicated. The object '%1!' cannot be replicated.
17964	0	The replication status for '%1!' is set to %2!.
17965	0	The replication status for '%1!' is currently %2!.
17966	0	Due to system failure, the replication status for '%1!' has not been changed.
17967	0	Only the System Administrator (SA) or the Database Owner (DBO) may execute this stored procedure.
17970	0	sp_syntax provides syntax help for Sybase products.
17971	0	These modules are installed on this Server:
17972	0	Usage: sp_syntax command [, module [, language]]
17973	0	No command or routine has a name like '%%%1!%%'
17974	0	No module has a name like '%%%1!%%'

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
17975	0	No command or routine has a name like '%%%1!%%' and a module like '%%%2!%%'
17976	0	No databases currently have auditing enabled.
17977	0	'%1!' does not exist.
17978	0	'%1!' has the following auditing options enabled:
17979	0	Invalid second argument. Valid choices are 'ok', 'fail', 'both', or 'off'.
17980	0	Invalid third argument. Valid choices are 'd', 'u', 'o', 'g', 'r', or 't'.
17981	0	Error updating the audit flags in the system catalogs. This is a system error. Contact a user with System Administrator (SA) role.
17982	0	Audit option has been changed and has taken effect immediately.
17983	0	Audit option has been changed and will take effect after a reboot.
17984	0	Error updating the audit flags in memory. This is a system error. Contact a user with System Administrator (SA) role.
17985	0	You must be in the sybsecurity database to run this procedure.
17986	0	Device name ignored because no segment name was provided.
17987	0	Segment '%1!' does not exist in the sybsecurity database.
17988	0	Creating segment '%1!' on device '%2!'
17989	0	Creating sysaudits table on the '%1!' segment
17990	0	Dumping transaction log in sybsecurity with no_log
17991	0	No logins currently have auditing enabled.
17992	0	Invalid second argument. Valid options are 'table', 'view', or 'cmdtext'.
17993	0	'%1!' is not a valid argument.
17994	0	Only 'default table' or 'default view' is allowed.
17995	0	Only 'ok', 'fail', 'both' or 'off' can be specified.
17996	0	You must provide 'ok', 'fail', 'both', or 'off' preceding the 'dusi' string.
17997	0	Error: An invalid letter was specified. Use only 'd', 'u', 's', or 'i'.
17998	0	No databases currently have %1! auditing enabled.
17999	0	'%1!' has the following %2! auditing options enabled.
18000	0	No objects currently have auditing enabled.
18001	0	An object name must be provided.
18002	0	You must provide an audit option.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18003	0	Audit option '%1!' does not exist. Valid options are:
18004	0	Audit option '%1!' is ambiguous. Ambiguous options are:
18005	0	'%1!' is an invalid audit option string in this context.
18006	0	The third argument was not necessary; therefore, it was ignored.
18007	0	No databases currently have default sproc/trigger auditing enabled.
18008	0	'%1!' has the following default sproc/trigger auditing enabled:
18009	0	No sprocs/triggers currently have auditing enabled.
18010	0	A sproc/trigger name or 'all' must be provided.
18011	0	Object name must be qualified with the owner name.
18012	0	Sproc/trigger name must be qualified with the owner name.
18013	0	Cannot lock the last remaining unlocked SA account.
18015	0	%1! must be a valid sensitivity_boundary label.
18016	0	The connection label supplied is an invalid sensitivity label.
18017	0	%1! must dominate %2!.
18018	0	New login configured.
18019	0	Must specify 'on' or 'off'.
18020	0	Account updated.
18021	0	Object name may be qualified with the owner name only; please don't qualify with the database name.
18022	0	Procedure/trigger name may be qualified with the owner name only; please don't qualify with the database name.
18023	0	The optional %1! and %2! labels must all be non-NULL if at least one of them is specified.
18024	0	Object does not have any declarative constraints.
18025	0	Non-NULL labels specified in 'off' action.
18026	0	Illegal action command specified.
18027	0	Procedure remains in a non-executable state.
18028	0	Certified state modified for object '%1!'.
18029	0	The procedures label configuration has changed.
18030	0	No change, update failed with error: %1!

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18031	0	This procedure can only affect thresholds in the current database. Say 'USE $\%1!$ ', then run this procedure again.
		See "Error 18031" in SQL Server Error Messages.
18032	0	You may not alter the free space or segment name of the log's last-chance threshold.
		See "Error 18032" in SQL Server Error Messages.
18033	0	You cannot drop user because user '%1!' owns thresholds in database.
		See "Error 18033" in SQL Server Error Messages.
18034	0	The sysaudits table already exists. This table will be truncated and re-used. Therefore, segment and device parameters, if supplied, will be ignored.
18035	0	Reserved Words Used as Database Object Names for Database,
18036	0	Upgrade renames sysobjects.schema to sysobjects.schemacnt.
18037	0	Found no reserved words used as names for database-wide objects.
18038	0	Found no reserved words used as database object names.
18039	0	Table qualifier must be name of current database.
18040	0	Catalog procedure '%1!' can not be run in a transaction.
18041	0	Stored procedure qualifier must be name of current database.
18042	0	Illegal value for 'col_type' argument. Legal values are 'V' or 'R'.
18043	0	primary key table name or foreign key table name must be given.
18044	0	%1! table qualifier must be name of current database.
18045	0	Cannot lock the last remaining unlocked SA login.
18046	0	Cannot revoke the SA role from the last remaining unlocked SA login.
18047	0	There is not enough room in the default devices to create the sybsyntax database
18048	0	The sybsyntax database could not be created.
18049	0	Syntax Help
18050	0	Foreign key
18051	0	Primary key
18052	0	The class column will display the cursor name for locks associated with a cursor for the current user and the cursor id for other users.
18053	0	User '%1!' was granted grantable privileges by the following users:
18054	0	Table contains text/image type columns. You must specify the total length per row for these columns in the argument list.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18055	0	Procedure should be used on system tables only.
18056	0	Cannot re-create index on this table.
18057	0	The index with id 1 on sysobjects can not be recreated.
18058	0	Name of user-defined type name changed.
18059	0	Attribute id %1! is not supported.
18060	0	The database sybsystemprocs needs to be atleast %1!MB in size. It is currently at %2!MB.
18061	0	Installing system stored procedures in the sybsystemprocs database.
18062	0	Database sybsystemprocs of size %1!MB is being created on the default device.
18063	0	Done creating database sybsystemprocs on the default device.
18064	0	Cannot create database sybsystemprocs of size %1!MB on the default device because there is not enough space. Please create this database elsewhere and rerun the installmaster script.
18065	0	Illegal fourth argument. Valid arguments are: 'access', 'trusted_invocation'
18066	0	Invalid third argument. Valid choices are 'd', 'u', 'o', 'g', 'r', 't' or 'a'
18067	0	Clearance Level: %1!
18068	0	Stored Procedure / Trigger does not exist in this database
18069	0	Access granted.
18070	0	Access revoked.
18071	0	Set curwrite to the level of table/column.
18072	0	Setting curwrite to data_low for updating syssegments failed.
18073	0	Set command failed. Set your maxwrite and minwrite labels to correct level.
18074	0	Curwrite label could not be set to the object level. Set your maxwrite and minwrite labels correctly.
18075	0	Set your maxwrite label correctly.
18076	0	Could not set curwrite to object level. Set your maxwrite label correctly.
18077	0	Set curwrite to the level of index.
18078	0	Set curwrite to the level of the object in systypes.
18079	0	Set curwrite to the level of the object in sysobjects.
18080	0	Certified state of object '%1!' has been set to 'Suspect'.
18081	0	Object name cannot be NULL if action is non-NULL.
18082	0	At least one of the labels must be non-NULL.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18083	0	Login account %1! has already been configured. Use sp_trustlogin to modify security profile of this account.
18084	0	A threshold at %1! pages for segment '%2!' is too close to the maximum size of the database. Because of this, the threshold will not fire more than once per SQL server re-boot. Modify the value using sp_modifythreshold to be between %3! and %4
18085	0	Object is not partitioned.
18086	0	Specified named cache does not exist.
18087	0	You must be in Master to bind or unbind a database.
18088	0	The target database does not exist.
18089	0	The 'master' database cannot be bound to or unbound from a named cache.
18090	0	The target object does not exist.
18091	0	The target index does not exist.
18092	0	Only logs may be bound to this cache.
18093	0	The specified source buffer pool does not exist.
18094	0	Not enough memory in source buffer pool to satisfy request.
18095	0	The destination buffer pool size must be a minimum of 512 kilobytes.
18096	0	Request will result in creating a source buffer pool less than the minimum of 512 kilobytes.
18097	0	Object must be a trigger, view or stored procedure.
18098	0	Individual tables in 'tempdb' cannot be bound to or unbound from named caches. However, all of 'tempdb' may be bound or unbound.
18099	0	Usage: sp_setrepdb {true false}
18100	0	Usage: sp_setreptable table_name, {true false}
18101	0	The specified table must be in the current database.
18102	0	Table '%1!' does not exist in this database.
18103	0	An object with the same name, but owned by a different user, is already being replicated. The table '%1!' cannot be replicated.
18104	0	table
18105	0	function
18106	0	The specified stored procedure must be in the current database.
18107	0	Stored procedure '%1!' does not exist in this database.
18108	0	Usage: sp_setrepproc procedure_name, {function table false}

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18109	0	Usage: sp_setrepcol table_name, column_name, {do_not_replicate always_replicate replicate_if_changed}
18110	0	The table '%1!' is not marked as replicated.
18111	0	do_not_replicate
18112	0	always_replicate
18113	0	replicate_if_changed
18114	0	A table name must be provided.
18115	0	No Text/Image columns in '%1!'.
18116	0	The replication status for all Text/Image columns in '%1!' is set to %2!.
18117	0	Column '%1!' does not exist in '%2!' or it is not a Text/Image column.
18118	0	Object '%1!' does not exist in this database.
18119	0	pre-System 11
18120	0	System 11 or later
18121	0	Unrecognized change attribute option.
18122	0	'%1!' attribute of object '%2!' changed to %3!.
18123	0	Configuration option changed. The SQL Server must be rebooted before the change in effect since the option is static.
18124	0	No matching configuration options. Here is a listing of groups:
18125	0	Must provide the parameter 'filename'.
18126	0	Log I/O Size must be a power of 2. For example: 2, 4, 8 and 16.
18127	0	You must have System Administrator (SA) role to execute this stored procedure.
18128	0	Unable to change the log I/O size. The memory pool for the specified log I/O size does not exist.
18129	0	Log I/O size is set to %1! Kbytes.
18130	0	sp_logiosize failed. Please contact Sybase Technical Support to help you resolve the problem.
18131	0	Log I/O Size value '%1!' is illegal.
18132	0	The transaction log for database '%1!' will use I/O size of %2! Kbytes.
18133	0	The character set, '%1!', is invalid since it is not defined in Syscharsets.
18134	0	The sortorder, '%1!', is invalid since it is not defined in Syscharsets.
18135	0	The specified named cache '%1!' does not exist.
18136	0	The cache type can only be specified once.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18137	0	Attempt to delete the default data cache. The default cache may not be deleted.
18138	0	A cache name must be supplied.
18139	0	Syntax error encountered. Parameter must be of the form 'wash = int[KMGP]'.
18140	0	Cannot modify a cache type to be 'log only' when non-log objects are bound to it Use sp_helpcache to print out bound objects and sp_unbindcache to delete the cache bindings.
18141	0	Syntax error encountered on size specification. %1! is an invalid size.
18142	0	I/O size of the memory pool is expected as the third argument.
18143	0	The source pool (%1! buffers, total size %2!) is not large enough to satisfy the request to move %3! of memory.
18144	0	Source pool (%1!) and destination pool (%2!) are the same pool. The source and destination pools must be different.
18145	0	Less memory moved than requested in cache '%1!'. Requested size = %2! Kb: from pool = %3!, to pool = %4!, actual memory moved = %5! Kb.
18146	0	Syntax error encountered. Sizes must be of the form int[KMGP]. For example, a size of 5 magabytes may be specified as '5M'.
18147	0	Invalid buffer size of %1! encountered. Valid buffer sizes are powers of two between 2k and 16k inclusive.
18148	0	The specified pool (%1!) does not exist in named cache '%2!'.
18149	0	Invalid size of %1! encountered. Sizes must be greter than zero.
18150	0	The login '%1!' does not exist.
18151	0	The current display level for login '%1!' is '%2!'.
18152	0	Invalid display level. The valid values are 'basic', 'intermediate' or 'comprehensive'.
18153	0	The display level for login '%1!' has been changed to '%2!'.
18154	0	Object '%1!' is not a table.
18155	0	The cache type can be either 'logonly' or 'mixed' only.
18156	0	$ \begin{tabular}{ll} Usage: sp_unbindcache dbname [, [ownername.] tablename [, indexname `text only' `table only']] \end{tabular} $
18157	0	The stored procedure 'sp_setrepdb' is currently not supported.
18158	0	At least one of the parameters 'new_lwm', 'new_hwm' or 'new_pct' must be not NULL to execute sp_setpglockpromote.
18159	0	You must be in the 'master' database to add, change or drop lock promotion attributes for a user database.

Table 5-84: 17000 to 18177, system and catalog stored procedure messages

Number	Severity	Message Text
18160	0	Please specify a non-NULL value for '%1!', since it has not been set previously with a non-NULL value.
18161	0	Object name parameter must be NULL for Server-wide lock promotion attributes Using NULL instead of - '%1!'.
18162	0	'%1!' is a not a user table. '%2!' can be used only on user tables.
18163	0	The 'lock promotion LWM' value '%1!' cannot be greater than the 'lock promotion HWM' value '%2!'.
18164	0	Invalid value specified for 'scope' parameter. Valid values are 'SERVER', 'DATABASE' or 'TABLE'.
18165	0	The 'lock promotion!' attributes of '%1!', '%2!' have been changed. The new values are '%3!'.
18166	0	Lock promotion attribute does not exist for '%1!', '%2!'. Cannot delete it.
18167	0	Lock promotion attribute of object '%1!' has been dropped.
18168	0	Invalid value '%1!', specified for 'scope' parameter. Valid values are 'DATABASE or 'TABLE'.
18169	0	Server-wide lock promotion values cannot be dropped. Use 'sp_configure' to restore server-wide defaults.
18170	0	Usage: sp_bindcache cachename, dbname [, [ownername.]tablename [, indexname 'text only' 'table only']]
18171	0	The table must have a text column if 'text only' is specified.
18172	0	The change is completed. The SQL Server must be rebooted for the change to take effect.
18173	0	Only the System Administrator (SA) or the Object Owner may execute this stored Procedure.
18174	0	The database '%1!' is offline. To obtain cache-bindings for objects in this database please online the database and rerun sp_helpcache.
18175	0	Specified named cache is not active yet. The SQL Server must be rebooted to activate the named cache.
18176	0	$\label{thm:constraints} Usage: sp_cachestrategy\ dbname\ [,\ [ownername.]tablename\ [,\ indexname\ \ `text\ only'\ \ `table\ only'\ [,\ \{\ prefetch\ \ mru\ \},\ \{\ `on'\ \ `off'\}]]]$
18177	0	Usage: sp_cacheconfig [cachename [, 'cache_size[K P M G]'] [, logonly mixed]]

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