

## Data Warehouse Service

# Error Code Reference

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# Contents

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<b>1 ErrorCode Rules.....</b>	<b>1</b>
<b>2 Row-column store.....</b>	<b>7</b>
2.1 Row-store.....	7
2.2 Column-store.....	9
2.3 GIN Index.....	10
2.4 Btree Index.....	11
2.5 Row-store Vacuum.....	11
2.6 SP-GiST Index.....	12
2.7 Hash Index.....	13
<b>3 Transaction.....</b>	<b>14</b>
3.1 Lock.....	14
3.2 GTM.....	16
3.3 xlog.....	17
3.4 Checkpoint.....	21
<b>4 HA.....</b>	<b>22</b>
4.1 Data page Replication.....	22
4.2 Log Replication.....	22
4.3 Replication Slot.....	22
<b>5 SQL on Anywhere.....</b>	<b>24</b>
5.1 SQL on Hudi.....	24
5.2 OBS / HDFS / DLI.....	24
<b>6 GDS/Copy.....</b>	<b>26</b>
6.1 Common mechanisms.....	26
6.2 Importing.....	27
<b>7 Parser.....</b>	<b>29</b>
7.1 Lexical Analysis.....	29
7.2 Grammatical Analysis.....	30
7.3 DDL.....	33
7.4 DML.....	40
7.5 Expressions.....	44
7.6 Metadata.....	45

<b>8 Optimizer</b> .....	<b>48</b>
8.1 Rewriting Queries.....	48
8.2 Path Generation.....	50
8.3 Plan generation.....	50
8.4 Analyze.....	50
8.5 utile Interface.....	51
<b>9 Actuator</b> .....	<b>53</b>
9.1 Row Execution Engine.....	53
9.2 Vectorized Execution Engine.....	55
9.3 Distributed Framework.....	55
<b>10 Security</b> .....	<b>57</b>
10.1 Authorizes.....	57
10.2 Masking.....	58
<b>11 Communications</b> .....	<b>59</b>
11.1 libpq.....	59
11.2 pooler.....	60
11.3 Communication Universal Interface.....	61
<b>12 WLM</b> .....	<b>62</b>
12.1 Load Management.....	62
12.2 CPU Management.....	63
12.3 Space Control.....	63
12.4 Exception Rule.....	63
12.5 Resource Monitoring.....	63
<b>13 Logical Cluster</b> .....	<b>65</b>
<b>14 Others</b> .....	<b>66</b>
14.1 Logical Replication.....	66
14.2 Postmaster.....	66
14.3 IPC.....	67
14.4 Tablespace.....	68
14.5 Common mechanism in Port.....	69
14.6 Tsearch.....	69
14.7 CN Retry.....	69
14.8 Advanced Packages.....	69
14.9 JSON.....	70
14.10 UDF.....	71
14.11 Functions and Features.....	72

# 1 ErrorCode Rules

The naming rule complies with the following rules: GS\_[3-digit service ID][2-digit error type ID][4-digit auto-increment ID].

For example, GS\_201110003 indicates a parameter error (11) in the row-column storage type (0) of the SQL module (2), Sub-error (0003) indicates the third error code of the same type (for example, the format of the parameter OID is incorrect).

For details about the current service and error type, see [Table1 Description of Error Codes](#).

**Table 1-1** Description of Error Codes

Category	Module Type	Sub Module Type	First three digits of an error code
SQL	Row-column store	Row-store	101
		Column-store	102
		HStore	103
		GIN Index	104
		Btree Index	105
		Row-store Vacuum	106
		Column-store Vacuum	107
		Time Series Table	108
		SP-GiST Index	109
		Hash Index	110
	Transaction	Lock	111
		GTM	112

Category	Module Type	Sub Module Type	First three digits of an error code	
		xlog	113	
		Snapshot	114	
		Barrier	115	
		Pool	116	
		Checkpoint	117	
		Residualfiles	118	
	HA	Data page Replication	121	
		Log Replication	122	
		Build	123	
		Primary-standby DN Switchovers	124	
		Replication Slot	125	
		Log flow Control	126	
		Catchup	127	
		Synchronous Submission	128	
	SQL on Anywhere	SQL on paequet	131	
		SQL on orc	132	
		SQL on Hudi	133	
		SQL on carbondata	134	
		OBS/HDFS/DLI	135	
	GDS/copy	Common mechanisms (option parameters, task assignment, compression)	141	
		Importing	142	
		Exporting	143	
		Interconnection	145	
			GDS reporting	146

Category	Module Type	Sub Module Type	First three digits of an error code
	Backup	Logical Backup	161
		Fine-grained DR	162
	Other	CBM	151
		Logical Replication	152
		RPC Message Output	153
		Postmaster	154
		IPC	155
		Commands	156
		Tablespace	157
		Clusters	158
		Common mechanism in the Port	159
Storage	Parser	Lexical Analysis	211
		Grammatical Analysis	212
		DDL	213
		DML	214
		Expressions	215
		Metadata	216
	Optimizer	Rewriting Queries	221
		Path Generation	222
		Plan generation	223
		Plan Cache	224
		Analyze	225
	Actuator	utile Interface	226
		Row Execution Engine	231
		Vectorized Execution Engine	232

Category	Module Type	Sub Module Type	First three digits of an error code
		Executing Diagnostic Information	233
		LLVM	234
		Distributed Framework	235
		RemoteQuery	236
		Explain	237
	Security	Certificates	241
		Authorizes	242
		Encryptes	243
		Audit	244
		Masking	245
	Communications	libpq	251
		pooler	252
		libcomm	253
		Stream Thread Pool	254
		Communication Universal Interface	255
	WLM	Load Management	261
		Memory Management	262
		CPU Management	263
		Space Control	264
		Network Control	265
		Exception Rule	266
		Resource Monitoring	267
	Logical Cluster	Logical Cluster	271
	Redistribution	Redistribution	281



Category	Module Type	Sub Module Type	First three digits of an error code
	Other	ODBC	201
		Tsearch	202
		Associated Analysis	203
		CN Retry	204
		Acceleration Cluster	205
		Advanced Packages	206
		JSON	207
		UDF	208
		Functions and Features	209
CBB	CBB	Signal	301
		Handle	302
		Memory	303
		Thread	304
		Error Handling	305
		Timer	306
		IPC	307
		GUC	308
		SysCache	309
		Log thread	310
Disaster Recovery (DR)	Disaster Recovery (DR)	-	501

**Table 1-2** Error code Type

Errorcode Type ID	Errorcode Type Description
01	Memory error (out of memory, memory unavailable, memory overflow, etc.)
02	Disk Error

Errorcode Type ID	Errorcode Type Description
03	Network error (connection setup failure, access denied, etc.)
04	File error (file not found, file size error, file format error, file reading failure, file writing failure, file damage, etc.)
05	Connection error (connection does not exist, connection failed, connection unavailable, connected platform error, etc.)
06	Protocol error.
10	Grammatical errors. (unsupported syntax, object not found, etc.)
11	Parameter exception (parameter exception in the SQL statement, including function parameter exception, expression parameter exception, table creation statement parameter exception, and parameter out-of-bounds exception)
12	Data error (data not found, invalid data (divided by zero), etc.)
13	Data type errors (type mismatch, data type issues (out of bounds, etc.))
14	Operation error (unsupported operation)
15	Incorrect permission (illegal user, incorrect user password, or unauthorized user)
17	Undefined object error
18	Invalid object error. (various object types such as database, schema, table, and function)
20	Internal error (exception scenario, related to debugging)
21	Unsupported Features
22	Locking errors (related to lock timeout, deadlock, and lock conflict)
24	SPI interface (The SPI interface fails to be executed.)

# 2 Row-column store

---

## 2.1 Row-store

### GS\_101020000

errmsg:could not write block %u in file %s: wrote only %d of %d bytes.

errhint: Check free disk space.

level:ERROR

### GS\_101040040

errmsg:could not extend file %s: %m

errhint: Check free disk space.

level:ERROR

### GS\_101040041

errmsg:could not extend file %s: wrote only %d of %d bytes at block %u.

errhint: Check free disk space.

level:ERROR

### GS\_101120151

errmsg:data type %s has no default operator class for access method %s.

errhint: You must specify an operator class for the index or define a default operator class for the data type.

level:ERROR

### GS\_101120154

errmsg:Table with OID \%u\ doesn't exist.

errhint: Please don't drop table when the operation of REINDEX DATABASE is executed.

level:LOG

### **GS\_101120203**

errmsg:no collation was derived for column %s with collatable type %s.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

### **GS\_101120274**

errmsg:invalid fork name.

errhint:alid fork names are \main\.

level:ERROR

### **GS\_101130074**

errmsg:column %s is of type %s but default expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

### **GS\_101130105**

errmsg:Tuple does not match the descriptor.

errhint: The data received from the network is incorrect.

level:ERROR

### **GS\_101140135**

errmsg:partitioned table does not support global index.

errhint: please set behavior\_compat\_options = 'create\_partition\_local\_index'to create local index by default.

level:ERROR

### **GS\_101140224**

errmsg:'could not stat file %s: %m'

errhint: I/O Error.

level:ERROR

### **GS\_101140235**

errmsg:cannot truncate a table referenced in a foreign key constraint.

errdetail: Table %s references %s.

errhint: Ensure that the current table to be truncated is not referenced by another table. If it is, delete both of them.

level:ERROR

### **GS\_101180046**

errmsg:type %s already exists.

errhint: A relation has an associated type of the same name.

level:ERROR

### **GS\_101200911**

errmsg:If we can not reuse the index.

errhint: Please reindex the index.

level:warning\_errlevel()

### **GS\_101200912**

errmsg:could not determine which collation to use for index expression.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

### **GS\_101201807**

errmsg:The 'DISTRIBUTE BY' clause is not specified. Using %s by default.

errhint: Please use 'DISTRIBUTE BY' clause to specify suitable data distribution column.

level:NOTICE

## **2.2 Column-store**

### **GS\_102040184**

errmsg:CU partial write.

errhint: CU file will be not page aligned and Check free disk space..

level:ERROR

### **GS\_102040186**

errmsg:could not extend file %s.

errhint: Check free disk space.

level:ERROR

### **GS\_102040189**

errmsg:some data are read from %s.  
errdetail: maybe CU file is not page aligned.  
errhint: maybe you should upgrade cstore data files first.  
level:ERROR

### **GS\_102140349**

errmsg:%s command cannot affect row a second time.  
errhint: Ensure that no rows proposed for insertion within the same command have duplicate constrained values.  
level:ERROR

### **GS\_102201426**

errmsg:Snapshot too old.  
errhint: This is a safe error report.  
level:ERROR

### **GS\_102202047**

errmsg:cannot use serializable mode in a hot standby.  
errhint: You can use `\SET default_transaction_isolation = 'repeatable read'` to change the default.  
level:ERROR

## **2.3 GIN Index**

### **GS\_104010009**

errmsg:posting list is too long.  
errhint: Reduce maintenance\_work\_mem.  
level:ERROR

### **GS\_104200059**

errmsg:recovery is in progress.  
errhint: GIN pending list cannot be cleaned up during recovery.  
level:ERROR

### **GS\_104200070**

errmsg:old GIN indexes do not support whole-index scans nor searches for nulls.

errhint: To fix this, do REINDEX INDEX "%s".

level:ERROR

## 2.4 Btree Index

### GS\_105120280

errmsg:index row size %lu exceeds maximum %lu for index %s.

errhint:alues larger than 1/3 of a buffer page cannot be indexed. Consider a function index of an MD5 hash of the value.

level:ERROR

### GS\_105120286

errmsg:index %s contains unexpected zero page at block %u%s.

errhint: Please REINDEX it.

level:ERROR

### GS\_105120287

errmsg:index %s contains corrupted page at block %u.

errhint: Please REINDEX it.

level:ERROR

### GS\_105120300

errmsg:index row size %lu exceeds maximum %lu for index %s.

errhint:alues larger than 1/3 of a buffer page cannot be indexed. Consider a function index of an MD5 hash of the value.

level:ERROR

### GS\_105140263

errmsg:failed to re-find tuple within index %s.

errhint: This may be because of a non-immutable index expression.

level:ERROR

## 2.5 Row-store Vacuum

### GS\_106200230

errmsg:autovacuum not started because of misconfiguration.

errhint: Enable the 'track\_counts' option.

level:WARNING

## 2.6 SP-GiST Index

### GS\_109120256

errmsg:index row size %lu exceeds maximum %lu for index %s.

errhint:alues larger than a buffer page cannot be indexed.

level:ERROR

### GS\_109120267

errmsg:SP-GiST inner tuple size %lu exceeds maximum %lu.

errhint:alues larger than a buffer page cannot be indexed.

level:ERROR

### GS\_109202302

errmsg:index %s contains an inner tuple marked as invalid.

errdetail: This is caused by an incomplete page split at crash recovery before upgrading to PostgreSQL 9.1.

errhint: Please REINDEX it.

level:LOG

### GS\_109202324

errmsg:picksplit method for column %d of index %s failed.

errhint: The index is not optimal. To optimize it, Optimize the index according to the index selection principles.

level:DEBUG1

### GS\_109202328

errmsg:index %s contains unexpected zero page at block %u.

errhint: Please REINDEX it.

level:ERROR

### GS\_109202660

errmsg:column %s contains null values.

errdetail: existing data violate the NOT NULL constraint of new column.

errhint: define DEFAULT constraint also.

level:ERROR



## 2.7 Hash Index

### GS\_110202338

errmsg:index row size %lu exceeds hash maximum %lu.

errhint:alues larger than a buffer page cannot be indexed,please modify index row size.

level:ERROR

### GS\_110202352

errmsg:index %s has wrong hash version.

errhint: Please REINDEX it.

level:ERROR

# 3 Transaction

---

## 3.1 Lock

### GS\_111010010

errmsg:out of shared memory.

errhint: You might need to increase max\_locks\_per\_transaction.

level:ERROR

### GS\_111010139

errmsg:memory for serializable conflict tracking is nearly exhausted.

errhint: There might be an idle transaction or a forgotten prepared transaction causing this.

level:WARNING

### GS\_111010156

errmsg:out of shared memory.

errhint: You might need to increase max\_pred\_locks\_per\_transaction.

level:ERROR

### GS\_111140038

errmsg:It is not supported to use function 'PGXC\_GET\_LOCK\_CONFLICTS' in distributed query.

errhint: Please use simple query without joining with distributed table.

level:ERROR

### GS\_111200529

errmsg:could not serialize access due to read/write dependencies among transactions.

errdetail\_internal: Reason code: Canceled on identification as a pivot.

errhint: The transaction might succeed if retried.

level:ERROR

### GS\_111200530

errmsg:not enough elements in RWConflictPool to record a potential read/write conflict.

errhint: You might need to run fewer transactions at a time or increase max\_connections.

level:ERROR

### GS\_111200540

errmsg:not enough elements in RWConflictPool to record a read/write conflict.

errhint: You might need to run fewer transactions at a time or increase max\_connections.

level:ERROR

### GS\_111202666

errmsg:could not serialize access due to read/write dependencies among transactions.

errhint:The transaction might succeed if retried.

level:ERROR

### GS\_111202680

errmsg:invalid fork name.

errhint:alid fork names are \main\.

level:ERROR

### GS\_111220022

errmsg:deadlock detected.

errdetail\_internal: '%s'

errdetail\_log: '%s'

errhint: See server log for query details.

level:ERROR

## GS\_111220048

errmsg:cannot acquire lock mode %s on database objects while recovery is in progress.

errhint: Only RowExclusiveLock or less can be acquired on database objects during recovery.

level:ERROR

## 3.2 GTM

### GS\_112030049

errmsg:could not bind %s socket: %s

errhint: Is another postmaster already running on port %d? If not, wait a few seconds and retry.

level:LOG

### GS\_112040696

errmsg:data directory %s has wrong ownership.

errhint: The server must be started by the user that owns the data directory.

level:FATAL

### GS\_112040704

errmsg:could not remove old lock file %s: %s.

errhint: The file seems accidentally left over.

level:FATAL

### GS\_112150010

errmsg:permission denied to finish prepared transaction.

errhint: Must be system admin or the user that prepared the transaction.

level:ERROR

### GS\_112150011

errmsg:prepared transaction belongs to another database.

errhint: Connect to the database where the transaction was prepared to finish it.

level:ERROR

### GS\_112201175

errmsg:prepared transactions are disabled.

errhint: Set max\_prepared\_transactions to a nonzero value.

level:ERROR

### **GS\_112201502**

errmsg:expecting a startup message.

errhint: Check if it is a right connection to gtm.

level:ERROR

### **GS\_112201529**

errmsg:semctl(%d, %d, SETVAL, %d) failed: %s.

errhint: You possibly need to raise your kernel's SEMVMX value to be at least %d.

Look into the PostgreSQL documentation for details.

level:FATAL

## **3.3 xlog**

### **GS\_113040326**

errmsg:syntax error in history file: %s.

errhint: Expected a numeric timeline ID.

level:FATAL

### **GS\_113040327**

errmsg:invalid data in history file: %s.

errhint: Timeline IDs must be in increasing sequence.

level:FATAL

### **GS\_113040328**

errmsg:invalid data in history file %s.

errhint: Timeline IDs must be less than child timeline's ID.

level:FATAL

### **GS\_113040337**

errmsg:recovery command file %s specified neither primary\_conninfo nor restore\_command.

errhint: The database server will regularly poll the pg\_xlog subdirectory to check for files placed there.

level:WARNING

### **GS\_113120083**

errmsg:could not reset replication slot at the end of recovery.  
errhint: Delete replication slot or increase max\_replication\_slots.  
level:WARNING

### **GS\_113120111**

errmsg:Could not locate required checkpoint record.  
errhint: If you are not restoring from a backup, try removing the file "%s/  
backup\_label".  
level:FATAL

### **GS\_113120112**

errmsg:could not find redo location referenced by checkpoint record.  
errhint: If you are not restoring from a backup, try removing the file "%s/  
backup\_label".  
level:FATAL

### **GS\_113120168**

errmsg:invalid replication slot recptr.  
errhint: Check slot configuration or setup standby/secondary.  
level:WARNING

### **GS\_113120188**

errmsg:WAL generated with full\_page\_writes=off was replayed since last  
restartpoint.  
errhint: This means that the backup being taken on the standby is corrupt and  
should not be used. Enable full\_page\_writes and run CHECKPOINT on the master.  
level:ERROR

### **GS\_113120190**

errmsg:the standby was promoted during online backup.  
errhint: This means that the backup being taken is corrupt and should not be  
used. Try taking another online backup.  
level:ERROR

### **GS\_113120191**

errmsg:WAL generated with full\_page\_writes=off was replayed during online  
backup.

errhint: This means that the backup being taken on the standby is corrupt and should not be used. Enable full\_page\_writes and run CHECKPOINT on the master.

level:ERROR

### **GS\_113120192**

errmsg:pg\_stop\_backup still waiting for all required WAL segments to be archived (%d seconds elapsed).

errhint: Check that your archive\_command is executing properly. pg\_stop\_backup can be canceled safely.

level:WARNING

### **GS\_113140042**

errmsg:recovery is in progress.

errhint: This xlog function cannot be executed during recovery.WAL control functions cannot be executed during recovery.Recovery control functions can only be executed during recovery.Cannot make new WAL entries during recovery.Roach backup cannot be executed during recovery.

level:ERROR

### **GS\_113140188**

errmsg:a backup is already in progress.

errhint: If you're sure there is no backup in progress.

level:ERROR

### **GS\_113150041**

errmsg:WAL level not sufficient for making an online roach backup.

errhint: wal\_level must be set to archive.

level:ERROR

### **GS\_113200318**

errmsg:WAL level not sufficient for creating a restore point.

errhint: wal\_level must be set to \archive\ or \hot\_standby\ at server start.

level:ERROR

### **GS\_113200827**

errmsg:backup\_label contains data inconsistent with control file.

errhint: This means that the backup is corrupted and you will have to use another backup for recovery.

level:FATAL

## GS\_113200862

errmsg:WAL ends before end of online backup.

errhint: All WAL generated while online backup was taken must be available at recovery.

level:FATAL

## GS\_113201237

errmsg:database files are incompatible with server.

errhint: This could be a problem of mismatched byte ordering. It looks like you need to gs\_initdb.

level:FATAL

## GS\_113201249

errmsg:database files are incompatible with server.

errdetail: The database cluster was initialized without HAVE\_INT64\_TIMESTAMP but the server was compiled with HAVE\_INT64\_TIMESTAMP.

errhint: It looks like you need to recompile or gs\_initdb.

level:FATAL

## GS\_113201258

errmsg:database system was interrupted while in recovery at %s.

errhint: This probably means that some data is corrupted and you will have to use the last backup for recovery.

level:LOG

## GS\_113201259

errmsg:database system was interrupted while in recovery at log time %s.

errhint: If this has occurred more than once some data might be corrupted and you might need to choose an earlier recovery target.

level:LOG

## GS\_113201322

errmsg:hot standby is not possible because %s = %d is a lower setting than on the master server (its value was %d).

errhint: You might need to increase the value of %s.

level:ERROR



### GS\_113201323

errmsg:WAL was generated with wal\_level=minimal.

errhint: This happens if you temporarily set wal\_level=minimal without taking a new base backup.

level:WARNING

### GS\_113201324

errmsg:hot standby is not possible because wal\_level was not set to \hot\_standby\ or higher on the master server.

errhint: Either set wal\_level to \hot\_standby\ on the master.

level:ERROR

### GS\_113201383

errmsg:recovery is in progress.

errhint: WAL control functions cannot be executed during recovery.

level:ERROR

## 3.4 Checkpoint

### GS\_117140292

errmsg:checkpoint request failed.

errhint: Consult recent messages in the server log for details.

level:ERROR

### GS\_117201920

errmsg:checkpoints are occurring too frequently (%d seconds apart).

errhint: Consider increasing the configuration parameter \checkpoint\_segments\.

level:LOG

# 4 HA

---

## 4.1 Data page Replication

### GS\_121030084

errmsg:invalid message header.

errhint: You might need to restart the instance.

level:PANIC

### GS\_121201135

errmsg:no replication connection config information.

errhint: please check your configuration in postgresql.conf.

level:ERROR

## 4.2 Log Replication

### GS\_122030004

errmsg:replconninfo1 or replconninfo2 not configured.

errhint: please check your configuration in postgresql.conf.

level:FATAL

## 4.3 Replication Slot

### GS\_125110230

errmsg:replication slot name %s contains invalid character.

errhint: Replication slot names may only contain letters.

level:level

### **GS\_125110254**

errmsg:all replication slots are in use.

errhint: Free one or increase max\_replication\_slots.

level:ERROR

### **GS\_125140300**

errmsg:recovery is in progress.

errhint: roach backup cannot be executed during recovery.

level:ERROR

### **GS\_125200816**

errmsg:too many replication slots active before shutdown.

errhint: Increase max\_replication\_slots and try again.

level:PANIC

# 5 SQL on Anywhere

---

## 5.1 SQL on Hudi

### GS\_133110664

errmsg:invalid value for option '%s%s.%s%s'.

errhint:alid values are %s.

level:ERROR

## 5.2 OBS / HDFS / DLI

### GS\_138110058

errmsg:Invalid option %s.

errhint:alid options in this context are: %s.

level:ERROR

### GS\_138110072

errmsg:Need type option for the server.

errhint:alid options in this context are: %s.

level:ERROR

### GS\_138110073

errmsg:Invalid option %s.

errhint:alid options in this context are \r\b\.

level:ERROR

### **GS\_138110087**

errmsg:too many partitions for dfs write-only foreign table.

errhint: Number of dfs write-only foreign table partitions can not be more than %d.

level:ERROR

### **GS\_138150047**

errmsg:permission denied to change owner of foreign-data wrapper %s.

errhint: Must be system admin to change owner of a foreign-data wrapper.

level:ERROR

### **GS\_138150049**

errmsg:permission denied to create foreign-data wrapper %s.

errhint: Must be system admin to create a foreign-data wrapper.

level:ERROR

# 6 GDS/Copy

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## 6.1 Common mechanisms

### GS\_141030101

errmsg:Unexpected EOF on GDS connection %s: %m.

errhint: An error occurs while the database exchanges data with GDS.The peer GDS may run in safety mode with SSL certification.Ensure that the network connection between GDS and DNs, network environment, and the system ports of nodes are normal. Check the GDS WARNING and ERROR logs to identify the cause.

level:ERROR

### GS\_141030102

errmsg:The peer GDS has performed an orderly shutdown on current connection with error %s.

errhint: Please refer to GDS log for more details.

level:ERROR

### GS\_141201384

errmsg:Skewness occurs.

errhint: Please check data distribution or modify warning threshold.

level:WARNING

### GS\_141201739

errmsg:The above Read-Only foreign table is using FIXED mode without specifying 'fix' option.

errhint: Please use 'fix' option to specify expected fixed record length in order to parser the data file correctly.

level:WARNING

## 6.2 Importing

### GS\_142010105

errmsg:out of memory.

errhint: 1. Please ensure that the quotation marks in the CSV file are paired.

2. Please check whether the quote option is reasonable.

3. Check whether a single row of data exceeds 1GB. You can manually delete the line according to the actual situation.

level:ERROR

### GS\_142050163

errmsg:connection failure error.

errhint: 1. Check whether the GDS process crashes. 2. Check whether the GDS startup parameter -H is correct. 3. Check the GDS log for error information.

level:ERROR

### GS\_142120237

errmsg:literal carriage return found in data.

errhint: Use `\\r` to represent carriage return.

level:ERROR

### GS\_142120239

errmsg:literal newline found in data.

errhint: Use `\\` to represent newline.

level:ERROR

### GS\_142140307

errmsg:Don't support COPY FROM table with INSERT triggers.

errhint: You may need drop the INSERT trigger first.

level:ERROR

### GS\_142150045

errmsg:must be system admin to COPY to or from a file.

errhint: Anyone can COPY to stdout or from stdin. gsql's `\\copy` command also works for anyone.

level:ERROR

## **GS\_142201772**

errmsg: COPY to or from a file is prohibited for security concerns.

errhint: Anyone can COPY to stdout or from stdin. gsql's \\copy command also works for anyone.

level:ERROR



# 7 Parser

---

## 7.1 Lexical Analysis

### GS\_211110001

errmsg:unsafe use of \\' in a string literal.

errhint: Use " to write quotes in strings. \\' is insecure in client-only encodings.

level:ERROR

### GS\_211110003

errmsg:nonstandard use of \\' in a string literal.

errhint: Use " to write quotes in strings.

level:WARNING

### GS\_211110004

errmsg:nonstandard use of \\\ in a string literal.

errhint: Use the escape string syntax for backslashes.

level:WARNING

### GS\_211110005

errmsg:nonstandard use of escape in a string literal.

errhint: Use the escape string syntax for escapes.

level:WARNING

### GS\_211130002

errmsg:invalid Unicode escape.

errhint: Unicode escapes must be \\uXXXX or \\UXXXXXXXX.

level:ERROR

## 7.2 Grammatical Analysis

### GS\_212100030

errmsg:unrecognized row security option %s.

errhint: Only PERMISSIVE or RESTRICTIVE policies are supported currently.

level:ERROR

### GS\_212100035

errmsg:RECHECK is no longer required.

errhint: Update your data type.

level:NOTICE

### GS\_212100039

errmsg:missing argument.

errhint: Use NONE to denote the missing argument of a unary operator.

level:ERROR

### GS\_212100063

errmsg:JOIN expression is not allowed.

errhint: USING clause can only be a table or a subquery.

level:ERROR

### GS\_212100069

errmsg:VALUES in FROM must have an alias.

errhint: For example, FROM (VALUES ...) [AS] foo.

level:ERROR

### GS\_212100171

errmsg:INCLUDING PARTITION option cannot be specified when creating table with \PARTITION BY\ clause.

errhint: Use either INCLUDING PARTITION option or PARTITION BY clause.

level:ERROR

### **GS\_212100172**

errmsg:INCLUDING REOPTIONS option cannot be specified when creating table with.

errhint: Use either INCLUDING REOPTIONS option or \WITH\ clause.

level:ERROR

### **GS\_212100173**

errmsg:\INCLUDING DISTRIBUTION\ option cannot be specified when creating table with \DISTRIBUTE BY\ clause.

errhint: Use either \INCLUDING DISTRIBUTION\ option or \DISTRIBUTE BY\ clause.

level:ERROR

### **GS\_212100206**

errmsg:The view %s is invalid!

errhint: Please turn on GUC parameter \view\_independent\.

level:ERROR

### **GS\_212100812**

errmsg:%s can't outer join with more than one relation.

errhint: %s outer join with one relation.

level:ERROR

### **GS\_212100832**

errmsg:VALUES must not contain OLD or NEW references.

errhint: Use SELECT ... UNION ALL ... instead.

level:ERROR

### **GS\_212100867**

errmsg:Invalid column reference in the INSERT VALUES Clause.

errhint: You may have referenced target table's column.

level:ERROR

### **GS\_212100945**

errmsg:SET %s = rolename not yet supported.

errhint: Use SET %s rolename clauses.

level:ERROR

### **GS\_212100958**

errmsg:SET %s TO rolename not yet supported.

errhint: Use SET %s rolename clauses.

level:ERROR

### **GS\_212100960**

errhint: "%s", "%s"...are specified Operator "(+)" in one condition.

errmsg:Operator "(+)" can't be specified on more than one relation in one join condition.

level:ERROR

### **GS\_212100963**

errmsg:subquery in FROM cannot refer to other relations of same query level.

errhint: maybe alias conflicts with column of other relation.

level:ERROR

### **GS\_212100973**

errhint: Use an explicit ordering operator or modify the query.

errmsg:could not identify an ordering operator for type %s.

level:ERROR

### **GS\_212100977**

errmsg:recursive query %s column %d has collation %s in non-recursive term but collation %s overall.

errhint: Use the COLLATE clause to set the collation of the non-recursive term.

level:ERROR

### **GS\_212100984**

errmsg:recursive query %s column %d has type %s in non-recursive term but type %s overall.

errhint: Cast the output of the non-recursive term to the correct type.

level:ERROR

### **GS\_212100991**

errmsg:collation mismatch between implicit collations %s and %s.

errhint: You can choose the collation by applying the COLLATE clause to one or both expressions.

level:ERROR

## GS\_212101101

errmsg:INSERT has more target columns than expressions.

errhint: The insertion source is a row expression containing the same number of columns expected by the INSERT. Did you accidentally use extra parentheses?

level:ERROR

## GS\_212101106

errmsg:Unsupport view independent feature.

errhint: Please turn on GUC parameter \view\_independent\.

level:ERROR

## GS\_212110010

errmsg:operator %s is not a valid ordering operator.

errhint: Ordering operators must be \<\ or \>\ members of btree operator families.

level:ERROR

## GS\_212120795

errmsg:array assignment requires type %s but expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

## GS\_212120801

errmsg:operator is not unique: %s.

errhint: Could not choose a best candidate operator. You might need to add explicit type casts.

level:ERROR

## 7.3 DDL

### GS\_213100016

errmsg:column %s cannot be cast automatically to type %s.

errhint: Specify a USING expression to perform the conversion.

level:ERROR

### GS\_213100046

errmsg:%s is an exclude index.

errhint: Partitioned table does not support EXCLUDE index.

level:ERROR

### **GS\_213100047**

errmsg:%s is an deferrable index.

errhint: Partitioned table does not support deferrable index.

level:ERROR

### **GS\_213100048**

errmsg:index %s is not valid.

errhint: Cannot change table with invalid index.

level:ERROR

### **GS\_213100054**

errmsg:partition not support to specify TABLESPACE.

errhint: Cold data partition of multi-temperature table or OBS partition not support to split partition specify tablespace.

level:ERROR

### **GS\_213100059**

errmsg:cannot add partition since table %s already has %d boundaries.

errhint: the number of boundaries cannot be greater than %d.

level:ERROR

### **GS\_213100060**

errmsg:cannot add partition since partition %s has too many boundaries.

errhint: the number of boundaries cannot be greater than %d.

level:ERROR

### **GS\_213100092**

errmsg:cannot set enable\_foreign\_table\_query\_rewrite = false when materialized view enable query rewrite.

errhint: alter materialized view disable query rewrite firstly.

level:ERROR

### **GS\_213100100**

errmsg:language %s does not exist.

errhint: Use CREATE LANGUAGE to load the language into the database.

level:ERROR

### **GS\_213100108**

errmsg:%s is an aggregate function.

errhint: Use ALTER AGGREGATE to rename aggregate functions.

level:ERROR

### **GS\_213100131**

errmsg:%s is a table's row type.

errhint: Use ALTER TABLE instead.

level:ERROR

### **GS\_213100164**

errmsg:unsupported language %s.

errhint: The supported languages are listed in the pg\_pltemplate system catalog.

level:ERROR

### **GS\_213100178**

errmsg:unsupported drop schema %s which has created volatile temp tables in other session.

errhint: please find the session created schema %s.

level:ERROR

### **GS\_213100179**

errmsg:could not determine which collation to use for view column %s.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

### **GS\_213100201**

errmsg:partition not support to specify TABLESPACE.

errhint: Cold data partition of multi-temperature table or OBS partition not support to split partition specify tablespace.

level:ERROR

### **GS\_213100335**

errmsg:%s is an aggregate function.

errhint: Use ALTER AGGREGATE to change owner of aggregate functions.

level:ERROR

### **GS\_213110017**

errmsg:option %s not recognized.

errhint:alid options are: dsn.

level:ERROR

### **GS\_213110027**

errmsg:LOCATION is not supported anymore.

errhint: Consider using tablespaces instead.

level:WARNING

### **GS\_213110068**

errmsg:%s is an aggregate function.

errhint: Use DROP AGGREGATE to drop aggregate functions.

level:ERROR

### **GS\_213110096**

errmsg:split point doesn't match partition key.

errhint: the number of split points should be equal to the number of partition keys.

level:ERROR

### **GS\_213110100**

errmsg:the number of boundaries cannot be greater than %d.

errhint: there are already %d boundaries.

level:ERROR

### **GS\_213130080**

errmsg:default value cannot reference to a column.

errhint: Perhaps the default value is enclosed in double quotes.

level:ERROR

### **GS\_213130085**

errmsg:cannot change owner of index %s.

errhint: Change the ownership of the index's table using 'GRANT'.

level:WARNING



### **GS\_213130086**

errmsg:%s is a composite type.  
errhint: Use ALTER TYPE instead.  
level:ERROR

### **GS\_213130120**

errmsg:%s is a composite type.  
errhint: Use ALTER TYPE instead.  
level:ERROR

### **GS\_213140026**

errmsg:too many partitions for partitioned table.  
errhint: Number of partitions can not be more than %d.  
level:ERROR

### **GS\_213140035**

errmsg:cannot alter array type %s.  
errhint: You can alter type %s.  
level:ERROR

### **GS\_213140051**

errmsg:some relations of database %s are already in tablespace %s.  
errhint: You must move them back to the database's default tablespace before using this command.  
level:ERROR

### **GS\_213140060**

errmsg:Modifying cross-database private object is not supported.  
errhint: please switch to %s and run this command.  
level:ERROR

### **GS\_213140082**

errmsg:Too many partition keys for partitioned table.  
errhint: Partittion keys can not be more than %d.  
level:ERROR

### **GS\_213140089**

errmsg:no boundary is reserved for partition %s.  
errhint: List partition must contain at least 1 boundary.  
level:ERROR

### **GS\_213140116**

errmsg:cannot alter type %s because it is the type of a typed table.  
errhint: Use ALTER ... CASCADE to alter the typed tables too.  
level:ERROR

### **GS\_213140143**

errmsg:cannot execute %s in a read-only transaction.  
errhint: To clear the disk space.  
level:ERROR

### **GS\_213150009**

errmsg:Permission denied when creating data source %s.  
errhint: Must be system admin to create a data source.  
level:ERROR

### **GS\_213150010**

errmsg:Permission denied when changing owner of data source %s.  
errhint: Must be system admin to change owner of a data source.  
level:ERROR

### **GS\_213150011**

errmsg:Permission denied when changing owner of data source %s.  
errhint: The owner of a data source must be a system admin.  
level:ERROR

### **GS\_213150017**

errmsg:Permission denied when creating directory %s.  
errhint: must be superuser to create a directory.  
level:ERROR

### **GS\_213150018**

errmsg:Permission denied when dropping directory %s.

errhint: must be superuser to drop a directory.

level:ERROR

### **GS\_213150019**

errmsg:Permission denied when changing owner of directory.

errhint: new owner must be superuser to alter a directory.

level:ERROR

### **GS\_213150022**

errmsg:permission denied to create extension %s.

errhint: Must be system admin to create this extension.

level:ERROR

### **GS\_213150023**

errmsg:permission denied to update extension %s.

errhint: Must be system admin to update this extension.

level:ERROR

### **GS\_213180038**

errmsg:It is unsupported to rename database %s.

errhint: the database may be on DFS tablespace %s or has multi-temperature tables.

level:ERROR

### **GS\_213180079**

errmsg:PARTIAL\_CLUSTER\_ROWS cannot be less than MAX\_BATCHROW.

errdetail: PARTIAL\_CLUSTER\_ROWS must be greater than or equal to MAX\_BATCHROW.

errhint: PARTIAL\_CLUSTER\_ROWS is MAX\_BATCHROW multiplied by an integer.

level:ERROR

### **GS\_213180083**

errmsg:can't merge partition because partition %s has unusable local index.

errhint: please reindex the unusable index first.

level:ERROR

## GS\_213180126

errmsg:column %s inherits conflicting default values.

errhint: To resolve the conflict, please use a value that matches the default value.

level:ERROR

## GS\_213200015

errmsg:materialized view contains foreign table %s is suggested to set ENABLE QUERY REWRITE when enable\_foreign\_table\_query\_rewrite = true.

errhint: ALTER MATERIALIZED VIEW matview\_name ENABLE QUERY REWRITE.

level:NOTICE

# 7.4 DML

## GS\_214110010

errmsg:too many partitions for partitioned table.

errhint: Number of partitions can not be more than %d.

level:ERROR

## GS\_214110025

errmsg:invalid reference to FROM-clause entry for table %s.

errhint: Perhaps you meant to reference the table alias %s.

level:ERROR

## GS\_214110026

errmsg:Operator (+) can't specify on "%s" which cannot be referenced from this part of the query.

errhint: %s should be in current query level.

level:ERROR

## GS\_214110032

errmsg:VALUES must not contain OLD or NEW references.

errhint: Use SELECT ... UNION ALL ... instead.

level:ERROR

## GS\_214110049

errmsg:invalid UNION/INTERSECT/EXCEPT ORDER BY clause.

errdetail: Only result column names can be used.

errhint: Add the expression/function to every SELECT.

level:ERROR

### **GS\_214110055**

errmsg:column %s is of type %s but expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

### **GS\_214110059**

errmsg:array assignment to %s requires type %s but expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

### **GS\_214110060**

errmsg:subfield %s is of type %s but expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

### **GS\_214110092**

errmsg:INSERT ON DUPLICATE KEY UPDATE don't allow update on table without primary key or unique constraint.

errhint: Please use INSERT INTO statement without ON DUPLICATE KEY UPDATE instead.

level:ERROR

### **GS\_214110096**

errmsg:ON CONFLICT DO UPDATE requires inference specification or constraint name.

errhint: For example,ON CONFLICT (column\_name).

level:ERROR

### **GS\_214110100**

errmsg:too many partitions for partitioned table.

errhint: Number of partitions cannot be more than %d.

level:ERROR

### **GS\_214110101**

errmsg:too many partitions after split partition %s.

errhint: number of partitions cannot be more than %d.

level:ERROR

## **GS\_214120002**

errmsg:START value of partition %s is smaller than START value of previous partition.

errhint: if exists only START value, use next partition's START value as current partition's END value.

level:ERROR

## **GS\_214120005**

errmsg:boundary values mismatch partitioning columns.

errhint: number of boundary value items should be equal to the number of partitioning columns.

level:ERROR

## **GS\_214120006**

errmsg:partitioned table has too many partition keys.

errhint: start/end syntax requires a partitioned table with only one partition key.

level:ERROR

## **GS\_214120007**

errmsg:number of start value items in partition %s is more than one.

errhint: must be single start value for start/end partition definition.

level:ERROR

## **GS\_214120011**

errmsg:EVERY value of partition %s is not a positive value.

errhint: Possibly caused by the conversion to the partitionkey's datatype.

level:ERROR

## **GS\_214120018**

errmsg:START value of partition %s is not equal %s.

errhint: partition gap or overlapping is not allowed.

level:ERROR

### **GS\_214120019**

errmsg:START value of partition %s is not equal to the END value of previous partition %s.

errhint: partition gap or overlapping is not allowed.

level:ERROR

### **GS\_214120020**

errmsg:END value of partition %s is maxvalue.

errhint: partitions cannot be defined after maxval.

level:ERROR

### **GS\_214120021**

errmsg:END value of partition %s is not bigger than the END value of previous partition %s.

errhint: partition boundary value overlapping is not allowed.

level:ERROR

### **GS\_214120024**

errmsg:too many partitions after split partition %s.

errhint: number of partitions can not be more than %d.

level:ERROR

### **GS\_214120032**

errmsg:could not determine which collation to use for bound expression of %s.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

### **GS\_214120033**

errmsg:could not determine which collation to use for bound expression of %s.

errhint: the collation of bound expression must be equal to the collation of partitioning column.

level:ERROR

### **GS\_214120035**

errmsg:START value of partition %s is not equal to %s.

errhint: partition gap or overlapping is not allowed.

level:ERROR

### **GS\_214120037**

errmsg:START value of partition %s is not equal to the END value of previous partition %s.

errhint: partition gap or overlapping is not allowed.

level:ERROR

### **GS\_214180006**

errmsg:relation %s does not exist.

errdetail: There is a WITH item named %s.

errhint: Use WITH RECURSIVE.

level:ERROR

### **GS\_214180007**

errmsg:relation %s does not exist on DN %s.

errhint: maybe DN restarted, please retry.

level:ERROR

## **7.5 Expressions**

### **GS\_215100033**

errmsg:could not determine interpretation of row comparison operator %s.

errhint: Row comparison operators must be associated with btree operator families.

level:ERROR

### **GS\_215130026**

errmsg:cannot determine type of empty array.

errhint: Explicitly cast to the desired type.

level:ERROR

### **GS\_215180009**

errmsg:function %s does not exist.

errhint: No function matches the given name and argument types. You might need to add explicit type casts.

level:ERROR



## GS\_215180016

errmsg:function %s is not unique.

errhint: Could not choose a best candidate function. You might need to add explicit type casts.

level:ERROR

## 7.6 Metadata

### GS\_216040005

errmsg:Library file %s does not exist.

errdetail: Source library file may be rollback-deleted or copy fail failed.

errhint: Try Re-Submit CREATE FUNCTION.

level:ERROR

### GS\_216040014

errmsg:pre-existing shared memory block (key %lu, ID %lu) is still in use

errhint: If you're sure there are no old server processes still running, remove the shared memory block or just delete the file "%s".

level:FATAL

### GS\_216110053

errmsg:cannot change name of input parameter %s.

errhint: The type of input parameter cannot be changed during function creation.Check whether the function parameter is changed and drop the existing function using DROP FUNCTION.

level:ERROR

### GS\_216110071

errmsg:date out of range.

errhint: The value range of DATE is from January 1.

level:ERROR

### GS\_216110073

errmsg:timestamp out of range.

errhint: The value range of TIMESTAMP is from January 1.

level:ERROR

### **GS\_216110103**

errmsg:invalid range bound flags.

errhint:alid values are \[\]\.

level:ERROR

### **GS\_216110140**

errmsg:time out of range.

errhint: The value of the time type ranges from 00:00:00 to 24:00:00.

level:ERROR

### **GS\_216110192**

errmsg:timestamp out of range.

errhint: The value range of TIMESTAMP is from January 1.

level:ERROR

### **GS\_216110195**

errmsg:%s out of range.

errhint: Analyze statements to determine whether data type exceeds the range. Alternatively, convert the type to the numeric type.

level:ERROR

### **GS\_216110197**

errmsg:%s is not a valid data directory.

errdetail: File %s does not contain valid data.

errhint: You might need to initdb.

level:FATAL

### **GS\_216110200**

errmsg:The view %s is invalid!

errhint: Use ALTER VIEW ... REBUILD to make the view valid again.

level:ERROR

### **GS\_216110203**

errmsg:cannot drop %s because %s requires it.

errhint: You can drop %s instead.

level:ERROR

## **GS\_216110212**

errmsg:cannot drop desired object(s) because other objects depend on them.

errhint: Use DROP ... CASCADE to drop the dependent objects too.

level:ERROR

## **GS\_216180051**

errmsg:cannot change return type of existing function.

errhint: The return type of the existing function cannot be changed.Change the return type of the new function or drop the existing function using DROP FUNCTION.

level:ERROR

## **GS\_216200081**

errmsg:could not determine which collation to use for string %s.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

## **GS\_216200083**

errmsg:The reltuples in pg\_class is equal to zero.

errhint: Do analyze for the current database first.

level:WARNING

# 8 Optimizer

---

## 8.1 Rewriting Queries

### GS\_221100010

errmsg:column %s is of type %s but default expression is of type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

### GS\_221100016

errmsg:cannot perform INSERT RETURNING on relation %s.

errhint: You need an unconditional ON INSERT DO INSTEAD rule with a RETURNING clause.

level:ERROR

### GS\_221100017

errmsg:cannot perform UPDATE RETURNING on relation %s.

errhint: You need an unconditional ON UPDATE DO INSTEAD rule with a RETURNING clause.

level:ERROR

### GS\_221100018

errmsg:cannot perform DELETE RETURNING on relation %s.

errhint: You need an unconditional ON DELETE DO INSTEAD rule with a RETURNING clause.

level:ERROR

### **GS\_221100021**

errmsg:no collation was derived for column %s with collatable type %s.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

### **GS\_221100050**

errmsg:rule actions on OLD are not implemented.

errhint: Use views or triggers instead.

level:ERROR

### **GS\_221100051**

errmsg:rule actions on NEW are not implemented.

errhint: Use triggers instead.

level:ERROR

### **GS\_221100052**

errmsg:INSTEAD NOTHING rules on SELECT are not implemented.

errhint: Use views instead.

level:ERROR

### **GS\_221100062**

errmsg:cannot perform INSERT RETURNING on relation %s.

errhint: You need an unconditional ON INSERT DO INSTEAD rule with a RETURNING clause.

level:ERROR

### **GS\_221100063**

errmsg:cannot perform UPDATE RETURNING on relation %s.

errhint: You need an unconditional ON UPDATE DO INSTEAD rule with a RETURNING clause.

level:ERROR

### **GS\_221100064**

errmsg:cannot perform DELETE RETURNING on relation %s.

errhint: You need an unconditional ON DELETE DO INSTEAD rule with a RETURNING clause.

level:ERROR

## GS\_221110004

errmsg:there are multiple rules named %s.

errhint: Specify a relation name as well as a rule name.

level:ERROR

## GS\_221180006

errmsg:could not convert table %s to a view because it has triggers.

errhint: In particular, the table cannot be involved in any foreign key relationships.

level:ERROR

## 8.2 Path Generation

### GS\_222100001

errmsg:could not determine which collation to use for ILIKE.

errhint: Use the COLLATE clause to set the collation explicitly.

level:ERROR

## 8.3 Plan generation

### GS\_223100005

errmsg:This SQL can not be executed because it can not be pushed down to datanode.

errhint: You need to modify this SQL and execute it.

level:ERROR

### GS\_223120009

errmsg:Fail to do UPDATE/DELETE.

errdetail: UPDATE/DELETE action cannot be shipped to datanode.

errhint: Proposed to rewrite query to remove unshippable factors or increase primary key constraint on %s.

level:ERROR

## 8.4 Analyze

### GS\_225120010

errmsg:No Datanode defined in cluster.

errhint: You need to define at least 1 Datanode with CREATE NODE.  
level:ERROR

### **GS\_225120023**

errmsg:Statistics in some tables or columns(%s) are not collected.  
errhint: Do analyze for them in order to generate optimized plan.  
evel: level

### **GS\_225120024**

errmsg:Statistics in some obs foreign tables(%s) are not collected.  
errhint: Do set totalrows option for them in order to generate optimized plan.  
level:level

### **GS\_225200001**

errmsg:The tupleDesc analyzed in CN is different from which received from DN.  
errhint: Do analyze again for the relation.  
level:ERROR

### **GS\_225200020**

errmsg:The tupleDesc analyzed on %s is different from tupleDesc which temp table created.  
errhint: Do analyze again for the relation: %s.  
level:LOG

## **8.5 utile Interface**

### **GS\_226100023**

errmsg:could not determine which collation to use for %s function.  
errhint: Use the COLLATE clause to set the collation explicitly.  
level:ERROR

### **GS\_226100025**

errmsg:invalid combination of date conventions.  
errhint: Do not mix Gregorian and ISO week date conventions in a formatting template.  
level:ERROR

### **GS\_226100032**

errmsg:hour \%d\ is invalid for the 12-hour clock.

errhint: Use the 24-hour clock.

level:ERROR

### **GS\_226120015**

errmsg:invalid format specification for an interval value.

errhint: Intervals are not tied to specific calendar dates.

level:ERROR

### **GS\_226120036**

errmsg:cached plan must not change result type.

errhint: Please restore the result type.

level:ERROR

### **GS\_226200015**

errmsg:temp relation is invalid because of cluster resizing.

errhint: try \DROP SCHEMA if exists %s.

level:ERROR



# 9 Actuator

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## 9.1 Row Execution Engine

### GS\_231100066

errmsg:not-in hashjoin optimization doesn't support row-engine.  
errhint: Don't include 'notinopt' option in rewrite\_rule setting.  
level:ERROR

### GS\_231100068

errmsg:RIGHT JOIN is only supported with merge-joinable join conditions.  
errhint: Try other join methods like nestloop or hashjoin.  
level:ERROR

### GS\_231100069

errmsg:FULL JOIN is only supported with merge-joinable join conditions.  
errhint: Try other join methods like nestloop or hashjoin.  
level:ERROR

### GS\_231140004

errmsg:%s command cannot affect row a second time.  
errhint: Ensure that no rows proposed for insertion within the same command have duplicate constrained values.  
level:ERROR

### GS\_231140071

errmsg:abort transaction due to concurrent update %s %u.

errhint: Try to turn on GUC allow\_concurrent\_tuple\_update if concurrent update is expected.

level:ERROR

### **GS\_231180005**

errmsg:cannot insert into view %s.

errhint: You need an unconditional ON INSERT DO INSTEAD rule or an INSTEAD OF INSERT trigger.

level:ERROR

### **GS\_231180006**

errmsg:cannot update view %s.

errhint: You need an unconditional ON UPDATE DO INSTEAD rule or an INSTEAD OF UPDATE trigger.

level:ERROR

### **GS\_231180007**

errmsg:cannot delete from view %s.

errhint: You need an unconditional ON DELETE DO INSTEAD rule or an INSTEAD OF DELETE trigger.

level:ERROR

### **GS\_231240003**

errmsg:transaction left non-empty SPI stack.

errhint: Check for missing \SPI\_finish\ calls.

level:WARNING

### **GS\_231240004**

errmsg:subtransaction left non-empty SPI stack.

errhint: Check for missing \SPI\_finish\ calls.

level:WARNING

### **GS\_231240027**

errmsg:%s is not allowed in a non-volatile function.

errhint: You can change function definition.

level:ERROR

## 9.2 Vectorized Execution Engine

### GS\_232010001

errmsg:[SonicHashJoin]: The memory of the current statement is not controlled.  
errhint: set hashjoin\_spill\_strategy to 0-2.  
level:ERROR

### GS\_232050001

errmsg:LZ4 decompress failed when deserializing message.  
errhint: The data received from the network is incorrect.  
level:ERROR

### GS\_232200033

errmsg:[VecHashJoin]: The memory of the current statement is not controlled.  
errhint: set hashjoin\_spill\_strategy to 0-2.  
level:ERROR

### GS\_232200037

errmsg:[%s(%d)] Warning: Partition %d[rows: outer %lu(%ldKB), inner %lu(%ldKB)], after %d times of repartition, data to be built hash table may be duplicated or too large. Build is %s.  
errhint: Try ANALYZE first to get better plan.  
level:LOG

## 9.3 Distributed Framework

### GS\_235100005

errmsg:Stream plan check failed. Execution datanodes list of stream node[%d] mismatch in parent node[%d].  
errhint: Please use EXPLAIN VERBOSE command to see more details.  
level:ERROR

### GS\_235110015

errmsg:Stream plan check failed. Query dop of stream node %d [dop: %d] mismatch in parent node %d [dop: %d].  
errhint: Please use EXPLAIN VERBOSE command to see more details.

level:ERROR

### **GS\_235120013**

errmsg:Invalid instance type option %s.

errhint:alid option is \all\coordinator\cn\datanode\dn\.

level:ERROR

### **GS\_235140022**

errmsg:Cursor can only scan forward.

errhint: Declare it with SCROLL option or the current plan is not supported%s.

level:ERROR

### **GS\_235180001**

errmsg:No Datanode defined in cluster.

errhint: You need to define at least 1 Datanode with CREATE NODE.

level:ERROR

### **GS\_235180005**

errmsg:No Datanode defined in cluster.

errhint: Need to define at least 1 Datanode with CREATE NODE.

level:ERROR

### **GS\_235200001**

errmsg:Skewness occurs.

errhint: Please check data distribution or modify warning threshold.

level:WARNING

# 10 Security

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## 10.1 Authorizes

### GS\_242110010

errmsg:Ignoring specified roles other than PUBLIC.

errhint: All roles are members of the PUBLIC role.

level:WARNING

### GS\_242120001

errmsg:unrecognized key word: %s.

errhint: ACL key word must be group or user.

level:ERROR

### GS\_242120002

errmsg:missing name.

errhint: A name must follow the group or user key word.

level:ERROR

### GS\_242150029

errmsg>Please carefully use independent user as it needs more self-management.

errhint: Self-management include logical backup.

level:WARNING

### GS\_242150105

errmsg:cannot set privileges of array types.

errhint: Set the privileges of the element type instead.

level:ERROR

### **GS\_242180039**

errmsg:language %s is not trusted.

errhint: Only system admin can use %s languages.

level:ERROR

### **GS\_242180101**

errmsg:dependent privileges exist.

errhint: Use CASCADE to revoke them too.

level:ERROR

### **GS\_242200037**

errmsg:Forbid to grant language c to user with grant option.

errhint: Only support grant language c to user.

level:ERROR

### **GS\_242200038**

errmsg:Forbid to grant language c to public.

errhint: Only support grant language c to specified users.

level:ERROR

### **GS\_242200057**

errmsg:Using encrypted password directly now and it is not recommended.

errhint: The role can't be used if you don't know the original password before encrypted.

level:NOTICE

## **10.2 Masking**

### **GS\_245140012**

errmsg:Redaction column %s cannot be referenced in equivalence conditions with const value.

errhint: Please use EXPLAIN command to see more details.

level:ERROR

# 11 Communications

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## 11.1 libpq

### GS\_251030014

errmsg:could not bind %s socket at the %d time: %m.

errhint: Is another postmaster already running on port %d? If not, remove socket file "%s" and retry.

level:LOG

### GS\_251030015

errmsg:sctp could not bind %s socket at the %d time: %m.

errhint: sctp Is another postmaster already running on port %d? If not, remove socket file "%s" and retry.

level:LOG

### GS\_251040069

errmsg:multiple values specified for connection type.

errcontext: line %d of configuration file %s.

errhint: Specify exactly one connection type per line.

level:LOG

### GS\_251040071

errmsg:hostssl requires SSL to be turned on.

errcontext: line %d of configuration file %s.

errhint: Set ssl = on in postgresql.conf.

level:LOG

## **GS\_251040072**

errmsg:hostssl is not supported by this build.  
errcontext: line %d of configuration file %s.  
errhint: Compile with --with-openssl to use SSL connections.  
level:LOG

## **GS\_251040077**

errmsg:multiple values specified for host address.  
errcontext: line %d of configuration file %s.  
errhint: Specify one address range per line.  
level:LOG

## **GS\_251040081**

errmsg:end-of-line before netmask specification.  
errcontext: line %d of configuration file %s.  
errhint: Specify an address range in CIDR notation.  
level:LOG

## **GS\_251040086**

errmsg:multiple values specified for authentication type.  
errcontext: line %d of configuration file %s.  
errhint: Specify exactly one authentication type per line.  
level:LOG

## **GS\_251040097**

errmsg:client certificates can only be checked if a root certificate store is available.  
errcontext: line %d of configuration file %s.  
errhint: Make sure the configuration parameter \ssl\_ca\_file\ is set.  
level:LOG

# **11.2 pooler**

## **GS\_252050041**

errmsg:It is not supported to use function 'PGXC\_POOL\_CONNECTION\_STATUS' in distributed query.  
errhint: Please use simple query without joining with distributed table.



level:ERROR

## 11.3 Communication Universal Interface

### GS\_255050005

errmsg:terminating connection because of crash of another server process.

errdetail: The postmaster has commanded this server process to roll back the current transaction and exit.

errhint: In a moment you should be able to reconnect to the database and repeat your command.

level:WARNING

### GS\_255050009

errmsg:terminating connection due to conflict with recovery.

errhint: In a moment you should be able to reconnect to the database and repeat your command.

level:FATAL

### GS\_255110049

errmsg:invalid command-line argument for server process: %s.

errhint: Try \%s --help\ for more information.

level:FATAL

### GS\_255110050

errmsg:%s: invalid command-line argument: %s.

errhint: Try \%s --help\ for more information.

level:FATAL

# 12 WLM

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## 12.1 Load Management

### GS\_261110006

errmsg:The \priority\ of query\_band action is invalid.  
errhint: The valid value for priority are \Rush\  
level:ERROR

### GS\_261110007

errmsg:The action %s of query\_band is invalid.  
errhint: The valid format is as follows: \respool=L1\  
level:ERROR

### GS\_261110008

errmsg:The action %s of query\_band is invalid.  
errhint: The valid action is \respool\ and \priority\  
level:ERROR

### GS\_261130001

errmsg:Failed to set the order of query\_band.  
errhint: The order of query\_band has exists.  
level:ERROR

### GS\_261140017

errmsg:resource pool %u does not exist in htab.  
errhint: please use pgxc\_wlm\_rebuild\_user\_respool to rebuild info.

level:ERROR

## 12.2 CPU Management

### GS\_263200040

errmsg:Cgroup failed to attach (tid %d) into "%s" group: %s(%d).

errhint: Maybe the path of Cgroup %s has been changed or removed.

level:WARNING

## 12.3 Space Control

### GS\_264120001

errmsg:schema %u does not exist.

errhint: please use gs\_wlm\_rebuild\_schema\_hash to rebuild info.

level:WARNING

### GS\_264140003

errmsg:When the database is read-only.

errhint: If the database still cannot be connected, disable CN-Retry and try again (set max\_query\_retry\_times = 0).

level:ERROR

## 12.4 Exception Rule

### GS\_266140001

errmsg:The query is in the blocklist and cannot be run.

errhint: If you want to run the query later, confirm the reason why the query is blocklisted and remove the query from the blocklist after resolving the problem.

level:ERROR

## 12.5 Resource Monitoring

### GS\_267120001

errmsg:role %u does not exist.

errhint: please use pgxc\_wlm\_rebuild\_user\_respool to rebuild info.

level:ERROR

### **GS\_267120003**

errmsg:cannot find resource pool with user: %u.

errhint: please use \pgxc\_wlm\_rebuild\_user\_respool\ to rebuild info.

level:ERROR

### **GS\_267140002**

errmsg:It is not supported to use function  
'PG\_STAT\_GET\_WLM\_NODE\_RESOURCE\_INFO' in distributed query.

errhint: Please use simple query without joining with distributed table.

level:ERROR

### **GS\_267140015**

errmsg:relation %s does not exist.

errhint: The table object in the specified schema does not exist. please use  
database 'postgres'.

level:ERROR

# 13 Logical Cluster

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## GS\_271180008

errmsg:database locale is incompatible with operating system.

errhint: Recreate the database with another locale or install the missing locale.

level:FATAL

# 14 Others

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## 14.1 Logical Replication

### GS\_152150028

errmsg:permission denied to change owner of publication %s.

errhint: The owner of a FOR ALL TABLES publication must be a superuser.

level:ERROR

### GS\_152150029

errmsg:permission denied to change owner of publication %s.

errhint: The owner of a FOR ALL TABLES IN SCHEMA publication must be a superuser.

level:ERROR

### GS\_152150031

errmsg:permission denied to change owner of subscription %s.

errhint: The owner of an subscription must be a superuser.

level:ERROR

## 14.2 Postmaster

### GS\_154040729

errmsg:data directory %s has wrong ownership.

errhint: The server must be started by the user that owns the data directory.

level:FATAL

### GS\_154110703

errmsg:could not open directory %s: %m.

errhint: This may indicate an incomplete PostgreSQL installation.Also possible causes for failures to open a directory include an unavailable directory, incorrect permission, or directory damage.Analyze the cause based on the error message. If the directory does not exist, create the directory. If the permission is incorrect, change the permission. If the directory is damaged, restore the file system or disk.

level:ERROR

### GS\_154110704

errmsg:invalid value for parameter \replication\.

errhint:alid values are: false.

level:FATAL

### GS\_154110705

errmsg:invalid value for parameter \backend\_version\.

errhint:alid values are of uint32 type.

level:FATAL

### GS\_154110707

errmsg:invalid value[%d] for parameter \connect\_timeout\.

errhint:alid values are of uint32 type.

level:FATAL

### GS\_154202468

errmsg:hot standby is not possible because wal\_level was not set to \hot\_standby\.

errhint: Either set wal\_level to \hot\_standby\.

level:ERROR

## 14.3 IPC

### GS\_155140414

errmsg:Snapshot is invalid.

errdetail: Snaphot xmin %lu is lower than newestOldestXmin: %lu.

errhint: This is a safe error report.

level:ERROR

## 14.4 Tablespace

### GS\_157040476

errmsg:directory %s does not exist.

errhint: Create this directory for the tablespace before restarting the server.

level:ERROR

### GS\_157120335

errmsg:Can not get tablespace size with SnapshotNow after try 3 times.

errhint: Please retry.

level:ERROR

### GS\_157140325

errmsg:Invalid value for tablespace maxsize: %s.

errhint: The format or value of the tablespace limit is incorrect.Correct the format or value according to corresponding prompt information.

level:ERROR

### GS\_157150055

errmsg:Permission denied to create tablespace %s.

errhint: Must be system admin to create a tablespace.

level:ERROR

### GS\_157150059

errmsg:Insufficient storage space for tablespace %s.

errhint: Limited size is %lu.

level:ERROR

### GS\_157201711

errmsg:directories for tablespace %u could not be removed.

errhint: You can remove the directories manually if necessary.

level:LOG



## 14.5 Common mechanism in Port

### GS\_159010148

errmsg:could not create shared memory segment: %m.

errhint: This error usually means that PostgreSQL's request for a shared memory segment exceeded available memory or swap space.

level:FATAL

### GS\_159202431

errmsg:semctl(%d, %d, SETVAL, %d) failed: %m

errhint: You possibly need to raise your kernel's SEMVMX value to be at least %d.

level:FATAL

## 14.6 Tsearch

### GS\_202040008

errmsg:thesaurus sample word "%s" is a stop word (rule %d).

errhint: Use ? to represent a stop word within a sample phrase.

level:ERROR

## 14.7 CN Retry

### GS\_204200024

errmsg:parameter \$%d of type %s cannot be coerced to the expected type %s.

errhint: You will need to rewrite or cast the expression.

level:ERROR

## 14.8 Advanced Packages

### GS\_206110001

errmsg:null value not allowed.

errhint: '%dth argument is NULL.'

level:ERROR

## GS\_206110017

errmsg:program limit exceeded.  
errdetail: Too much concurrent opened files.  
errhint: You can only open a maximum of %d files for each session.  
level:ERROR

## 14.9 JSON

### GS\_207110021

errmsg:argument list must have even number of elements.  
errhint: The arguments of %s must consist of alternating keys and values.  
level:ERROR

### GS\_207110022

errmsg:argument %d cannot be null.  
errhint: Object keys should be text.  
level:ERROR

### GS\_207110026

errmsg:could not determine row type for result of %s.  
errhint: Provide a non-null record argument.  
level:ERROR

### GS\_207110027

errmsg:cannot replace existing key.  
errhint: Try using the function jsonb\_set to replace key value.  
level:ERROR

### GS\_207120016

errmsg:expected JSON array.  
errhint: See the value of key %s.  
level:ERROR

### GS\_207120018

errmsg:expected JSON array.  
errhint: See the array element %s of key %s.

level:ERROR

### **GS\_207130009**

errmsg:flag array element is not a string.

errhint: 'Possible values are: \string\'

level:ERROR

### **GS\_207130010**

errmsg:'wrong flag in flag array: %s'.

errhint: 'Possible values are: \string\'

level:ERROR

## **14.10 UDF**

### **GS\_208140022**

errmsg:incompatible library %s: missing magic block.

errhint: Extension libraries are required to use the PG\_MODULE\_MAGIC macro.

level:ERROR

### **GS\_208140076**

errmsg:Permission for current user: %s to operate service table: %s.

errhint: Only service table or database owner can call the function.

level:ERROR

### **GS\_208140097**

errmsg:invalid option %s.

errhint: 'Valid options in this context are: %s'.

level:ERROR

### **GS\_208200079**

errmsg:Invalid searchletId: %d.

errhint: Maybe there is no vector data adding to searchlet.

level:WARNING

### **GS\_208200090**

errmsg:could not obtain message string for remote error.

errhint: 'from remote cluster: %s'

level:level

## 14.11 Functions and Features

### GS\_209030003

errmsg:Sequence %s retry %d times to connect GTM on DataNode %s.

errhint: Need reduce the num of concurrent Sequence request.

level:ERROR

### GS\_209100010

errmsg:The definition of the function is null.

errhint: Check whether the definition of the function is complete in the pg\_proc system table.

level:ERROR

### GS\_209100039

errmsg:case not found.

errhint: CASE statement is missing ELSE part.

level:ERROR

### GS\_209100052

errmsg:query has no destination for result data.

errhint: If you want to discard the results of a SELECT

level:ERROR

### GS\_209100088

errmsg:missing argument.

errhint: Use NONE to denote the missing argument of a unary operator.

level:ERROR

### GS\_209100089

errmsg:too many arguments.

errhint: Provide two argument types for operator.

level:ERROR

### GS\_209100112

errmsg:invalid OWNED BY option.

errhint: Specify OWNED BY table.column or OWNED BY NONE.  
level:ERROR

### **GS\_209100157**

errmsg:Sort method %s is not supported.  
errdetail: Not support the given sort method.  
errhint: Please check and revise your nlssort parameter.  
level:ERROR

### **GS\_209110032**

errmsg:trigger functions cannot have declared arguments.  
errhint: The arguments of the trigger can be accessed through TG\_NARGS and TG\_ARGV instead.  
level:ERROR

### **GS\_209110106:**

errmsg:could not determine which collation to use for regular expression.  
errhint: Use the COLLATE clause to set the collation explicitly.  
level:ERROR

### **GS\_209110108**

errmsg:could not determine which collation to use for ILIKE.  
errhint: Use the COLLATE clause to set the collation explicitly.  
level:ERROR

### **GS\_209110110**

errmsg:invalid escape string.  
errhint: Escape string must be empty or one character.  
level:ERROR

### **GS\_209110178**

errmsg:invalid multibyte character for locale.  
errhint: The server's LC\_CTYPE locale is probably incompatible with the database encoding.  
level:ERROR

### **GS\_209110184**

errmsg:"query\_band" is invalid or the length of query\_band exceeds the maximum(%d) limit.

errhint:alid format is key=value.

level:ERROR

### **GS\_209120040**

errmsg:unrecognized reset target: %s.

errhint: Target must be \bgwriter\.

level:ERROR

### **GS\_209120067**

errmsg:boundary values mismatch partitioning columns.

errhint: number of boundary value items should be equal to the number of partitioning columns.

level:ERROR

### **GS\_209120068**

errmsg:partitioned table has too many partition keys.

errhint: start/end syntax requires a partitioned table with only one partition key.

level:ERROR

### **GS\_209120069**

errmsg:number of start value items in partition %s is more than one.

errhint: must be single start value for start/end partition defination.

level:ERROR

### **GS\_209130018**

errmsg:Unrecognized function type code: %d.

errhint: This node type is expected to be a function or trigger.

level:ERROR

### **GS\_209130070**

errmsg:RETURN cannot have a parameter in function returning set.

errhint: Use RETURN NEXT or RETURN QUERY.

level:ERROR

### **GS\_209130087**

errmsg:column %s is not an advised partitioning column since its datatype [%s].

errhint: floating-point number cannot be accurately represented.

level:WARNING

### **GS\_209130088**

errmsg:datatype of column %s is unsupported for partition key in start/end clause.

errhint: 'valid datatypes are: smallint'.

level:ERROR

### **GS\_209140002**

errmsg:could not set up XML error handler.

errhint: This probably indicates that the version of libxml2 being used is not compatible with the libxml2 header files that PostgreSQL was built with.

level:ERROR

### **GS\_209140015**

errmsg:can't %s partition since index %s is unusable.

errhint: reindex the unusable index first.

level:ERROR

### **GS\_209140017**

errmsg:Range partitioned table with INTERVAL is unsupported.

errhint: Only support pure range partitioned table.

level:ERROR

### **GS\_209140037**

errmsg:[WDRReport] Snapshot id is invalid.

errhint: begin snapshot id must be smaller than end snapshot id.

level:ERROR

### **GS\_209140053**

errmsg:It is not supported to use function 'GS\_UPDATE\_BLOCKLIST\_HASH\_INFO' in distributed query.

errhint: Please use simple query without joining with distributed table.

level:ERROR

### **GS\_209140062**

errmsg:EXECUTE of SELECT ... INTO is not implemented.

errhint: You might want to use EXECUTE ... INTO or EXECUTE CREATE TABLE ... AS instead.

level:ERROR

### **GS\_209180019**

errmsg:no pg\_constraint entry for trigger %s on table %s.

errhint: Remove this referential integrity trigger and its mates.

level:ERROR

### **GS\_209200144**

errmsg:Trigger function with non-plpgsql type is not recommended.

errdetail: Non-plpgsql trigger function are not shippable by default.

errhint: Unshippable trigger may lead to bad performance.

level:WARNING

### **GS\_209200219**

errmsg:Failed to drop the user.

errhint: Failed to cancel backend process for privilege.

level:ERROR

### **GS\_209240007**

errmsg:cannot begin/end transactions in PL/pgSQL.

errhint: Use a BEGIN block with an EXCEPTION clause instead.

level:ERROR

### **GS\_209240028**

errmsg:referential integrity query on %s from constraint %s on %s gave unexpected result.

errhint: This is most likely due to a rule having rewritten the query.

level:ERROR

### **GS\_209240060**

errmsg:cannot begin/end transactions in PL/pgSQL.

errhint: Use a BEGIN block with an EXCEPTION clause instead.

level:ERROR



### **GS\_209240063**

errmsg:cannot begin/end transactions in PL/pgSQL.

errhint: Use a BEGIN block with an EXCEPTION clause instead.

level:ERROR

### **GS\_209240064**

errmsg:SPI\_execute failed executing query %s: %s.

errhint: You might want to use EXECUTE ... INTO or EXECUTE CREATE TABLE ... AS instead.

level:ERROR