SQL Server Data Model

for use with Invantive SQL

24.0

invantive
the SQL company

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Contents

1 SQL Driver for SQL Server

Invantive SQL is the fastest, easiest and most reliable way to exchange data with SQL Server.

Use the "Search" option in the left menu to search for a specific term such as the table or column description. When you already know the term, please use the "Index" option. When you can't find the information needed, please click on the Chat button at the bottom or place your question in the user community. Other users or Invantive Support will try to help you to our best.

Microsoft SQL Server is a traditional database platform. SQL Server supports ANSI SQL. It is available both as a cloud database on Microsoft Azure as a traditional database running on-premise or hosted.

SQL Server Clients

Invantive SQL is available on many user interfaces ("clients" in traditional server-client paradigma). All Invantive SQL statements can be exchanged with a close to 100% compatibility across all clients and operating systems (Windows, MacOS, Linux, iOS, Android).

The clients include Microsoft Excel, Microsoft Power BI, Microsoft Power Query, Microsoft Word and Microsoft Outlook. Web-based clients include Invantive Cloud, Invantive Bridge Online as OData proxy, Invantive App Online for interactive apps, Online SQL Editor for query execution and Invantive Data Access Point as extended proxy.

The SQL Server Power BI connector is based on the Invantive SQL driver for SQL Server, completed by a high-performance OData connector which works straight on Power BI without any add-on. The OData protocol is always version 4, independent whether the backing platform uses OData, SOAP or another protocol.

For technical users there are command-line editions of Invantive Data Hub running on iOS, Android, Windows, MacOS and Linux. Invantive Data Hub is also often used for enterprise server applications such as ETL. High-volume replication of data taken from SQL Server into traditional databases such as SQL Server (on-premise and Azure), MySQL, PostgreSQL and Oracle is possible using Invantive Data Replicator. Invantive Data Replicator automatically creates and maintains SQL Server datawarehouses, possibly in combination with data from over 70 other (cloud) platforms. Data Replicator supports data volumes up to over 1 TB and over 5.000 companies. The on-premise edition of Invantive Bridge offers an SQL Server ADO.net provider.

Finally, online web apps can be build for SQL Server using App Online of Invantive Cloud.

Monitor API Calls

When a query or DML-statement has been executed on Invantive SQL a developer can evaluate the actual calls made to SQL Server using a query on sessionios@DataDictionary. As an alternative, extensive request and response logging can be enabled by setting log-native-calls-to-disk to true. In the %USERPROFILE%\Invantive\NativeLogs folder Invantive SQL will create log files per request and response.

Specifications

The SQL driver for SQL Server does not support partitioning. Define one data container in a database for each company in SQL Server to enable parallel access for data from multiple companies.

An introduction into the concepts of Invantive SQL such as databases, data containers and partitioning can be found in the Invantive SQL grammar.

The configuration can be changed using various attributes during log on and use. A full list of configuration options is listed in the driver attributes 2.

The catalog name is used to compose the full qualified name of an object like a table or view. The schema name is used to compose the full qualified name of an object like a table or view. On SQL Server the comparison of two texts is case sensitive by default.

Changes and bug fixes on the SQL Server SQL driver can be found in the release notes. Get access to the SQL Server community through the SQL Server section of the Invantive forums.

Driver code for use in settings.xml: `SqlServer`

Alias: `mssql`

Recommended alias: `mss`

Updated: 12-12-2020 18:19 using Invantive SQL version 20.1.301-BETA+3023.

2 SQL Driver Attributes for SQL Server

The SQL driver for SQL Server has many attributes that can be finetuned to improve handling in scenarios with unreliable network connections to the SQL Server server or high-volumes of data. Also, many drivers have driver-specific attributes to finetune actual behaviour or handle data not matching specifications.

The SQL Server driver attributes are assigned a default value which seldom requires change. However, changes can be applied when needed on four levels, which are reflected in the table below by separate checkmarks:

- Connection string: the connection string from the settings*.xml file and applied during log on.
- Set SQL statement: a set SQL-statement to be executed once connection has been established.
- Drivers file: the providers.xml file (obsolete starting release 17.32).
- Log on: value to be specified interactively by user during log on in a user interface.

The connection string for SQL Server can be found in the settings*.xml file used for the database. Settings*.xml files are typically located in the `%USERPROFILE%\invantive` folder in most deployment scenarios. The reference manuals contain instructions how to relocate the settings*.xml files. Each data container of a database in the connection string can have a `connectionString` element specifying the name and values of attributes. Both name and value must be properly escaped according to XML-semantics. Actual application of the value is solely done during log on. A new connection must be established to change the value of a driver attribute using a connection string.

The set SQL statement can be executed after log on. The syntax is: `set NAME VALUE`, or for a distributed database: `set NAME@ALIAS VALUE`. In some scenarios you may need to enclose the driver attribute name in square brackets to escape it from parsing, for instance when a reserved SQL keyword is part of the name. The new value takes effect straight after execution of the set-statement. The set-statement can be executed as often as needed during a session.

Driver attributes that can be interactively set to a value are typically presented in the log on window. Depending on the platform and design decisions of the user interface designer, some or all of the available driver attributes can have been made available.

The SQL Server driver can be configured using the following attributes:

Code	Description	Origin	Default Value	Set from Connection String	Set from Set SQL-Statement	Set from Drivers File	Set from Log On
analysis-enforce-row-uniqueness	Use for analysis only! Enforce rows to be unique.	Shared	False	✓	✓	✓	
bulk-delete-page-size-rows	Number of rows to delete per batch when bulk deleting	Shared	3000	✓	✓	✓	
bulk-insert-page-size-bytes	Approximate maximum size in bytes of batch when bulk inserting	Shared	10000000	✓	✓	✓	
bulk-insert-page-size-rows	Number of rows to insert per batch when bulk inserting	Shared	3000	✓	✓	✓	
bulk-insert-timeout-sec	Number of seconds after which a bulk insert times out	SQL Server	300	✓	✓	✓	
command-timeout-sec	Number of seconds after which a command times out.			✓	✓	✓	
connection-string-async-add	Should the 'Async' be added automatically to the connection string?	SQL Server	False	✓	✓	✓	
connection-string-async-value	Size of the Async to be added to the connection string	SQL Server	True	✓	✓	✓	
connection-string-multiple-active-result-sets-add	Should the 'MultipleActiveResultSets' be added automatically to the connection string?	SQL Server	True	✓	✓	✓	
connection-string-multiple-active-result-sets-value	Value of MultipleActiveResultSets to be added to the connection string	SQL Server	True	✓	✓	✓	
force-case-sensitive-identifiers	Consider identifiers as case-sensitive independent of the platform capabilities.	Shared	False	✓	✓	✓	
forced-casing-identifiers	Forced casing of identifiers. Choose from Unset, Lower, Upper and Mixed.	Shared		✓	✓	✓	
invantive-sql-correct-invalid-date	Whether to correct dates considered invalid since they are before 01-01-1753. When nullable, they are removed. Otherwise they are replaced by 01-01-1753.	SQL Engine V1	False	✓	✓	✓	
invantive-sql-forward-filters-to-data-containers	Whether to forward filters to data containers.	SQL Engine V1	True	✓	✓	✓	
invantive-sql-shuffle-fetch-results-data-containers	Whether to shuffle results fetched from data containers.	SQL Engine V1	False	✓	✓	✓	
invantive-use-cache	Whether to cache the results of a query.	SQL Engine V1	True	✓	✓	✓	

Code	Description	Origin	Default Value	Set from Connection String	Set from Set SQL-Statement	Set from Drivers File	Set from Log On
log-native-calls-to-disk	Registers native calls to data container backend as disk files.	Shared	False	✓	✓	✓	
log-native-calls-to-trace	Log native calls to data container backend on the trace.	Shared	False	✓	✓	✓	
maximum-length-identifiers	Non-default maximum length in characters of identifier names.	Shared		✓	✓	✓	
maximum-number-of-pooled-connections	Maximum number of concurrent pooled connections.			✓	✓	✓	
maximum-sleep-acquire-pooled-connection-ms	Maximum time in ms to wait for acquiring a free connection from a pool of connections.		30000	✓	✓	✓	
maximum-sleep-acquire-unpooled-connection-ms	Maximum time in ms to wait for acquire a free connection when there is no connection pooling.		60000	✓	✓	✓	
max-url-length-accepted	The maximum accepted URL length before raising an error.	Shared	8000	✓	✓	✓	
max-url-length-desired	The maximum desired URL length.	Shared	8000	✓	✓	✓	
minimum-command-timeout-sec	Minimum number of seconds after which a command times out.		300	✓	✓	✓	
minimum-connection-timeout-sec	Minimum connection timeout in seconds.			✓	✓	✓	
on-close-sql	Native SQL statements to execute directly before close.			✓	✓	✓	
on-open-sql	Native SQL statements to execute directly after open.			✓	✓	✓	
open-connection-interval-sec	Delay between retries in milliseconds when login fails.		500	✓	✓	✓	
open-connection-retries	Maximum number of retries when login fails.		2	✓	✓	✓	
partition-slot-based-rate-limit-length-ms	Total length in ms across all slots of a partition-based rate limit.	Shared	60000	✓		✓	
partition-slot-based-rate-limit-slots	Number of slots per partition-based rate limit. Null means no slot-based rate limit	Shared		✓		✓	
pooled-connection-monitor-interval-sec	Minimum interval in seconds between two connection pool monitor activations.		60	✓	✓	✓	
pooled-connection-release-obsolete-interval-sec	Minimum interval in seconds between two tries to release obsolete connections from the connection pool when above the preferred number of connections.		60	✓	✓	✓	
pooled-connections-monitoring	Enable monitoring of connections of connection pool for automatic cleanup of obsolete connections.		True	✓	✓	✓	

Code	Description	Origin	Default Value	Set from Connection String	Set from Set SQL-Statement	Set from Drivers File	Set from Log On
preferred-number-of-pooled-connections	Preferred number of concurrent pooled connections.			✓	✓	✓	
prefix-bind-variable-in-list	Prefix for bind variables used in an IN-list		i	✓	✓	✓	
prefix-bind-variable-normal	Prefix for bind variables used in all cases except in an IN-list		w	✓	✓	✓	
prefix-renamed-columns	Prefix appended to columns whose names occur multiple times in the column list of a query		column	✓	✓	✓	
pre-request-delay-ms	Pre-request delay in milliseconds per request.	Shared	0	✓	✓	✓	
requested-page-size	Preferred number of rows to exchange per round trip; only effective on limited platforms such as AFAS Online	Shared		✓	✓	✓	
requests-parallel-max	Maximum number of parallel data requests from individual partitions on the data container.	Shared	32	✓	✓	✓	
slot-based-rate-limit-length-ms	Total length in ms across all slots of a slot-based rate limit.	Shared	60000	✓		✓	
slot-based-rate-limit-slots	Number of slots of a slot-based rate limit. Null means no slot-based rate limit	Shared		✓		✓	
standardize-identifiers	Rewrite all identifiers to the preferred standards as configured by standardize-identifiers-casing and maximum-length-identifiers.	Shared	True	✓	✓	✓	
standardize-identifiers-casing	Rewrite all identifiers to the recommended standard platform-specific casing when changing a data model on a case-dependent platform.	Shared	True	✓	✓	✓	

3 Catalog: Database

3.1 Schemas

3.1.1 Schema: Invantive

3.1.1.1 Tables

Collections: SQL Server Metadata Collections

Catalog: Database

Schema: Invantive

Label: Metadata Collections

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Collections` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLLECTION_NAME	string(240)	Collection Name	☐	
NUMBER_OF_IDENTIFIER_PARTS	int32	Number of Identifier Parts	☐	
NUMBER_OF_RESTRICTIONS	int32	Number of Restrictions	☐	
POPULATION_MECHANISM	string(240)	Population Mechanism	☐	
POPULATION_STRING	string(240)	Population String	☐	
SCHEMA_NAME	string(240)	Schema	☐	

DataSourceInformation: SQL Server Data Source Information

Catalog: Database

Schema: Invantive

Label: Data Source Information

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `DataSourceInformation` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COMPOSITE_IDENTIFIER_SEPERATOR_PATTERN	string(240)	Composite Identifier Separator Pattern	☐	
GROUP_BY_BEHAVIOR	int32	Group by Behavior	☐	
IDENTIFIER_CASE	int32	Identifier Case	☐	0: Unknown, the data source has ambiguous rules regarding identifier case and cannot discern this information; 1: Insensitive; the data source ignores identifier case when searching the system catalog. The identifiers "ab" and "AB" will match; 2: Sensitive; the data source distinguishes identifier case when searching the system catalog. The identifiers "ab" and "AB" will not match.
IDENTIFIER_PATTERN	string(240)	Identifier Pattern	☐	
ORDER_BY_COLUMNS_IN_SELECT	boolean	Order by Columns in Select	☐	
PARAMETER_MARKER_FORMAT	string(240)	Parameter Marker Format	☐	

Name	Data Type	Label	Required	Documentation
PARAMETER_MARKER_PATTERN	string(240)	Parameter Marker Pattern	☐	
PARAMETER_NAME_MAX_LENGTH	int32	Parameter Name Maxmimum Length	☐	
PARAMETER_NAME_PATTERN	string(240)	Parameter Name Pattern	☐	
PRODUCT_NAME	string(240)	Product Name	☐	
PRODUCT_VERSION	string(240)	Product Version	☐	
PRODUCT_VERSION_NORMALIZED	string(240)	Product Version Normalized	☐	
QUOTED_IDENTIFIER_CASE	string(240)	Quoted Identifier Case	☐	
QUOTED_IDENTIFIER_PATTERN	string(240)	Quoted Identifier Pattern	☐	
STATEMENT_SEPARATOR_PATTERN	string(240)	Statement Separator Pattern	☐	
STRING_LITERAL_PATTERN	string(240)	String Literal Pattern	☐	
SUPPORTED_JOIN_OPERATORS	int32	Supported Join Operators	☐	

DataTypes: SQL Server Data Types

Catalog: Database

Schema: Invantive

Label: Data Types

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `DataTypes` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLUMN_SIZE	int64	Column Size	☐	
CREATE_FORMAT	string(240)	Create Format	☐	
CREATE_PARAMETERS	string(240)	Create Parameters	☐	
DATA_TYPE	string(240)	Data Type	☐	
IS_AUTOINCREMENTABLE	boolean	Is Auto-incrementable	☐	
IS_BEST_MATCH	boolean	Is Best Match	☐	
IS_CASE_SENSITIVE	boolean	Is Case-sensitive	☐	
IS_CONCURRENCY_TYPE	boolean	Is Concurrency Type	☐	
IS_FIXED_LENGTH	boolean	Is Fixed Length	☐	
IS_FIXED_PRECISION_SCALE	boolean	Is Fixed Precision Scale	☐	
IS_LITERAL_SUPPORTED	boolean	Is Literal Supported	☐	

Name	Data Type	Label	Required	Documentation
IS_LONG	boolean	Is Long	☐	
IS_NULLABLE	boolean	Is Nullable	☐	
IS_SEARCHABLE	boolean	Is Searchable	☐	
IS_SEARCHABLE_WITH_LIKE	boolean	Is Searchable with Like	☐	
IS_UNSIGNED	boolean	Is Unsigned	☐	
LITERAL_PREFIX	string(240)	Literal Prefix	☐	
LITERAL_SUFFIX	string(240)	Literal Suffix	☐	
MAXIMUM_SCALE	int16	Maximum Scale	☐	
MINIMUM_SCALE	int16	Minimum Scale	☐	
NATIVE_DATA_TYPE	string(240)	Native Data Type	☐	
PROVIDER_DB_TYPE	int32	Provider Database Type	☐	
SCHEMA_NAME	string(240)	Schema	☐	
TYPE_NAME	string(240)	Type Name	☐	

PooledConnections: SQL Server Pooled Connections

Catalog: Database

Schema: Invantive

Label: Pooled Connections

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `PooledConnections` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CONNECTION_TIMEOUT_SEC	int32	Connection Time-out (sec)	☑	
COUNT_TIMES_USED	int32	Number of Times Used		
CREATED_UTC	datetime	Date Created		
CURRENT_CONTEXT_DESCRIPTION	string(240)	Current Context Description		
CURRENT_CONTEXT_NATURAL_KEY	string(240)	Current Context Natural Key		
CURRENT_CONTEXT_USER_LOG_ON_CODE	string(240)	Current Context User Log On Code		
DATABASE	string(240)	Database	☐	
DURATION_USED_MS	int32	Duration Used (ms)		
ID	int32	ID		
IS_FREE	boolean	Is Free	☑	

Name	Data Type	Label	Required	Documentation
LAST_USE_DURATION_MS	int32	Last Use Duration (ms)		
LAST_USE_END_UTC	datetime	Last Use End		
LAST_USE_START_UTC	datetime	Last Use Start		
ON_CLOSE_SQL_DURATION_MS	int32	SQL On Close Duration (ms)	☐	
ON_CLOSE_SQL_START_UTC	datetime	SQL On Close Start (UTC)	☐	
ON_CLOSE_SQL_STATEMENT	string	SQL On Open Statement	☐	
ON_OPEN_SQL_DURATION_MS	int32	SQL On Open Duration (ms)	☐	
ON_OPEN_SQL_START_UTC	datetime	SQL On Open Start (UTC)	☐	
ON_OPEN_SQL_STATEMENT	string	SQL On Open Statement	☐	
PREVIOUS_CONTEXT_DESCRIPTIONS	string	Previous Context Descriptions		
SERVER_VERSION	string(240)	Server Version		
USAGE_PERCENTAGE	int32	Usage (%)	☑	

Restrictions: SQL Server Restrictions

Catalog: Database

Schema: Invantive

Label: Restrictions

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Restrictions` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLLECTION_NAME	string(240)	Collection Name	☐	
PARAMETER_NAME	string(240)	Parameter Name	☐	
RESTRICTION_DEFAULT	string(240)	Restriction Default	☐	
RESTRICTION_NAME	string(240)	Restriction Name	☐	
RESTRICTION_NUMBER	int32	Restriction Number	☐	
SCHEMA_NAME	string(240)	Schema	☐	

3.1.2 Schema: Metadata

3.1.2.1 Tables

AllColumns

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `AllColumns` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CHARACTER_MAXIMUM_LENGTH	int32	CHARACTER_MAXIMUM_LENGTH	☐	
CHARACTER_OCTET_LENGTH	int32	CHARACTER_OCTET_LENGTH	☐	
CHARACTER_SET_CATALOG	string	CHARACTER_SET_CATALOG	☐	
CHARACTER_SET_NAME	string	CHARACTER_SET_NAME	☐	
CHARACTER_SET_SCHEMA	string	CHARACTER_SET_SCHEMA	☐	
COLLATION_CATALOG	string	COLLATION_CATALOG	☐	
COLUMN_DEFAULT	string	COLUMN_DEFAULT	☐	
COLUMN_NAME	string	COLUMN_NAME	☐	
DATA_TYPE	string	DATA_TYPE	☐	
DATETIME_PRECISION	int16	DATETIME_PRECISION	☐	
IS_COLUMN_SET	boolean	IS_COLUMN_SET	☐	
IS_FILESTREAM	boolean	IS_FILESTREAM	☐	
IS_NULLABLE	string	IS_NULLABLE	☐	
IS_SPARSE	boolean	IS_SPARSE	☐	
NUMERIC_PRECISION	byte	NUMERIC_PRECISION	☐	
NUMERIC_PRECISION_RADIX	int16	NUMERIC_PRECISION_RADIX	☐	
NUMERIC_SCALE	int32	NUMERIC_SCALE	☐	
ORDINAL_POSITION	int32	ORDINAL_POSITION	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	

Columns

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Columns` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CHARACTER_MAXIMUM_LENGTH	int32	CHARACTER_MAXIMUM_LENGTH	☐	
CHARACTER_OCTET_LENGTH	int32	CHARACTER_OCTET_LENGTH	☐	
CHARACTER_SET_CATALOG	string	CHARACTER_SET_CATALOG	☐	
CHARACTER_SET_NAME	string	CHARACTER_SET_NAME	☐	
CHARACTER_SET_SCHEMA	string	CHARACTER_SET_SCHEMA	☐	
COLLATION_CATALOG	string	COLLATION_CATALOG	☐	
COLUMN_DEFAULT	string	COLUMN_DEFAULT	☐	
COLUMN_NAME	string	COLUMN_NAME	☐	
DATA_TYPE	string	DATA_TYPE	☐	
DATETIME_PRECISION	int16	DATETIME_PRECISION	☐	
IS_COLUMN_SET	boolean	IS_COLUMN_SET	☐	
IS_FILESTREAM	boolean	IS_FILESTREAM	☐	
IS_NULLABLE	string	IS_NULLABLE	☐	
IS_SPARSE	boolean	IS_SPARSE	☐	
NUMERIC_PRECISION	byte	NUMERIC_PRECISION	☐	
NUMERIC_PRECISION_RADIX	int16	NUMERIC_PRECISION_RADIX	☐	
NUMERIC_SCALE	int32	NUMERIC_SCALE	☐	
ORDINAL_POSITION	int32	ORDINAL_POSITION	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	

ColumnSetColumns

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `ColumnSetColumns` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CHARACTER_MAXIMUM_LENGTH	int32	CHARACTER_MAXIMUM_LENGTH	☐	
CHARACTER_OCTET_LENGTH	int32	CHARACTER_OCTET_LENGTH	☐	
CHARACTER_SET_CATALOG	string	CHARACTER_SET_CATALOG	☐	
CHARACTER_SET_NAME	string	CHARACTER_SET_NAME	☐	
CHARACTER_SET_SCHEMA	string	CHARACTER_SET_SCHEMA	☐	
COLLATION_CATALOG	string	COLLATION_CATALOG	☐	
COLUMN_DEFAULT	string	COLUMN_DEFAULT	☐	
COLUMN_NAME	string	COLUMN_NAME	☐	
DATA_TYPE	string	DATA_TYPE	☐	
DATETIME_PRECISION	int16	DATETIME_PRECISION	☐	
IS_COLUMN_SET	boolean	IS_COLUMN_SET	☐	
IS_FILESTREAM	boolean	IS_FILESTREAM	☐	
IS_NULLABLE	string	IS_NULLABLE	☐	
IS_SPARSE	boolean	IS_SPARSE	☐	
NUMERIC_PRECISION	byte	NUMERIC_PRECISION	☐	
NUMERIC_PRECISION_RADIX	int16	NUMERIC_PRECISION_RADIX	☐	
NUMERIC_SCALE	int32	NUMERIC_SCALE	☐	
ORDINAL_POSITION	int32	ORDINAL_POSITION	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	

Databases

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Databases` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
create_date	datetime	create_date	☐	
database_name	string	database_name	☐	
dbid	int16	dbid	☐	

DataSourceInformation

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `DataSourceInformation` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COMPOSITE_IDENTIFIER_SEPERATOR_PATTERN	string(240)	Composite Identifier Separator Pattern	☐	
GROUP_BY_BEHAVIOR	int32	Group by Behavior	☐	
IDENTIFIER_CASE	int32	Identifier Case	☐	0: Unknown, the data source has ambiguous rules regarding identifier case and cannot discern this information; 1: Insensitive; the data source ignores identifier case when searching the system catalog. The identifiers "ab" and "AB" will match; 2: Sensitive; the data source distinguishes identifier case when searching the system catalog. The identifiers "ab" and "AB" will not match.
IDENTIFIER_PATTERN	string(240)	Identifier Pattern	☐	
ORDER_BY_COLUMNS_IN_SELECT	boolean	Order by Columns in Select	☐	
PARAMETER_MARKER_FORMAT	string(240)	Parameter Marker Format	☐	
PARAMETER_MARKER_PATTERN	string(240)	Parameter Marker Pattern	☐	
PARAMETER_NAME_MAX_LENGTH	int32	Parameter Name Maxmimum Length	☐	
PARAMETER_NAME_PATTERN	string(240)	Parameter Name Pattern	☐	
PRODUCT_NAME	string(240)	Product Name	☐	

Name	Data Type	Label	Required	Documentation
PRODUCT_VERSION	string(240)	Product Version	☐	
PRODUCT_VERSION_NORMALIZED	string(240)	Product Version Normalized	☐	
QUOTED_IDENTIFIER_CASE	string(240)	Quoted Identifier Case	☐	
QUOTED_IDENTIFIER_PATTERN	string(240)	Quoted Identifier Pattern	☐	
STATEMENT_SEPARATOR_PATTERN	string(240)	Statement Separator Pattern	☐	
STRING_LITERAL_PATTERN	string(240)	String Literal Pattern	☐	
SUPPORTED_JOIN_OPERATORS	int32	Supported Join Operators	☐	

DataTypes

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `DataTypes` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLUMN_SIZE	int64	Column Size	☐	
CREATE_FORMAT	string(240)	Create Format	☐	
CREATE_PARAMETERS	string(240)	Create Parameters	☐	
DATA_TYPE	string(240)	Data Type	☐	
IS_AUTOINCREMENTABLE	boolean	Is Auto-incrementable	☐	
IS_BEST_MATCH	boolean	Is Best Match	☐	
IS_CASE_SENSITIVE	boolean	Is Case-sensitive	☐	
IS_CONCURRENCY_TYPE	boolean	Is Concurrency Type	☐	
IS_FIXED_LENGTH	boolean	Is Fixed Length	☐	
IS_FIXED_PRECISION_SCALE	boolean	Is Fixed Precision Scale	☐	
IS_LITERAL_SUPPORTED	boolean	Is Literal Supported	☐	
IS_LONG	boolean	Is Long	☐	
IS_NULLABLE	boolean	Is Nullable	☐	
IS_SEARCHABLE	boolean	Is Searchable	☐	
IS_SEARCHABLE_WITH_LIKE	boolean	Is Searchable with Like	☐	
IS_UNSIGNED	boolean	Is Unsigned	☐	
LITERAL_PREFIX	string(240)	Literal Prefix	☐	
LITERAL_SUFFIX	string(240)	Literal Suffix	☐	

Name	Data Type	Label	Required	Documentation
MAXIMUM_SCALE	int16	Maximum Scale	☐	
MINIMUM_SCALE	int16	Minimum Scale	☐	
NATIVE_DATA_TYPE	string(240)	Native Data Type	☐	
PROVIDER_DB_TYPE	int32	Provider Database Type	☐	
SCHEMA_NAME	string(240)	Schema	☐	
TYPE_NAME	string(240)	Type Name	☐	

ForeignKeys

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `ForeignKeys` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CONSTRAINT_CATALOG	string	CONSTRAINT_CATALOG	☐	
CONSTRAINT_NAME	string	CONSTRAINT_NAME	☐	
CONSTRAINT_SCHEMA	string	CONSTRAINT_SCHEMA	☐	
CONSTRAINT_TYPE	string	CONSTRAINT_TYPE	☐	
INITIALLY_DEFERRED	string	INITIALLY_DEFERRED	☐	
IS_DEFERRABLE	string	IS_DEFERRABLE	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	

IndexColumns

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `IndexColumns` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
column_name	string	column_name	☐	
constraint_catalog	string	constraint_catalog	☐	
constraint_name	string	constraint_name	☐	
constraint_schema	string	constraint_schema	☐	
index_name	string	index_name	☐	
KeyType	byte	KeyType	☐	
ordinal_position	int32	ordinal_position	☐	
table_catalog	string	table_catalog	☐	
table_name	string	table_name	☐	
table_schema	string	table_schema	☐	

Indexes

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Indexes` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
constraint_catalog	string	constraint_catalog	☐	
constraint_name	string	constraint_name	☐	
constraint_schema	string	constraint_schema	☐	
index_name	string	index_name	☐	
table_catalog	string	table_catalog	☐	
table_name	string	table_name	☐	
table_schema	string	table_schema	☐	
type_desc	string	type_desc	☐	

MetaDataCollections

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `MetaDataCollections` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CollectionName	string	CollectionName	☐	
NumberOfIdentifierParts	int32	NumberOfIdentifierParts	☐	
NumberOfRestrictions	int32	NumberOfRestrictions	☐	

ProcedureParameters

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `ProcedureParameters` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
AS_LOCATOR	string	AS_LOCATOR	☐	
CHARACTER_MAXIMUM_LENGTH	int32	CHARACTER_MAXIMUM_LENGTH	☐	
CHARACTER_OCTET_LENGTH	int32	CHARACTER_OCTET_LENGTH	☐	
CHARACTER_SET_CATALOG	string	CHARACTER_SET_CATALOG	☐	
CHARACTER_SET_NAME	string	CHARACTER_SET_NAME	☐	
CHARACTER_SET_SCHEMA	string	CHARACTER_SET_SCHEMA	☐	
COLLATION_CATALOG	string	COLLATION_CATALOG	☐	
COLLATION_NAME	string	COLLATION_NAME	☐	
COLLATION_SCHEMA	string	COLLATION_SCHEMA	☐	
DATA_TYPE	string	DATA_TYPE	☐	
DATETIME_PRECISION	int16	DATETIME_PRECISION	☐	
INTERVAL_PRECISION	int16	INTERVAL_PRECISION	☐	
INTERVAL_TYPE	string	INTERVAL_TYPE	☐	
IS_RESULT	string	IS_RESULT	☐	
NUMERIC_PRECISION	byte	NUMERIC_PRECISION	☐	
NUMERIC_PRECISION_RADIX	int16	NUMERIC_PRECISION_RADIX	☐	

Name	Data Type	Label	Required	Documentation
NUMERIC_SCALE	int32	NUMERIC_SCALE	☐	
ORDINAL_POSITION	int32	ORDINAL_POSITION	☐	
PARAMETER_MODE	string	PARAMETER_MODE	☐	
PARAMETER_NAME	string	PARAMETER_NAME	☐	
SPECIFIC_CATALOG	string	SPECIFIC_CATALOG	☐	
SPECIFIC_NAME	string	SPECIFIC_NAME	☐	
SPECIFIC_SCHEMA	string	SPECIFIC_SCHEMA	☐	

Procedures

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Procedures` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CREATED	datetime	CREATED	☐	
LAST_ALTERED	datetime	LAST_ALTERED	☐	
ROUTINE_CATALOG	string	ROUTINE_CATALOG	☐	
ROUTINE_NAME	string	ROUTINE_NAME	☐	
ROUTINE_SCHEMA	string	ROUTINE_SCHEMA	☐	
ROUTINE_TYPE	string	ROUTINE_TYPE	☐	
SPECIFIC_CATALOG	string	SPECIFIC_CATALOG	☐	
SPECIFIC_NAME	string	SPECIFIC_NAME	☐	
SPECIFIC_SCHEMA	string	SPECIFIC_SCHEMA	☐	

ReservedWords

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `ReservedWords` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
ReservedWord	string	ReservedWord	☐	

Restrictions

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Restrictions` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLLECTION_NAME	string(240)	Collection Name	☐	
PARAMETER_NAME	string(240)	Parameter Name	☐	
RESTRICTION_DEFAULT	string(240)	Restriction Default	☐	
RESTRICTION_NAME	string(240)	Restriction Name	☐	
RESTRICTION_NUMBER	int32	Restriction Number	☐	
SCHEMA_NAME	string(240)	Schema	☐	

StructuredTypeMembers

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `StructuredTypeMembers` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CHARACTER_MAXIMUM_LENGTH	int32	CHARACTER_MAXIMUM_LENGTH	☐	
CHARACTER_OCTET_LENGTH	int32	CHARACTER_OCTET_LENGTH	☐	
CHARACTER_SET_CATALOG	string	CHARACTER_SET_CATALOG	☐	
CHARACTER_SET_NAME	string	CHARACTER_SET_NAME	☐	

Name	Data Type	Label	Required	Documentation
CHARACTER_SET_SCHEMA	string	CHARACTER_SET_SCHEMA	☐	
COLLATION_CATALOG	string	COLLATION_CATALOG	☐	
DATA_TYPE	string	DATA_TYPE	☐	
DATETIME_PRECISION	int16	DATETIME_PRECISION	☐	
IS_NULLABLE	string	IS_NULLABLE	☐	
MEMBER_DEFAULT	string	MEMBER_DEFAULT	☐	
MEMBER_NAME	string	MEMBER_NAME	☐	
NUMERIC_PRECISION	byte	NUMERIC_PRECISION	☐	
NUMERIC_PRECISION_RADIX	int16	NUMERIC_PRECISION_RADIX	☐	
NUMERIC_SCALE	int32	NUMERIC_SCALE	☐	
ORDINAL_POSITION	int32	ORDINAL_POSITION	☐	
TYPE_CATALOG	string	TYPE_CATALOG	☐	
TYPE_NAME	string	TYPE_NAME	☐	
TYPE_SCHEMA	string	TYPE_SCHEMA	☐	

Tables

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Tables` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	
TABLE_TYPE	string	TABLE_TYPE	☐	

UserDefinedTypes

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `UserDefinedTypes` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
assembly_name	string	assembly_name	☐	
Create_Date	datetime	Create_Date	☐	
culture_info	object	culture_info	☐	
is_fixed_length	boolean	is_fixed_length	☐	
max_length	int16	max_length	☐	
Permission_set_desc	string	Permission_set_desc	☐	
public_key	object	public_key	☐	
udt_name	string	udt_name	☐	
version_build	object	version_build	☐	
version_major	object	version_major	☐	
version_minor	object	version_minor	☐	
version_revision	object	version_revision	☐	

Users

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Users` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
createdate	datetime	createdate	☐	
uid	int16	uid	☐	
updatedate	datetime	updatedate	☐	
user_name	string	user_name	☐	

ViewColumns

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `ViewColumns` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
COLUMN_NAME	string	COLUMN_NAME	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	
VIEW_CATALOG	string	VIEW_CATALOG	☐	
VIEW_NAME	string	VIEW_NAME	☐	
VIEW_SCHEMA	string	VIEW_SCHEMA	☐	

Views

Catalog: Database

Schema: Metadata

This is a read-only view. The SQL Server API may not support changing the data or the Invantive SQL driver for SQL Server does not cover it. In the latter case, please use the table `NativePlatformScalarRequests` to upload data to the SQL Server API.

View Columns

The columns of the view `Views` are shown below. Each column has an SQL data type.

Name	Data Type	Label	Required	Documentation
CHECK_OPTION	string	CHECK_OPTION	☐	
IS_UPDATABLE	string	IS_UPDATABLE	☐	
TABLE_CATALOG	string	TABLE_CATALOG	☐	
TABLE_NAME	string	TABLE_NAME	☐	
TABLE_SCHEMA	string	TABLE_SCHEMA	☐	

3.1.3 Schema: Native

3.1.3.1 Tables

NATIVEPLATFORMSCALARREQUESTS: SQL Server Native Platform Scalar Requests

Direct access to native API.

Catalog: Database

Schema: Native

Alias: `npt`

Label: Native Platform Scalar Requests

Documentation:

The NativePlatformScalarRequests table provides direct access to the native protocol over an established connection to the SQL Server platform server. It will contain a new row for every row inserted with a native request in PAYLOAD_TEXT with the results of unaltered forwarding of the payload to the SQL Server platform server.

Retrieve: true

Insert: true

Update: false

Delete: false

View Columns

The columns of the view `NATIVEPLATFORMSCALARREQUESTS` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert.

Name	Data Type	Label	Required	Documentation
BLOB_PREFERRED	boolean	BLOB Preferred	☑	Indicator whether a BLOB result is preferred over text.
BOL_RESPONSE_CACHE_MAX_AGE_SEC	int32	Response Cache Maximum Age (sec)	☐	Maximum age in seconds of Bridge Online response cache entries to be used.
CONTENT_TYPE	string(240)	Content Type	☐	
DATE_ENDED	datetime	End Date	☑	
DATE_STARTED	datetime	Start Date	☑	
DRY_RUN	boolean	Run without Actions	☑	
ERROR_MESSAGE_CODE	string(30)	Error Message Code	☐	
ERROR_MESSAGE_TEXT	string(4000)	Error Message Text	☐	
HTTP_DISK_CACHE_MAX_AGE_SEC	int32	HTTP Disk Cache Maximum Age (sec)	☐	Maximum age in seconds of HTTP disk cache entries to be used.
HTTP_DISK_CACHE_SAVE	boolean	Save HTTP Disk Cache	☐	Whether results can be stored in HTTP disk cache.
HTTP_DISK_CACHE_USE	boolean	Use HTTP Disk Cache	☐	Whether results can be fetched from HTTP disk cache.
HTTP_MEMORY_CACHE_MAX_AGE_SEC	int32	HTTP Memory Cache Maximum Age (sec)	☐	Maximum age in seconds of HTTP memory cache entries to be used.
HTTP_MEMORY_CACHE_SAVE	boolean	Save HTTP Memory Cache	☐	Whether results can be stored in HTTP memory cache.
HTTP_MEMORY_CACHE_USE	boolean	Use HTTP Memory Cache	☐	Whether results can be fetched from HTTP memory cache.
HTTP_METHOD	string(30)	HTTP Method	☐	
ORIG_SYSTEM_GROUP	string(4000)	Original System Group	☐	
ORIG_SYSTEM_REFERENCE	string(4000)	Original System Reference	☐	
PAYLOAD_TEXT	string	Payload	☐	
RESULT_BLOB	byte[]	Result BLOB	☐	
RESULT_TEXT	string	Result Text	☐	

Name	Data Type	Label	Required	Documentation
SUCCESSFUL	boolean	Succesful	☑	
TIMEOUT_SEC	int32	Timeout (sec)	☐	Timeout in seconds.
TRANSACTION_ID	int32	Transaction ID	☑	Incrementing ID of the transaction.
URL	string(4000)	URL	☐	

4 Catalog: master

4.1 Schemas

4.1.1 spt_fallback_db

Catalog: master

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `spt_fallback_db` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
dbid	int16		☐	
name	string		☐	
status	int16		☐	
version	int16		☐	
xdttm_ins	datetime		☐	
xdttm_last_ins_upd	datetime		☐	
xfallback_dbid	int16		☐	
xserver_name	string		☐	

4.1.2 spt_fallback_dev

Catalog: master

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `spt_fallback_dev` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
high	int32		☐	
low	int32		☐	
name	string		☐	
phyname	string		☐	
status	int16		☐	
xdttm_ins	datetime		☐	
xdttm_last_ins_upd	datetime		☐	
xfallback_drive	string		☐	
xfallback_low	int32		☐	
xserver_name	string		☐	

4.1.3 spt_fallback_usg

Catalog: master

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `spt_fallback_usg` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
dbid	int16		☐	
lstart	int32		☐	
segmap	int32		☐	
sizepg	int32		☐	
vstart	int32		☐	
xdttm_ins	datetime		☐	
xdttm_last_ins_upd	datetime		☐	
xfallback_vstart	int32		☐	
xserver_name	string		☐	

4.1.4 spt_monitor

Catalog: master

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `spt_monitor` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
connections	int32		☐	
cpu_busy	int32		☐	
idle	int32		☐	
io_busy	int32		☐	
lastrun	datetime		☐	
pack_errors	int32		☐	
pack_received	int32		☐	
pack_sent	int32		☐	
total_errors	int32		☐	
total_read	int32		☐	
total_write	int32		☐	

4.1.5 spt_values

Catalog: master

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `spt_values` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
high	int32		☐	
low	int32		☐	
name	string		☐	
number	int32		☐	
status	int32		☐	
type	string		☐	

5 Catalog: msdb

5.1 Schemas

5.1.1 autoadmin_backup_configuration_summary

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `autoadmin_backup_configuration_summary` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
DatabaseCount	int32		☐	
DayOfWeek	string		☐	
EncryptionAlgorithm	string		☐	
IsAlwaysOn	boolean		☐	
IsDropped	boolean		☐	
IsEnabled	boolean		☐	
ManagedBackupVersion	int32		☐	
RetentionPeriod	int32		☐	
SchedulingOption	string		☐	

5.1.2 backupfile

Catalog: msdb

Schema: dbo

Primary Keys: backup_set_id

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `backupfile` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
backed_up_page_count	decimal		☐	
backup_set_id	int32		☐	
backup_size	decimal		☐	
create_lsn	decimal		☐	
differential_base_guid	guid		☐	

Name	Data Type	Label	Required	Documentation
differential_base_lsn	decimal		☐	
drop_lsn	decimal		☐	
file_guid	guid		☐	
file_number	decimal		☐	
file_size	decimal		☐	
file_type	char		☐	
filegroup_guid	guid		☐	
filegroup_name	string		☐	
first_family_number	int16		☐	
first_media_number	int16		☐	
is_present	boolean		☐	
is_readonly	boolean		☐	
logical_name	string		☐	
page_size	int32		☐	
physical_drive	string		☐	
physical_name	string		☐	
read_only_lsn	decimal		☐	
read_write_lsn	decimal		☐	
source_file_block_size	decimal		☐	
state	int16		☐	
state_desc	string		☐	

5.1.3 backupmediafamily

Catalog: msdb

Schema: dbo

Primary Keys: media_set_id

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `backupmediafamily` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
device_type	int16		☐	
family_sequence_number	int16		☐	
logical_device_name	string		☐	
media_count	int32		☐	
media_family_id	guid		☐	

Name	Data Type	Label	Required	Documentation
media_set_id	int32		☐	
mirror	int16		☐	
physical_block_size	int32		☐	
physical_device_name	string		☐	

5.1.4 backupmediaset

Catalog: msdb

Schema: dbo

Primary Keys: media_set_id

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `backupmediaset` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
description	string		☐	
is_compressed	boolean		☐	
is_encrypted	boolean		☐	
is_password_protected	boolean		☐	
media_family_count	int16		☐	
media_set_id	int32		☐	
media_uuid	guid		☐	
mirror_count	int16		☐	
MTF_major_version	int16		☐	
name	string		☐	
software_name	string		☐	
software_vendor_id	int32		☐	

5.1.5 backupset

Catalog: msdb

Schema: dbo

Primary Keys: backup_set_id

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `backupset` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
backup_finish_date	datetime		☐	
backup_set_id	int32		☐	
backup_set_uuid	guid		☐	
backup_size	decimal		☐	
backup_start_date	datetime		☐	
begins_log_chain	boolean		☐	
catalog_family_number	int16		☐	
catalog_media_number	int16		☐	
checkpoint_lsn	decimal		☐	
code_page	int16		☐	
collation_name	string		☐	
compatibility_level	int16		☐	
compressed_backup_size	decimal		☐	
database_backup_lsn	decimal		☐	
database_creation_date	datetime		☐	
database_guid	guid		☐	
database_name	string		☐	
database_version	int32		☐	
description	string		☐	
differential_base_guid	guid		☐	
differential_base_lsn	decimal		☐	
encryptor_thumbprint	byte[]		☐	
encryptor_type	string		☐	
expiration_date	datetime		☐	
family_guid	guid		☐	
first_family_number	int16		☐	
first_lsn	decimal		☐	
first_media_number	int16		☐	
first_recovery_fork_guid	guid		☐	
flags	int32		☐	
fork_point_lsn	decimal		☐	
has_backup_checksums	boolean		☐	
has_bulk_logged_data	boolean		☐	
has_incomplete_metadata	boolean		☐	
is_copy_only	boolean		☐	
is_damaged	boolean		☐	
is_force_offline	boolean		☐	
is_password_protected	boolean		☐	

Name	Data Type	Label	Required	Documentation
is_readonly	boolean		☐	
is_single_user	boolean		☐	
is_snapshot	boolean		☐	
key_algorithm	string		☐	
last_family_number	int16		☐	
last_lsn	decimal		☐	
last_media_number	int16		☐	
last_recovery_fork_guid	guid		☐	
machine_name	string		☐	
media_set_id	int32		☐	
mtf_minor_version	int16		☐	
name	string		☐	
position	int32		☐	
recovery_model	string		☐	
server_name	string		☐	
software_build_version	int16		☐	
software_major_version	int16		☐	
software_minor_version	int16		☐	
software_vendor_id	int32		☐	
sort_order	int16		☐	
time_zone	int16		☐	
type	char		☐	
unicode_compare_style	int32		☐	
unicode_locale	int32		☐	
user_name	string		☐	

5.1.6 dm_hadr_automatic_seeding_history

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `dm_hadr_automatic_seeding_history` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
ag_db_id	guid		☐	
ag_id	guid		☐	

Name	Data Type	Label	Required	Documentation
ag_remote_replica_id	guid		☐	
completion_time	datetime		☐	
current_state	string		☐	
error_code	int32		☐	
failure_state	int32		☐	
failure_state_desc	string		☐	
is_source	boolean		☐	
number_of_attempts	int32		☐	
operation_id	guid		☐	
performed_seeding	boolean		☐	
start_time	datetime		☐	

5.1.7 logmarkhistory

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `logmarkhistory` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
database_name	string		☐	
description	string		☐	
lsn	decimal		☐	
mark_name	string		☐	
mark_time	datetime		☐	
user_name	string		☐	

5.1.8 restorefile

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `restorefile` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
destination_phys_drive	string		☐	
destination_phys_name	string		☐	
file_number	decimal		☐	
restore_history_id	int32		☐	

5.1.9 restorefilegroup

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `restorefilegroup` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
filegroup_name	string		☐	
restore_history_id	int32		☐	

5.1.10 restorehistory

Catalog: msdb

Schema: dbo

Primary Keys: restore_history_id

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `restorehistory` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
backup_set_id	int32		☐	
destination_database_name	string		☐	
device_count	int16		☐	
recovery	boolean		☐	

Name	Data Type	Label	Required	Documentation
replace	boolean		☐	
restart	boolean		☐	
restore_date	datetime		☐	
restore_history_id	int32		☐	
restore_type	char		☐	
stop_at	datetime		☐	
stop_at_mark_name	string		☐	
stop_before	boolean		☐	
user_name	string		☐	

5.1.11 suspect_pages

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

Table Columns

The columns of the table `suspect_pages` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
database_id	int32		☐	
error_count	int32		☐	
event_type	int32		☐	
file_id	int32		☐	
last_update_date	datetime		☐	
page_id	int64		☐	

5.1.12 sysdac_instances

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `sysdac_instances` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
created_by	string		☐	
database_name	string		☐	
date_created	datetime		☐	
description	string		☐	
instance_id	guid		☐	
instance_name	string		☐	
type_name	string		☐	
type_stream	byte[]		☐	
type_version	string		☐	

5.1.13 syspolicy_conditions

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_conditions` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
condition_id	int32		☐	
created_by	string		☐	
date_created	datetime		☐	
date_modified	datetime		☐	
description	string		☐	
expression	string		☐	
facet	string		☐	
is_name_condition	int16		☐	
is_system	boolean		☐	
modified_by	string		☐	
name	string		☐	
obj_name	string		☐	

5.1.14 syspolicy_configuration

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_configuration` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
current_value	string		☐	
name	string		☐	

5.1.15 syspolicy_object_sets

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_object_sets` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
facet_id	int32		☐	
facet_name	string		☐	
is_system	boolean		☐	
object_set_id	int32		☐	
object_set_name	string		☐	

5.1.16 syspolicy_policies

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_policies` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
condition_id	int32		☐	

Name	Data Type	Label	Required	Documentation
created_by	string		☐	
date_created	datetime		☐	
date_modified	datetime		☐	
description	string		☐	
execution_mode	int32		☐	
help_link	string		☐	
help_text	string		☐	
is_enabled	boolean		☐	
is_system	boolean		☐	
job_id	guid		☐	
modified_by	string		☐	
name	string		☐	
object_set_id	int32		☐	
policy_category_id	int32		☐	
policy_id	int32		☐	
root_condition_id	int32		☐	
schedule_uid	guid		☐	

5.1.17 syspolicy_policy_categories

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_policy_categories` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
mandate_database_subscriptions	boolean		☐	
name	string		☐	
policy_category_id	int32		☐	

5.1.18 syspolicy_policy_category_subscriptions

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_policy_category_subscriptions` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
policy_category_id	int32		☐	
policy_category_subscription_id	int32		☐	
target_object	string		☐	
target_type	string		☐	

5.1.19 syspolicy_policy_execution_history

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_policy_execution_history` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
end_date	datetime		☐	
exception	string		☐	
exception_message	string		☐	
history_id	int64		☐	
policy_id	int32		☐	
result	boolean		☐	
start_date	datetime		☐	

5.1.20 syspolicy_policy_execution_history_details

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_policy_execution_history_details` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
detail_id	int64		☐	
exception	string		☐	
exception_message	string		☐	
execution_date	datetime		☐	
history_id	int64		☐	
result	boolean		☐	
result_detail	string		☐	
target_query_expression	string		☐	

5.1.21 syspolicy_system_health_state

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_system_health_state` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
health_state_id	int64		☐	
last_run_date	datetime		☐	
policy_id	int32		☐	
result	boolean		☐	
target_query_expression	string		☐	
target_query_expression_with_id	string		☐	

5.1.22 syspolicy_target_set_levels

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_target_set_levels` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
condition_id	int32		☐	
level_name	string		☐	
target_set_id	int32		☐	
target_set_level_id	int32		☐	
type_skeleton	string		☐	

5.1.23 syspolicy_target_sets

Catalog: msdb

Schema: dbo

The data in this table is partitioned per value of the column.

Can retrieve data and change data using insert, update and delete.

View Columns

The columns of the view `syspolicy_target_sets` are shown below. Each column has an SQL data type. A new non-null value must be provided for every required column at all times during insert or update.

Name	Data Type	Label	Required	Documentation
enabled	boolean		☐	
object_set_id	int32		☐	
target_set_id	int32		☐	
type	string		☐	
type_skeleton	string		☐	

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