

erwin DM r9.8

What's new

erwin[®] r9.8 – Product Details

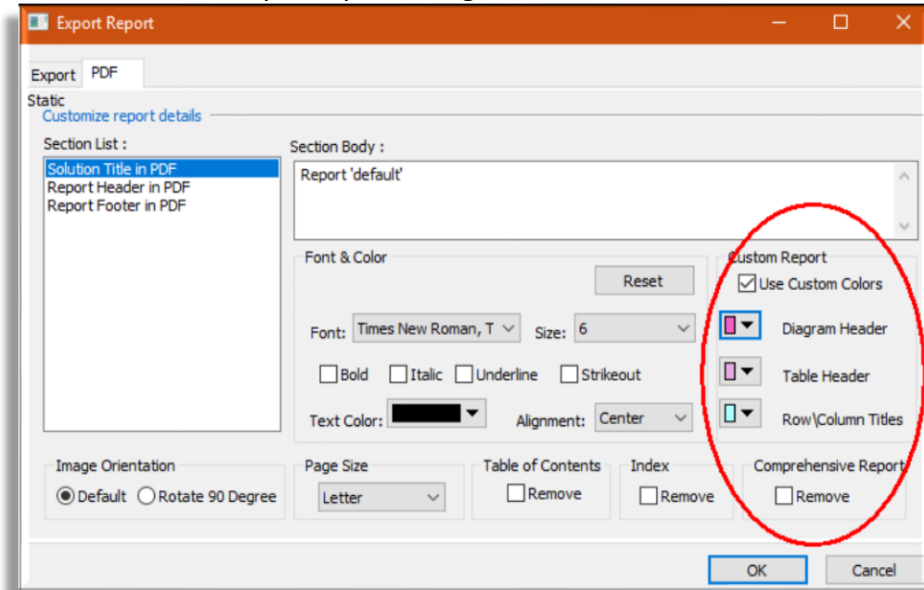
- New “Database Abstraction Layer” technology
- New database support:
 - Hadoop Hive (v2.1) “native” and metastore (MySQL and PostgreSQL)
 - PostgreSQL (v9.6)
- Enhanced database support – SQL Server 2014/2016
- New database certifications:
 - PostgreSQL 9.6.5
 - Teradata v16.1
 - Oracle 12c R2
- Aggressive “extermination” of potential vulnerability issues (e.g., soft vs. secure passwords, third-party component upgrades)



Product Improvements

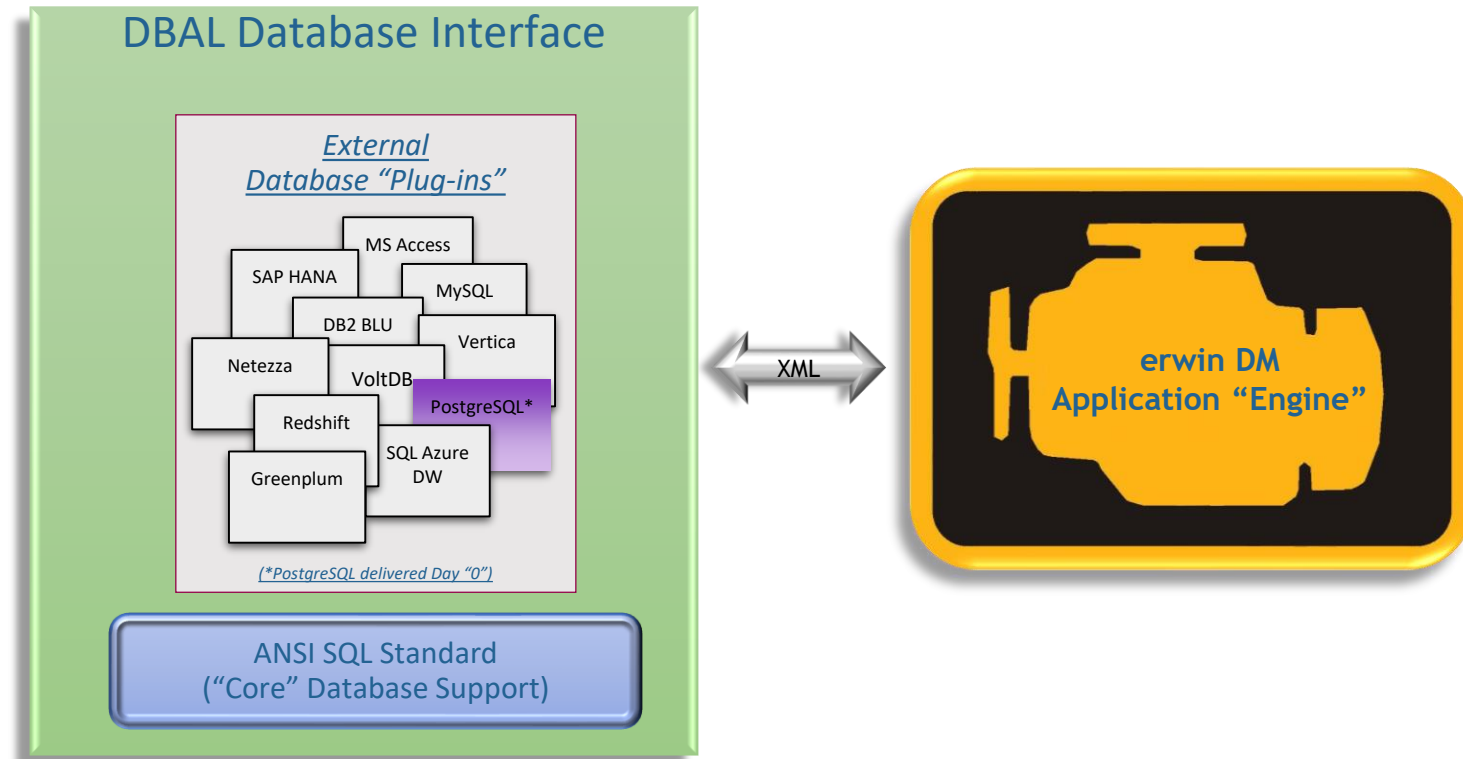
- Modeler productivity enhancements:
 - Relationship Key (“PK/FK”) auto highlighting
 - Guided TABLE Editor – SQL tab
 - Unrestricted SA access for mart “Viewers”
- Report Designer enhancements (mart and model)
- Mart improvements:
 - Progress bar added in concurrent mart save option
 - Improvements to LDAP support
- Enhanced, self-service activation-based licensing

Example Report Designer Enhancement



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Database Abstraction Layer Architecture (Simplified View)



Hadoop Hive – “Native” Support

SNEAK
PREVIEW

The screenshot shows the 'Hive Table 'call_detail_records' Editor' window with the 'General' tab selected. The top section contains a table with columns: Physical Name, Database, Table Type, Temporary, Physical Only, Touch, and Generate. The table lists several tables: 'call_detail_records' (Managed, xademo), 'customer' (External, foodmart), 'customer_details' (Managed, xademo), and 'inventory_fact_1998' (External, foodmart). Below this table, the 'Physical Name' field is set to '%EntityName()'. The 'Location' field is set to 'hdfs://sandbox.hortonworks.com:8020/apps/hive/warehouse/xademo.db/call_d'. The 'Table Properties' field is empty. The 'Like Options' section has 'Like Table' and 'Like View' dropdowns. The 'Other Options' section has 'Concatenate', 'Compact', and 'Overwrite Table Properties' checkboxes.

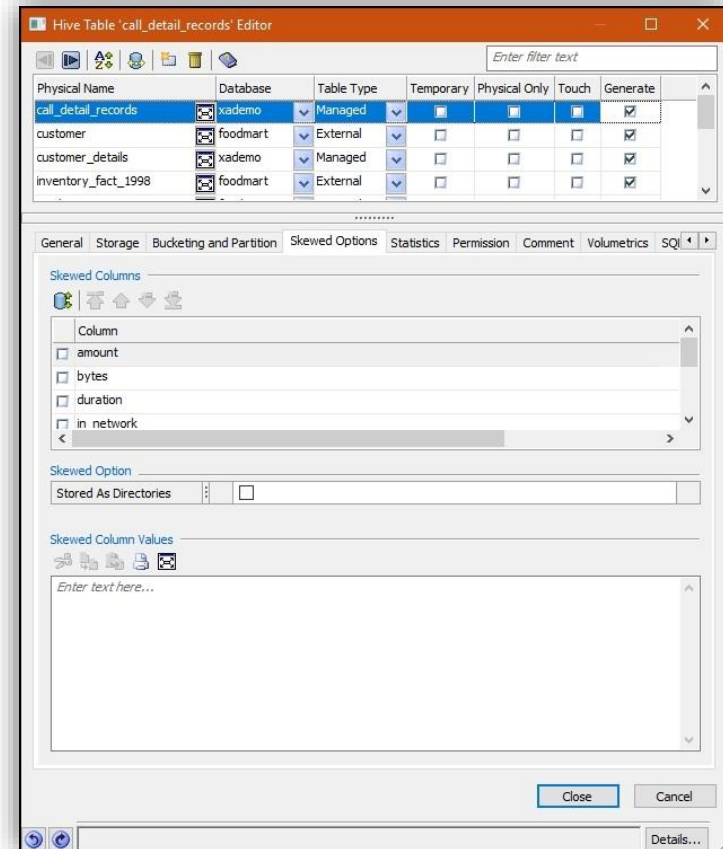
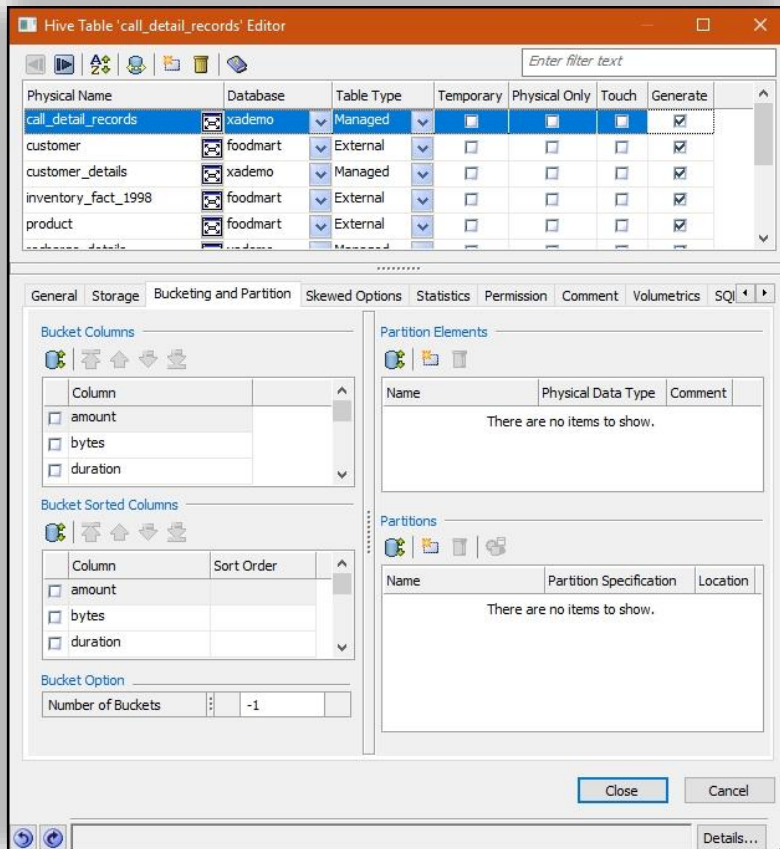
Physical Name	Database	Table Type	Temporary	Physical Only	Touch	Generate
call_detail_records	xademo	Managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
customer	foodmart	External	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
customer_details	xademo	Managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
inventory_fact_1998	foodmart	External	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Physical Name: %EntityName()
Location: hdfs://sandbox.hortonworks.com:8020/apps/hive/warehouse/xademo.db/call_d
Table Properties:
Like Table:
Like View:
Concatenate: ☐
Compact:
Overwrite Table Properties:
Close Cancel Details...

The screenshot shows the 'Hive Table 'call_detail_records' Editor' window with the 'Row Format' and 'Serde and Storage Format' tabs selected. The 'Row Format' section has fields for 'Fields Terminated By' (set to '\t'), 'Fields Escaped By', 'Collection Items Terminated By', 'Map Keys Terminated By', 'Lines Terminated By', and 'Null Defined As'. The 'Serde and Storage Format' section has fields for 'Serde Handler Class' (set to 'org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe'), 'Stored As' (set to 'TEXTFILE'), 'Input Format' (set to 'org.apache.hadoop.mapred.TextInputFormat'), 'Output Format' (set to 'org.apache.hadoop.hive.q1.io.HiveIgnoreKeyText'), 'Stored By', and 'Serde Properties'. A dropdown menu is open for the 'Output Format' field, showing options: TEXTFILE (selected), SEQUENCEFILE, ORC, PARQUET, AVRO, and RCFILE.

Fields Terminated By: \t
Fields Escaped By:
Collection Items Terminated By:
Map Keys Terminated By:
Lines Terminated By:
Null Defined As:
Serde Handler Class: org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe
Stored As: TEXTFILE
Input Format: org.apache.hadoop.mapred.TextInputFormat
Output Format: org.apache.hadoop.hive.q1.io.HiveIgnoreKeyText
Stored By:
Serde Properties:
Close Cancel Details...

Hadoop Hive – “Native” Support (cont’d)



Hadoop Hive – Statistics

Hive Table 'customer' Editor

Enter filter text

Physical Name	Database	Table Type	Temporary	Physical Only	Touch	Generate
call_detail_records	xademo	Managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
customer	foodmart	External	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
customer_details	xademo	Managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
inventory_fact_1998	foodmart	External	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
product	foodmart	External	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
recharge_details	xademo	Managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

General Storage Bucketing and Partition Skewed Options **Statistics** Permission Comment Volumetrics SQL

Table Statistics

Number Of Partitions	
Number Of Files	1
Number Of Rows	10281
Raw Data Size	20911554
Total Size	719866

Must Run:
ANALYZE TABLE ownername.tablename COMPUTE STATISTICS;

Close Cancel Details...

Hive Table 'customer' Column 'Name' Editor

Table: customer

Enter filter text

Physical Name	Domain Parent	Physical Data Type	Primary Key	Physical Only	Foreign Key
customer_id	Number	int	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
account_num	Number	bigint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
name	String	varchar(30)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
fname	String	varchar(30)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Hive **Column Statistics** Constraint Link Indexes Style Comment Where Used UDP History Notes Ex

Number Of Distinct Values	4855
Number Of Null Values	0
Average Column Size	6.463400

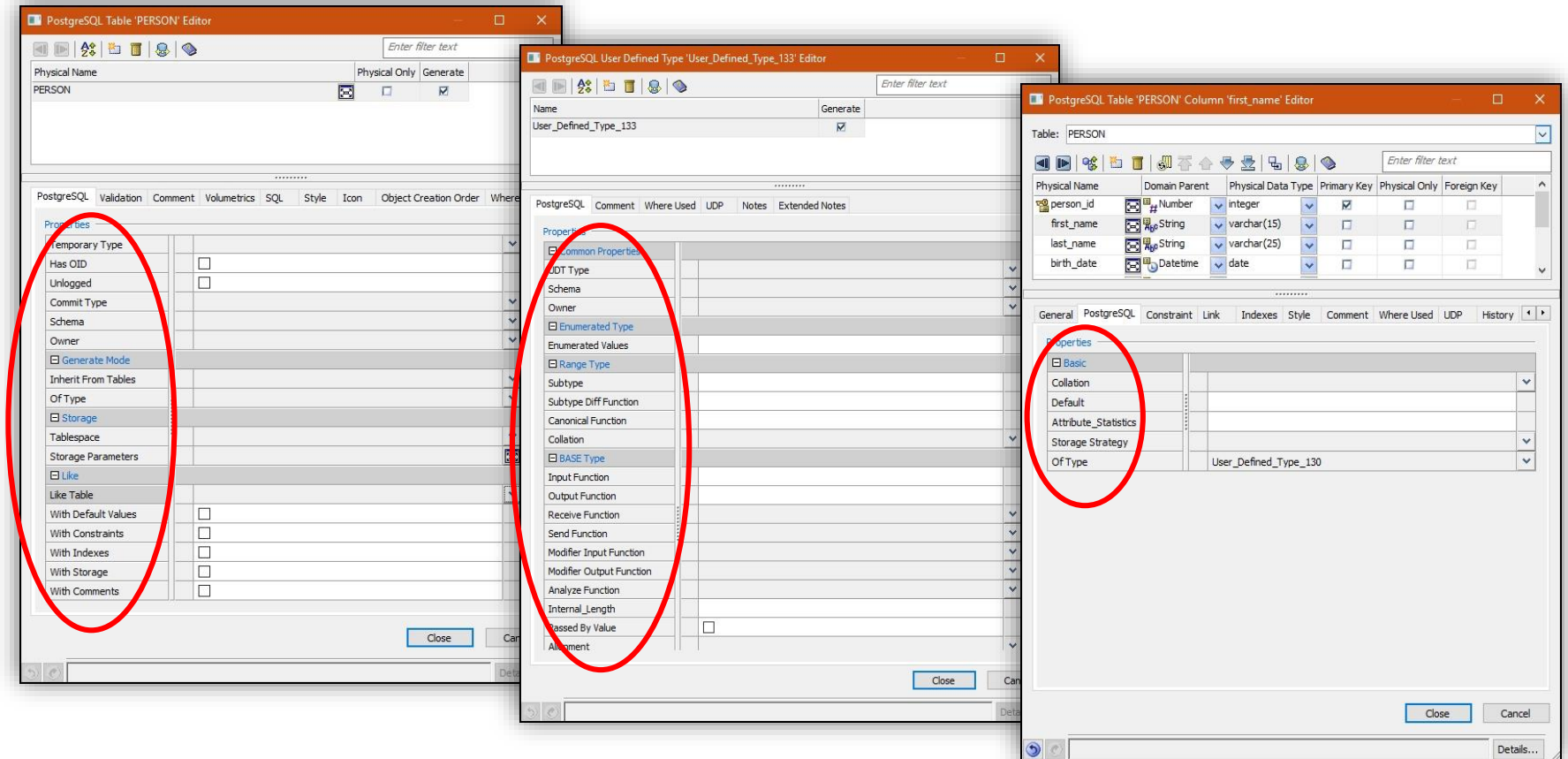
Must Run:
ANALYZE TABLE ownername.tablename COMPUTE STATISTICS FOR COLUMNS;

Physical Data Type Expression

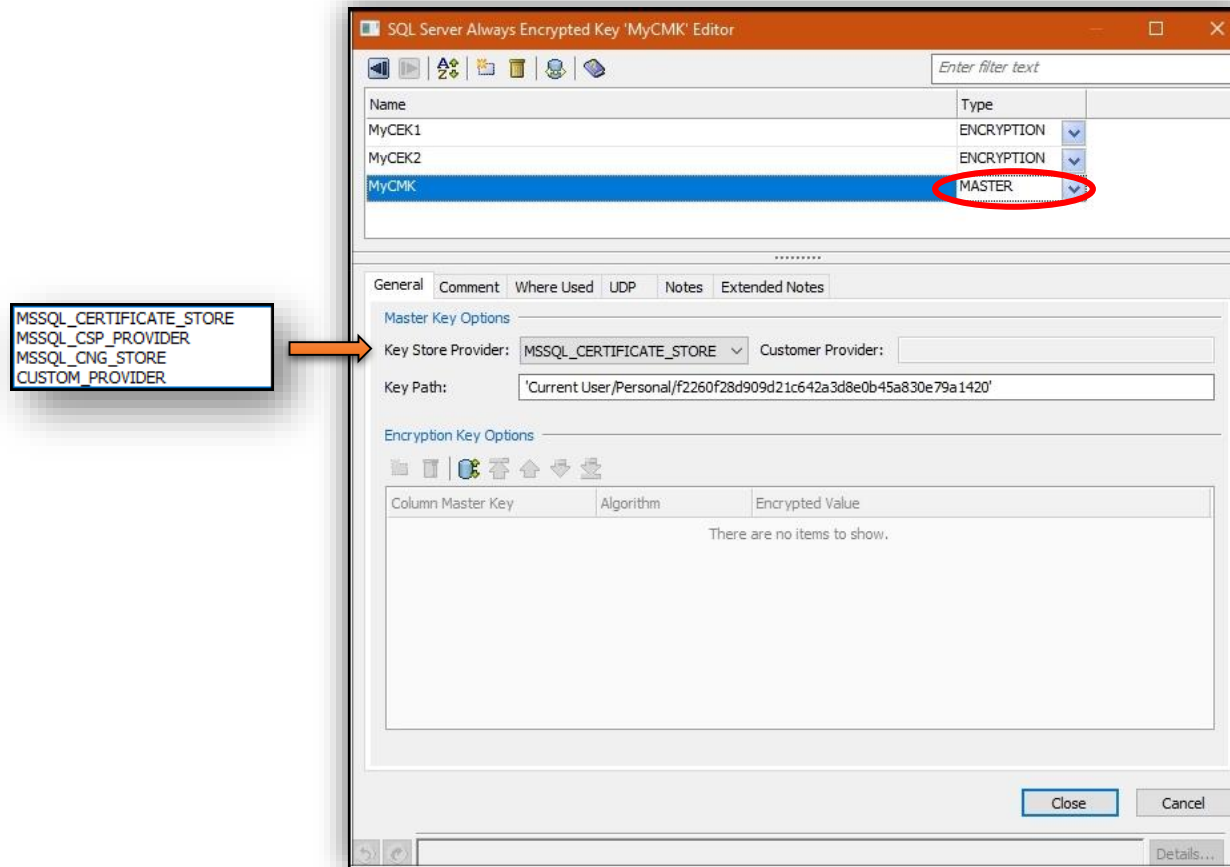
varchar(30)

Close Cancel Details...

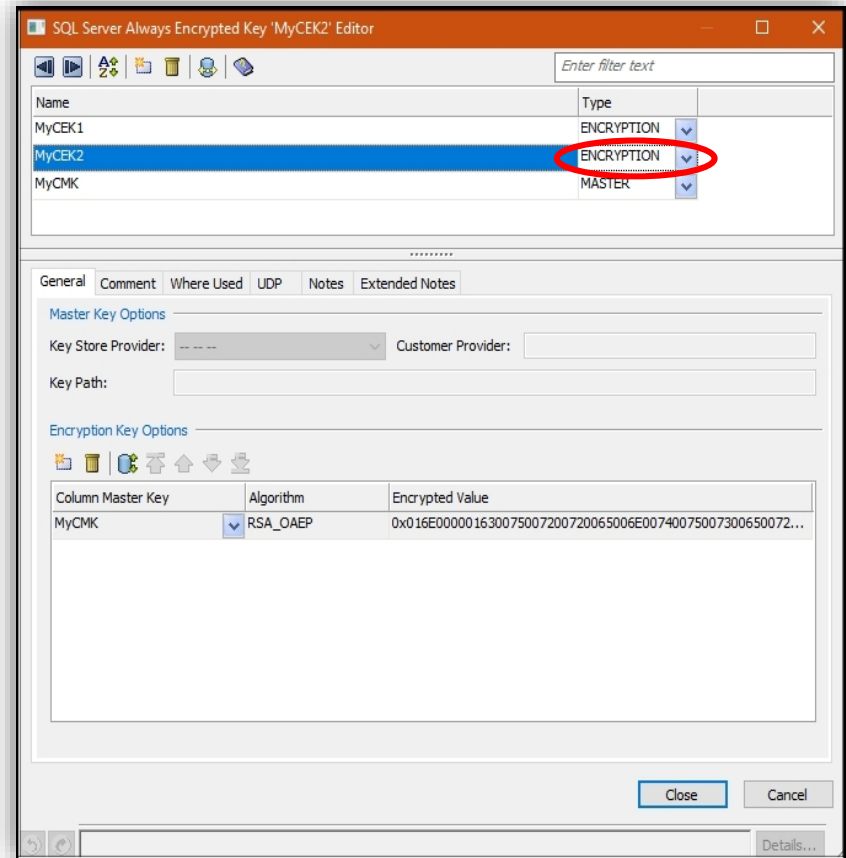
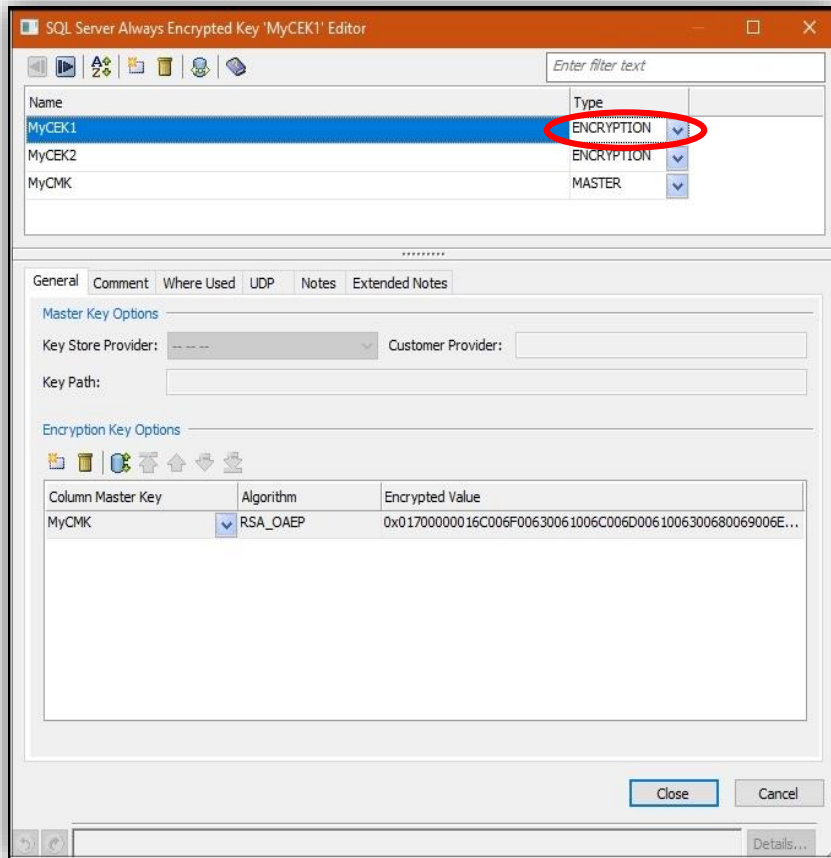
PostgreSQL Support (DBAL Technology)



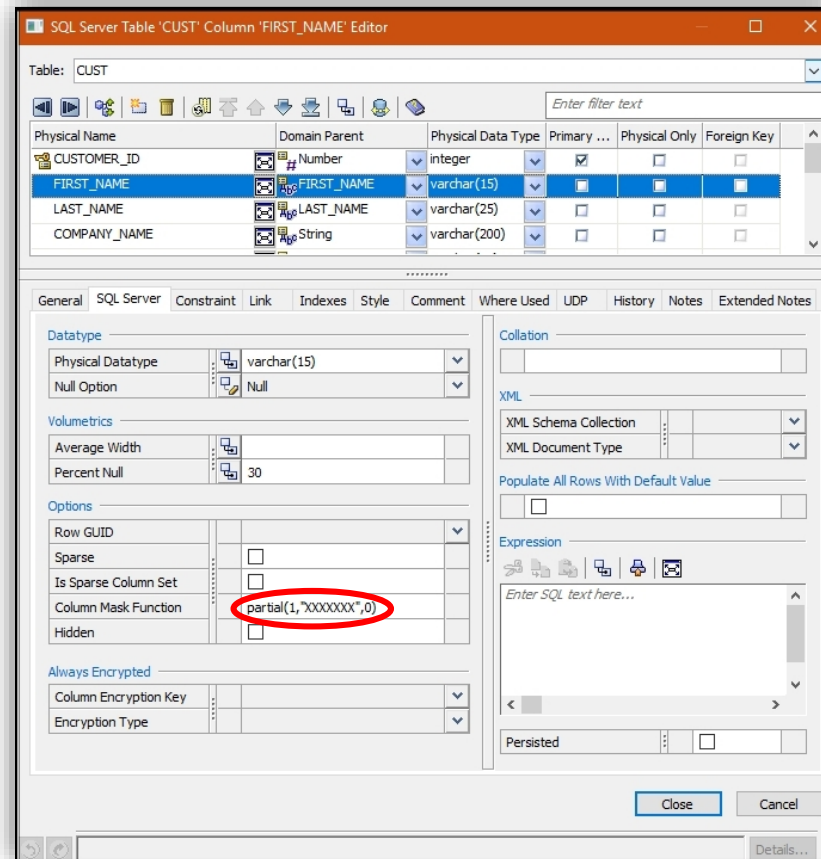
SQL Server SQL Server – “Always Encrypted” (Master Key)



SQL Server SQL Server – “Always Encrypted” (Encryption Keys)



SQL Server – Defining Column Masking



SQL Server – Defining Column Masking and Encryption

SQL Server Table 'CUST' Column 'LAST_NAME' Editor

Table: CUST

Physical Name	Domain Parent	Physical Data Type	Primary ...	Physical Only	Foreign Key
CUSTOMER_ID	Number	integer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FIRST_NAME	FIRST_NAME	varchar(15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LAST_NAME	LAST_NAME	varchar(25)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COMPANY_NAME	String	varchar(200)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General SQL Server Constraint Link Indexes Style Comment Where Used UDP History Notes Extended Notes

Datatype

Physical Datatype: varchar(25)
Null Option: Null

Volumetrics

Average Width:
Percent Null:

Options

Row GUID:
Sparse: ☐
Is Sparse Column Set: ☐
Column Mask Function: default()
Hidden: ☐

Always Encrypted

Column Encryption Key: MyCEK1
Encryption Type: DETERMINISTIC

Collation

XML

XML Schema Collection:
XML Document Type:

Populate All Rows With Default Value

☐

Expression

Enter SQL text here...

Persisted

☐

Close Cancel

SQL Server Table 'CUST' Column 'COMPANY_NAME' Editor

Table: CUST

Physical Name	Domain Parent	Physical Data Type	Primary ...	Physical Only	Foreign Key
CUSTOMER_ID	Number	integer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FIRST_NAME	FIRST_NAME	varchar(15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LAST_NAME	LAST_NAME	varchar(25)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMPANY_NAME	String	varchar(200)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

General SQL Server Constraint Link Indexes Style Comment Where Used UDP History Notes Extended Notes

Datatype

Physical Datatype: varchar(200)
Null Option: Null

Volumetrics

Average Width:
Percent Null: 15

Options

Row GUID:
Sparse: ☐
Is Sparse Column Set: ☐
Column Mask Function:
Hidden: ☐

Always Encrypted

Column Encryption Key: MyCEK2
Encryption Type: RANDOMIZED

Collation

XML

XML Schema Collection:
XML Document Type:

Populate All Rows With Default Value

☐

Expression

Enter SQL text here...

Persisted

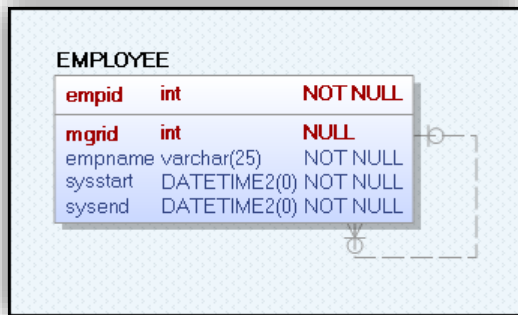
☐

Close Cancel

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SQL Server – Temporal Tables



SQL Server Table 'EMPLOYEE' Editor

Physical Name	Schema	SQL Server Table Type	Durability	Physical Only	Generate As Type	Generate
EMPLOYEE	dbo	Disk Based		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

General | Partitions | ChangeDataCapture | DataCompression | Validation | Permission | Comment | Volumetrics | SQL | Style | Icon

Physical Name: EMPLOYEE

Storage Locations

Filegroup	Text Image	Filestream Fileg...	Filestream Parti...

Change Tracking Options

Change Tracking	Track Columns Updated

Table Options

Lock Escalation Type	Vardecimal Storage Format

FileTable Options

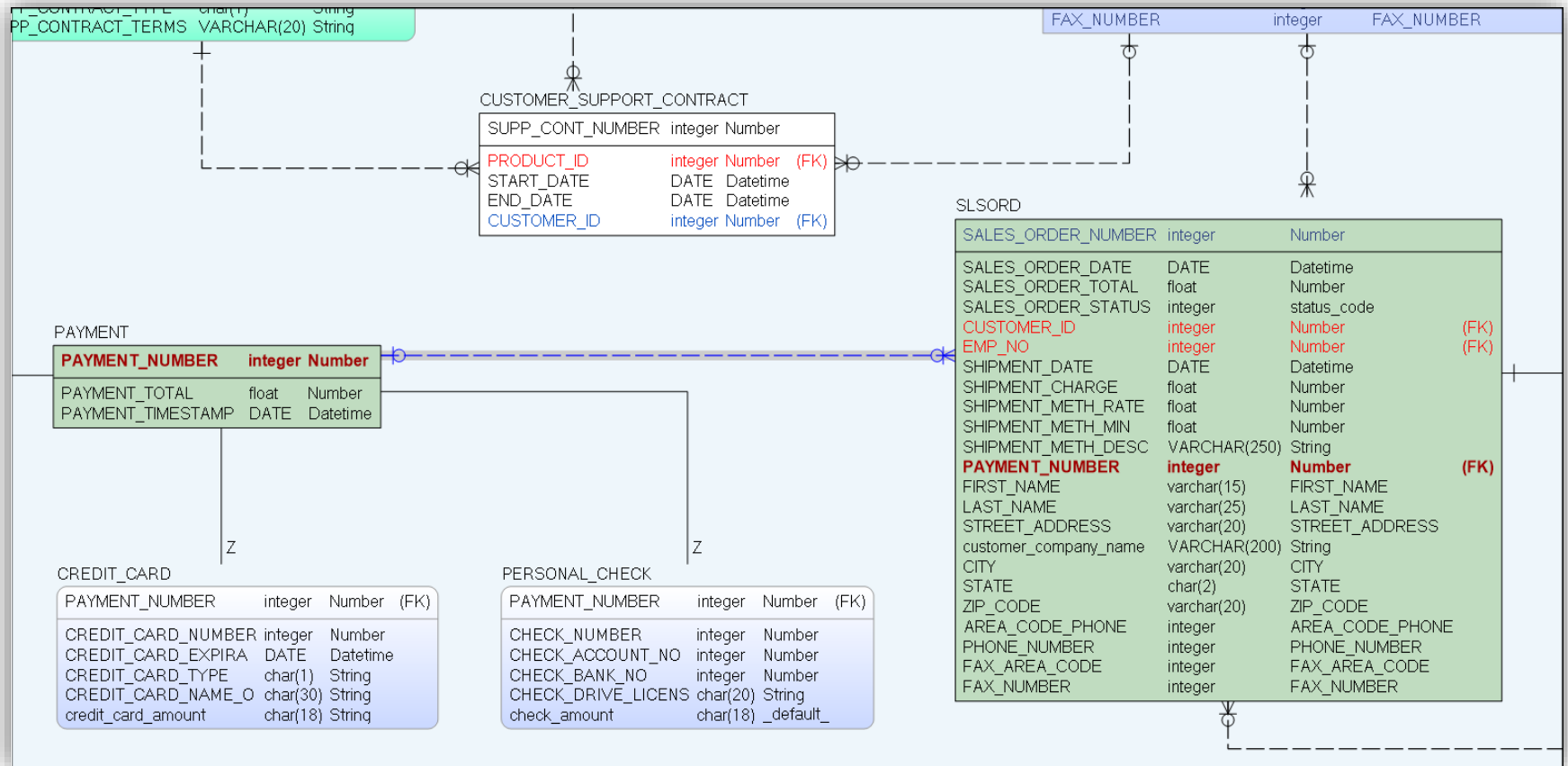
Filetable Directory	Filetable Collate Filename	Filetable Primary Key C...	Filetable Streamid Uniq...	Filetable Fullpath Uniqu...

Temporal Options

Temporal Table	Period Start Column	Period End Column	History Table Name	Data Consistency Check
<input checked="" type="checkbox"/>	sysstart	sysend	dbo.EmployeesHistory	<input type="checkbox"/>

Close Cancel Details...

Relationship Key (“PK/FK”) Auto Highlighting



Relationship Key (“PK/FK”) Auto Highlighting: Options

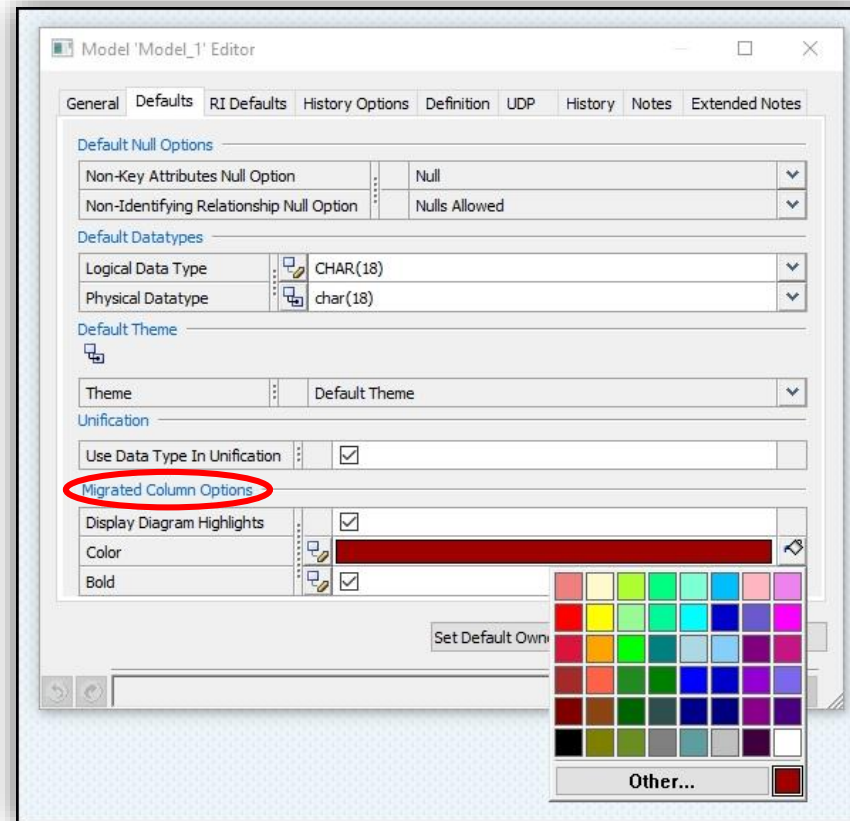
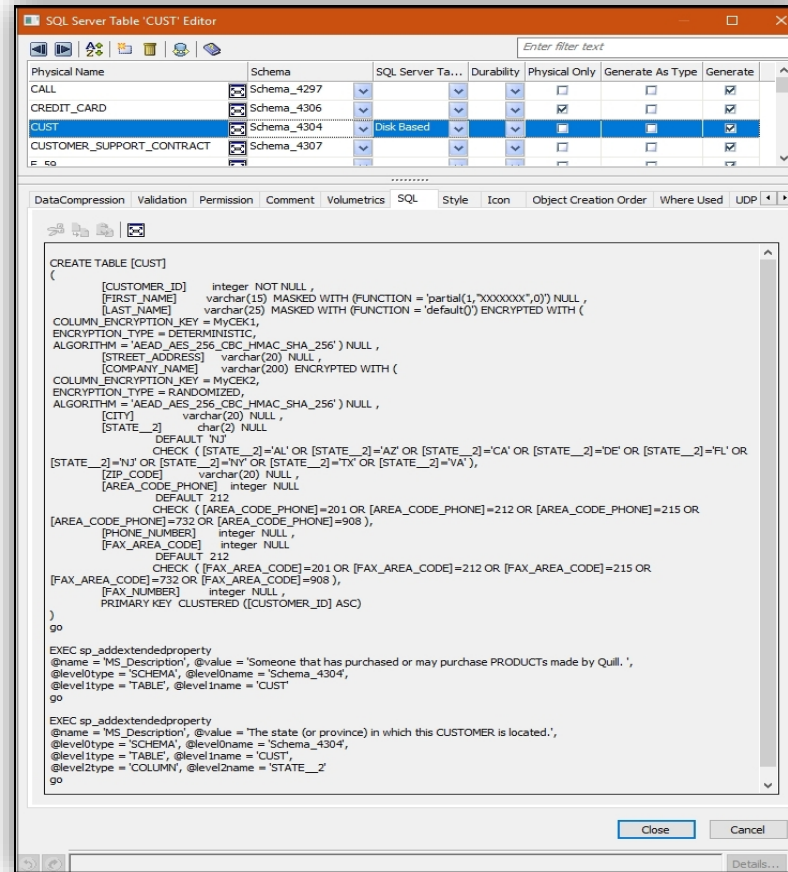


TABLE Guided Editor – SQL Tab



Licensing Changes

Why Change?

- Pre-r9.8 licensing was certificate based and “clunky”
 - Individual license certificates are issued post-purchase
 - Certificates are tied to a physical workstation component
 - Certificate generation process is manual, time consuming, and error prone
 - Certificates can not be moved
- r9.8 licensing provides flexibility
 - License key is provided with software download instructions – no time consuming delays
 - Activation is cloud-based and happens in real-time (internet connection is required)
 - “Offline” activation is also available
 - Users can “return” or “move” licenses between workstations
 - Will be used to universally license all erwin Inc. products (desktop, server-based, SaaS)

r9.8 Licensing

- What's Different?
 - Node-locked licenses do not require specific workstation information (e.g., MAC Id, hostname, IP Address)
 - Concurrent-use licenses do not require a "local" (on-premise) license server
 - Licensing exceptions are not necessary
 - Overall process is simplified
- What's New?
 - Licensing is self-service
 - Vendor intervention is not required (in most cases)
 - Node-locked licenses are easily moved between workstation and/or users

Licensing Info/User Management Dialog

Licensing

Licensing Information

License Code

12345678901234567890

Edition

Workgroup

NSL Version

Library Version: 3.1.0.24 NSL: 13.1.0.24

Computer ID

qgeoA3EcBm/sdh3WfTNgJ

License Type

Subscription, Node-Locked

Activation Type

Activated Online

Online Activations

87/150

Subscription Expiry Date

Fri Jan 12 01:00:00 2018

Maintenance End Date

Lease Expiry Date

Close

Online

Click on the button below to return the license. Application will close after returning the license.

Return

Offline

Click on the button below to do an offline deactivation. Application will close after deactivation.

Deactivation

Long-Term Checkout

Click on the button below to return the LTCO license. Application will close after returning the license.

Return

Expiration Reminder

Timeframes to remind the approaching expirations. Settings below can be over ruled by license.

Within

20

days of Subscription Expiry Date.

Within

20

days of Maintenance End Date.

Refresh

Help

Why Is This Better?

- Easier and streamlined
- No licensing delays
- More flexible
- Enhanced administration
- All products (consistency)

Contact Information

For In-Depth Demonstration of any of the erwin suite

Visit

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