DATABASE DOCUMENTATION DONE THE EASY WAY

Martin Guth

ABOUT ME



- Martin Guth (40)
- Data Swiss Knife at 3C (Experian)
  - BI
  - DBA
  - Compliance



Agenda

1. Document with Extended Properties (SQL Server Database)
2. Make your Documentation accessible on a website (SchemaSpy)



Photo by Sigmund on Unsplash

DOCUMENT WITH EXTENDED PROPERTIES

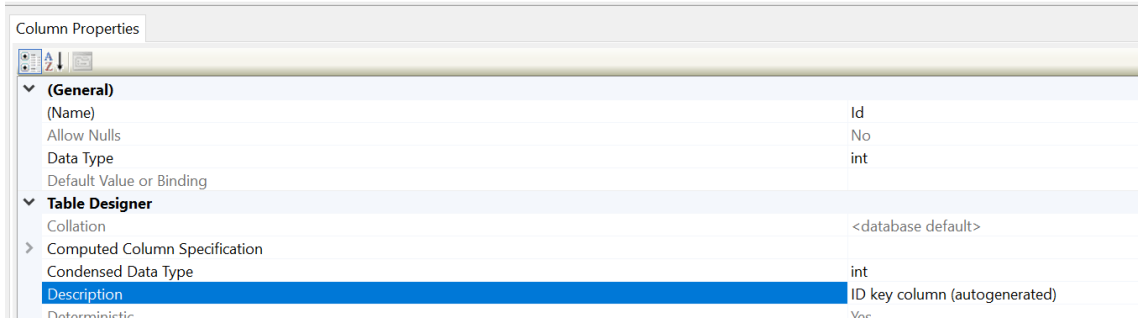
What to document?

- Tables / Views
- Columns
- Other database objects like
  - Stored Procedures
  - Functions
  - Schemas
  - Logins
  - …

Options to document columns

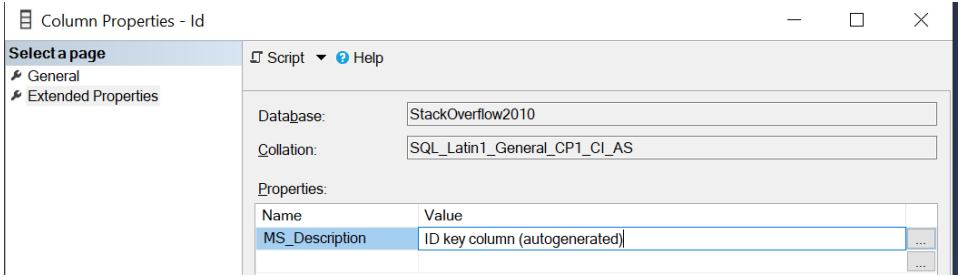
- Table Editor in SSMS (Property: Description)





Options to document columns (2)

- Object Properties (shown here for columns)



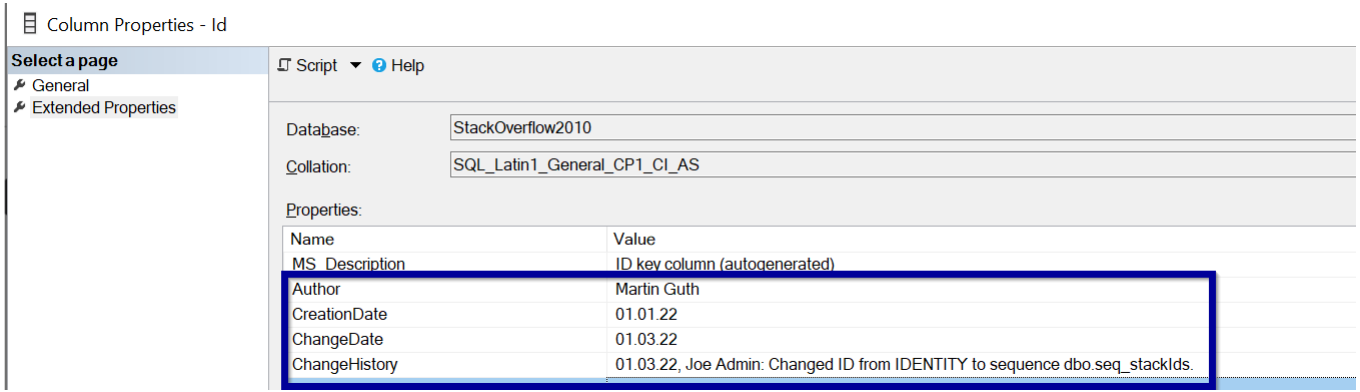
This works for a lot of different object types.

- TSQL-code (a bit clumsy)

```
1  EXEC sys.sp_addextendedproperty
2       @name=N'MS_Description', @value=N'ID key column (auto generated)',
3       @level0type=N'SCHEMA',@level0name=N'dbo',
4       @level1type=N'TABLE',@level1name=N'Badges',
5       @level2type=N'COLUMN',@level2name=N'Id'
```

Can we use our own Property Names?

YES, WE CAN!

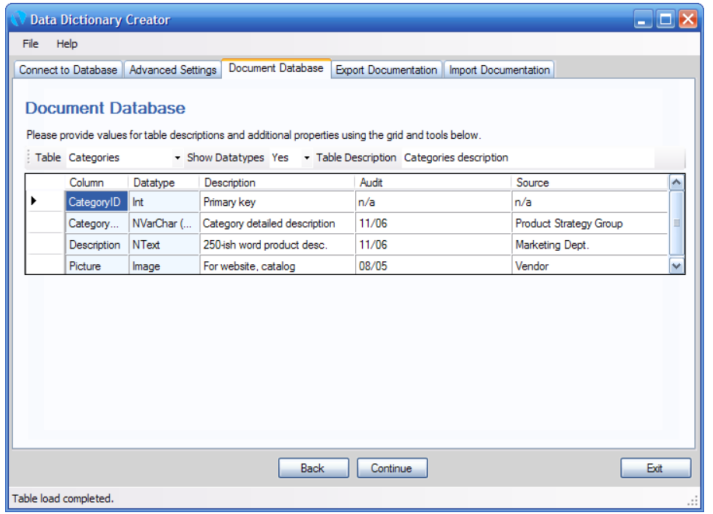


Can we use our own Property Names? (2)

```
USE [StackOverflow2010]
GO
EXEC sys.sp_addextendedproperty @name=N'Author', @value=N'Martin Guth' , @level0type=N'SCHEMA',
@level0name=N'dbo', @level1type=N'TABLE',@level1name=N'Badges', @level2type=N'COLUMN',@level2name=N'Id'
GO
EXEC sys.sp_addextendedproperty @name=N'ChangeDate', @value=N'01.03.22' , @level0type=N'SCHEMA',
@level0name=N'dbo', @level1type=N'TABLE',@level1name=N'Badges', @level2type=N'COLUMN',@level2name=N'Id'
GO
EXEC sys.sp_addextendedproperty @name=N'ChangeHistory', @value=N'01.03.22, Joe Admin: Changed ID from IDENTITY to sequence dbo.seq_stackIds.',
@level0type=N'SCHEMA',@level0name=N'dbo', @level1type=N'TABLE',@level1name=N'Badges', @level2type=N'COLUMN',@level2name=N'Id'
GO
EXEC sys.sp_addextendedproperty @name=N'CreationDate', @value=N'01.01.22' , @level0type=N'SCHEMA',@level0name=N'dbo',
@level1type=N'TABLE',@level1name=N'Badges', @level2type=N'COLUMN',@level2name=N'Id'
GO
```

Useful additional tools

- User Stored Procedure to add default extended properties
- User Stored Procedure to synchronize extended properties between tables
- Data Dictionary Creator





MAKE YOUR DOCUMENTATION ACCESSIBLE

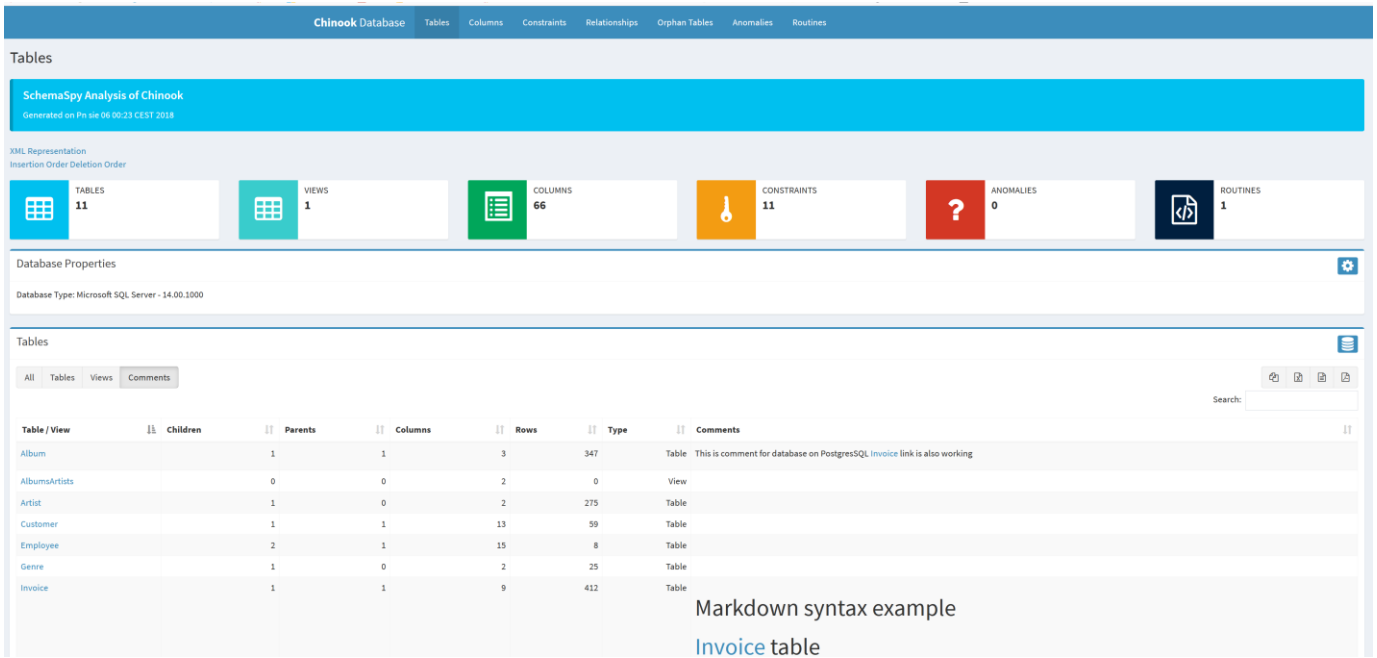
Photo by Maarten van den Heuvel on Unsplash

SchemaSpy

- Free and Open Source
- Credits to John Currier, Rafal Kasa and Nils Petzäll
- Generates awesome HTML documentation
- Runs on Java
- Supports numerous database vendors
- Customizable Templates



Schema Spy Example



Resources

- https://www.sqlservercentral.com/articles/extended-properties-introduction
- https://schemaspy.org/
- http://www.martinguth.de/category/database-documentation/



Photo by Melinda Gimpel on Unsplash

Martin Guth, Heilbronn

@sqlNewRow

martinguth.de

martin_guth@hotmail.com

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Thank you very much for your attention.

Vielen Dank für Eure Aufmerksamkeit.