Sinergija23

Zanimljive MS SQL funkcije za developere

28-30th November, Hotel Crown Plaza Belgrade

Sinergija23

Damir Matešić, MVP

Database Developer @Span.eu

AD 2018 - Leading Data Events in Croatia

AD 2019 - Introduced SQL Saturday in Croatia

AD 2020 - Co-founder & organizer of #Dataweekender...

W: blog.matesic.info

@: dmatesic@gmail.com

in: linkedin.com/in/dmatesic

Sinergija23

Slides & Demos

https://github.com/matesic-damir/presentations

COMPRESS AND DECOMPRESS

- 2016+
- ROW, PAGE…
- Syntax:

COMPRESS (expression)

- nvarchar(n), nvarchar(max), varchar(n), varchar(max), varbinary(n), varbinary(max), char(n), nchar(n), or binary(n) expression.
- GZIP
- INDEKS !?!
- XML, Log-s, Rarely used data

COMPRESS AND **DECOMPRESS**

- Opposite of COMPRESS?
- Syntax:

- DECOMPRESS (expression)
- varbinary(n), varbinary(max), or binary(n)
- **Return** -> data in varbinary(max)

- Casting!!!

STRING_SPLIT – SQL 2016

- Syntax:

STRING_SPLIT (string , separator)

- table-valued function
- splitting string values by a separator

STRING_SPLIT – SQL 2022

- Syntax:

STRING_SPLIT (string , separator [, **enable_ordinal**])

STRING_AGG – SQL 2017

- Syntax:

STRING_AGG (expression, separator) [<order_clause>]

<order_clause> ::=

WITHIN GROUP (ORDER BY <order_by_expression_list> [ASC | DESC])

- string aggregation using a separator

DATE_BUCKET

- Syntax:

DATE_BUCKET(<datepart>, <bucket_width>, <input date/time> [, <origin>])

datePart	Abbreviations
day	**dd, d**
week	**wk, ww**
month	**mm, m**
quarter	**qq, q**
year	**yy, yyyy**
hour	**hh**
minute	**mi, n**
second	**ss, s**
millisecond	**ms**

GENERATE_SERIES

- Syntax:

GENERATE_SERIES(<start>, <stop> [, STEP = <step>])

FIRST_VALUE, LAST_VALUE

- Syntax:

FIRST/LAST_VALUE ([scalar_expression])

OVER ([partition_by_clause] order_by_clause [rows_range_clause])

Sinergija23

IS [NOT] DISTINCT FROM (The Distinct Predicate)

```
DECLARE @dt AS DATE = '20220212';
SELECT orderid, shippeddate
FROM Sales.Orders
WHERE shippeddate = @dt;
```

```
DECLARE @dt AS DATE = NULL; ??
```

GREATEST() & LEAST()

- Syntax:

GREATEST/LEAST (expression1 [,...expressionN])

- same data type or implicitly convert
- NULL
- Types not supported for comparison: varchar(max), varbinary(max) or nvarchar(max) exceeding 8,000 bytes, cursor, geometry, geography, image, non-byte-ordered user-defined types, ntext, table, text, and xml.

DATETRUNC

- Syntax:

DATETRUNC (datepart, date)

Sinergija23

HASHBYTES

- SQL 2005 - ~~MD2, MD4, MD5, SHA, SHA1~~
- SQL 2012 - SHA2_256, SHA2_512

- SQL 2016 - Input: ~~8 000 bytes~~

Sinergija23

sp_invoke_external_rest_endpoint

- HTTPS REST
- Allowed endpoints - *.windows.net, *.azure.net, …

DEMO

Sinergija23

Thank you