

#FABCONSQLCON2026

FABCON

Microsoft Fabric
COMMUNITY CONFERENCE

SQLCON

Microsoft SQL
COMMUNITY CONFERENCE

ATLANTA MARCH 16 - 20, 2026

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Influence the product roadmap.

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Share your feedback directly with our Fabric product group and researchers.

<https://aka.ms/JoinFabricUserPanel>

Join the SQL User Panel



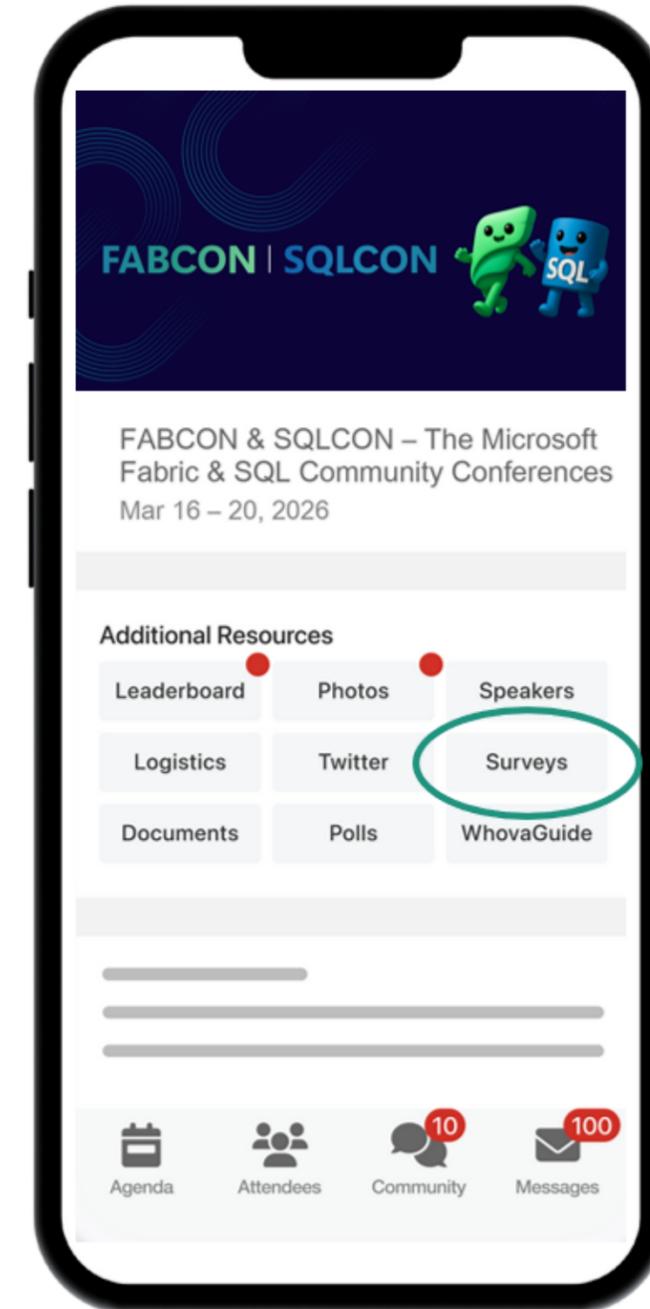
Influence our SQL roadmap and ensure it meets your real-life needs

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How was the session?



Complete Session Surveys in
Whova for your chance to WIN
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SQL Server 2025

Marcelo Adade

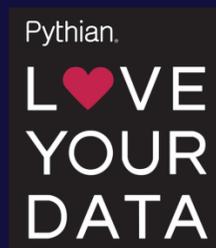
Roberto Fonseca

SQL Server 2025 for DBAs

sp_who2

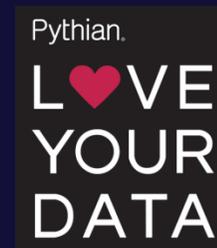
Marcelo Adade

- **Microsoft Data Platform Internal Principal Consultant at Pythian**
- **Database Consultant and Instructor at DBBITS (Sao Paulo)**
- **Microsoft Data Platform MVP**
- **SQL Saturday São Paulo - organizer**
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Session Plan

- SQL Server Evolution
- Key Features in SQL Server 2025
- Performance Improvements
- Security Enhancements
- High Availability and Disaster Recovery
- Automation and DBA Productivity
- Monitoring and Troubleshooting
- Demo Scenarios

SQL Server Evolution

- From a on-premises database to a hybrid data platform
- Fully integrated with cloud and AI services
- Automation-first DBA tooling
- Performance optimization with intelligent features



SQL Server Evolution

Building on a foundation of innovation



SQL Server 2017

SQL Server on Linux
Containers
Adaptive query processing
Automatic Tuning
Graph database
Machine learning services



SQL Server 2019

Data virtualization
Intelligent query processing
Accelerated database recovery
Data classification



SQL Server 2022

Cloud Connected
IQP NextGen
Ledger
Data Lakes
T-SQL enhancements

SQL Server Evolution

Generally Available



SQL Server 2025

The AI-ready enterprise database from ground to cloud

AI built-in

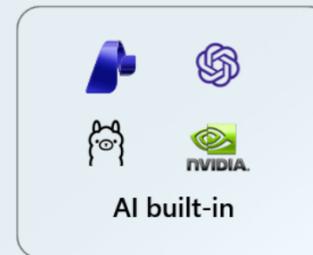
Built for developers

Mission Critical

aka.ms/sqlserver2025

SQL Server 2025

The AI-ready enterprise database from ground to cloud



AI built-in



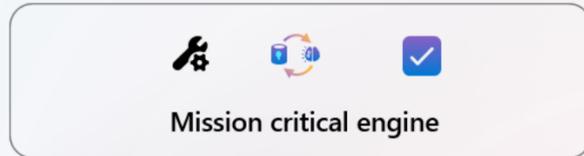
Develop modern data applications



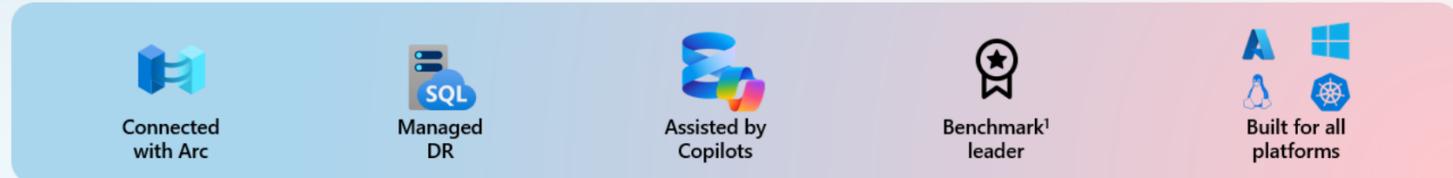
Integrate your data with Fabric



Secure by default



Mission critical engine



Connected with Arc Managed DR Assisted by Copilots Benchmark¹ leader Built for all platforms

¹ All TPC Claims as of 11/18/2025 <https://www.tpc.org/3408>, <https://www.tpc.org/3409>, <https://www.tpc.org/3410>

Basics



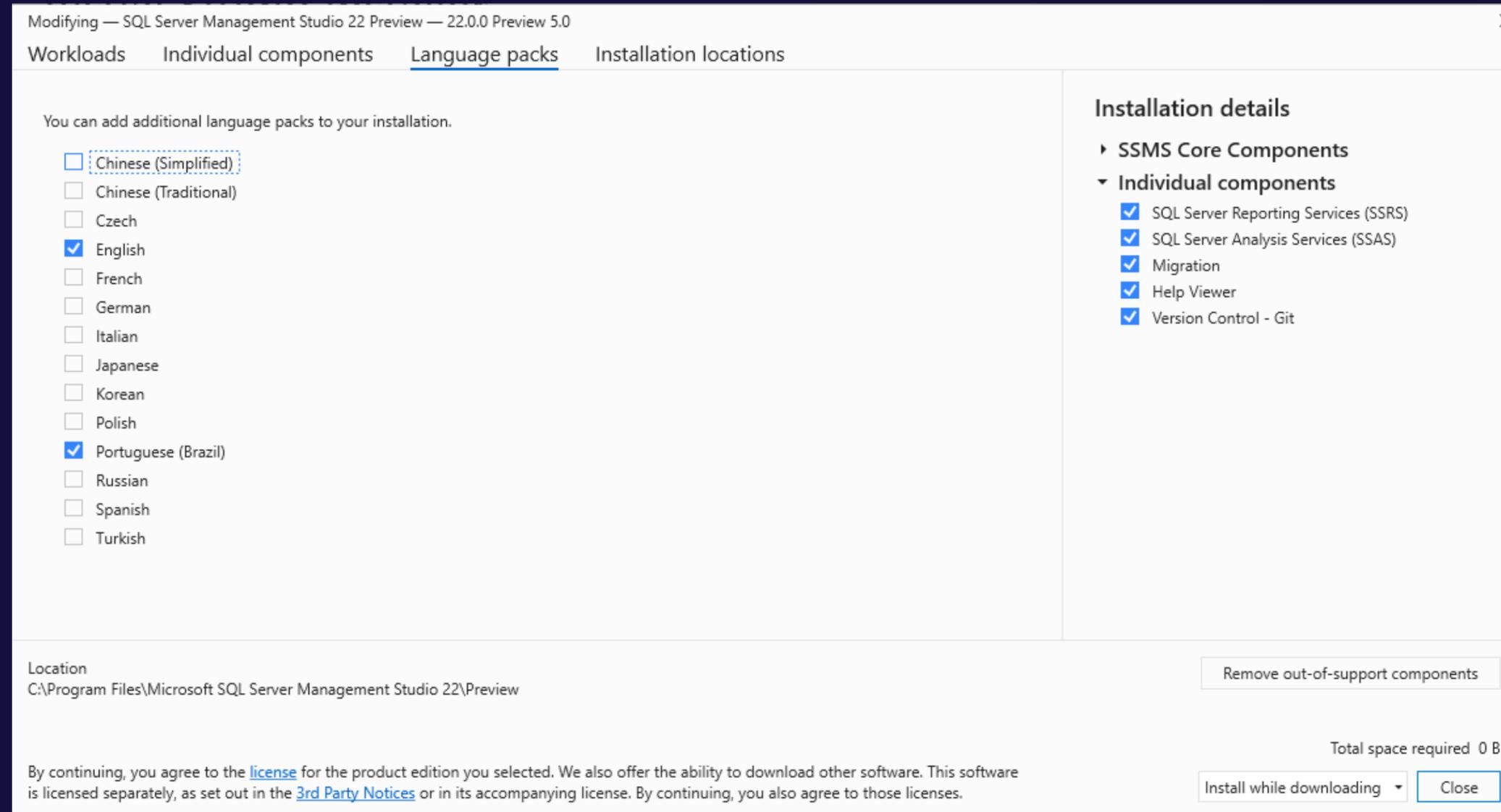
- Brand new SSMS 22 – GA – Current Version 22.3.2
[SQL Server Management Studio | Microsoft Learn](#)
- Uses Visual Studio Installer. No more MSI installation
- Works with SQL Server 2014 and later versions
- Optional Language Packs
- Modern, updated connection dialog
- AI assistance (Preview)
- Query Hint (Preview)
- Compatibility Level – 100 – 170 (default)



- New SQL Server **Standard** Developer Edition
- SQL Server Express Edition max database size to 50GB
- LocalDB (was a Express with Advanced Services feature)
- [Editions and Supported Features of SQL Server 2025 - SQL Server | Microsoft Learn](#)

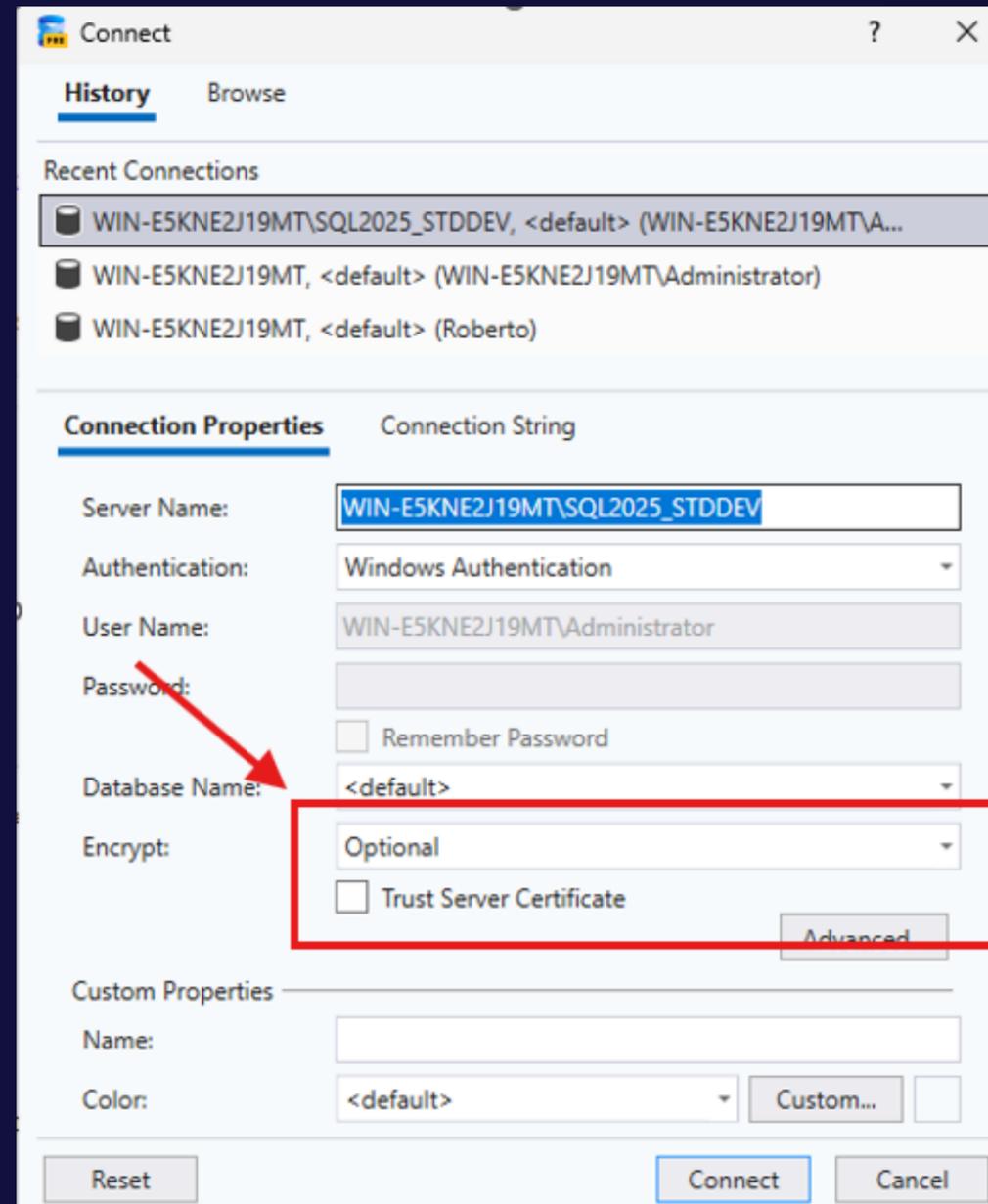
Basics – SSMS 22

- Optional Language Packs



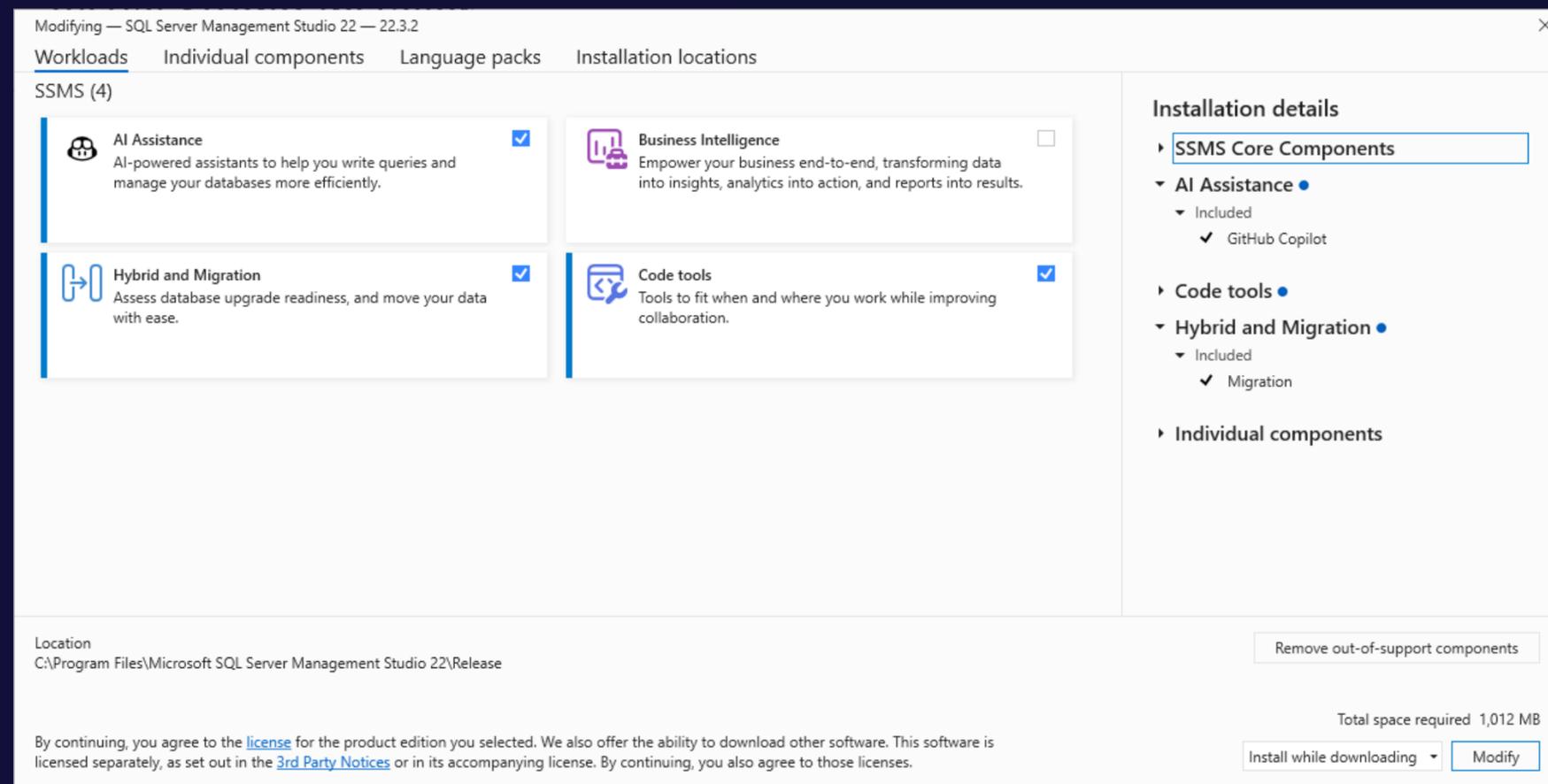
Basics – SSMS 22

- Modern, updated connection dialog



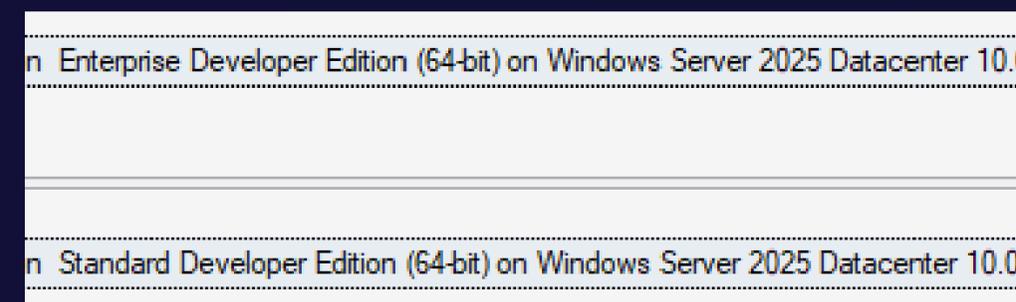
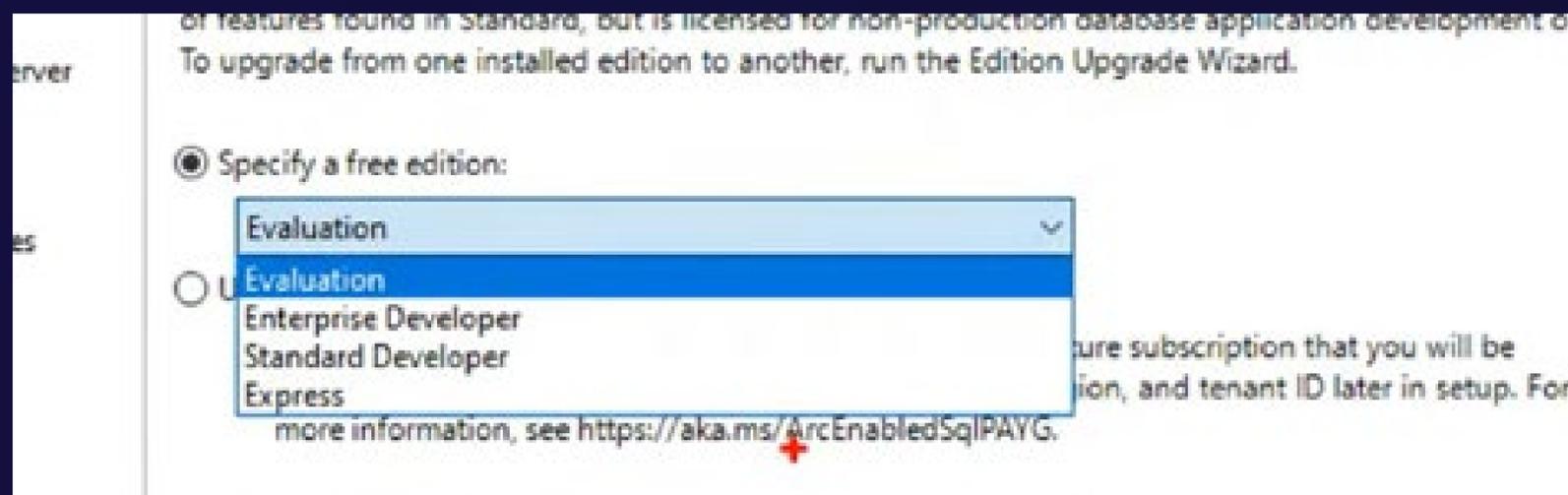
Basics – SSMS 22

- Github Copilot
- AI Assistance
- Query Hint Recommendation tool
- DMA is retired (since July 16, 2025)
- New themes including dark
- JSON Viewer
- Fabric Integration
- Zoom results grid



Basics – SQL Server 2025

- New SQL Server Standard Developer Edition (along with Enterprise Developer Edition)
 - Old SQL Server 2022 Developer Edition and below had same Enterprise Edition features only
 - Two new editions with full feature set from their respective production editions
 - Licensed only for development and testing





Key DBA Features

- Performance
 - Improved Query Optimizer intelligence
 - Better memory management
 - Adaptive Query Processing
 - Faster Indexing and data access
- Security
 - Improved encryption
 - Advanced thread detection
- HA and DR
 - Enhancements to Always On Availability Groups
 - Improved failover performance
- Automation and DBA Productivity
- Monitoring and Troubleshooting
 - Extended Events improvements
 - Query Store enhancements

Key DBA Features

- REST API: `sp_invoke_external_rest_endpoint`
- Regular Expressions
- IQP “improvements”
- Better Query Performance
- Optimized Locking
- ZSTD Backup Compression
- Persisted stats on secondaries
- Query Store on secondaries
- `ABORT_QUERY_EXECUTION` hint
- New `VECTOR` data type – `VECTOR_SEARCH`
- Native JSON and JSON indexes

REST API: sp_invoke_external_rest_endpoint

- Data processed via an Azure Function
- Update a PowerBI dashboard
- Call a local REST endpoint
- Talk to Azure OpenAI Services

```
OpenAI.sql -...strator (64) | sp_invoke_ex...trator (62) | SQLServer_STD...strator (51) | SQLServerVers...strator (93)
2 go
3
4 EXEC sp_configure 'external rest endpoint enabled', 1
5 RECONFIGURE
6 go
7
8 -- Brazilian Holidays
9 -- https://brasilapi.com.br/docs#tag/Feriodos-Nacionais
10
11 declare @results nvarchar(max);
12 exec sp_invoke_external_rest_endpoint @url = 'https://brasilapi.com.br/api/feriados/v1/2025', @response = @results OUTPUT, @method = 'GET'
13
14
15 select @results
16
17 select * from OPENJSON(@results, '$.result') with (date date, name varchar(100))
18 go
19
20 -- Using authentication
21 create database scoped credential [https://httpbin.org]
22 with identity = 'HTTPEndpointHeaders', SECRET = '{"Authorization":"Bearer TokenTest"}'
23 -- Error - Must Create a Master Key
24
25 create master key encryption by password = 'SQLSatOregon2025'
```

100 % | No issues found | Ln: 11, Ch: 1 | (281 chars, 8 lines) | TABS | CRLF | Windows 12

Results | Messages

(No column name)

1	["response":{"status":{"http":{"code":200,"descr...
---	---

	date	name
1	2025-01-01	Confraternização mundial
2	2025-03-04	Camaval
3	2025-04-18	Sexta-feira Santa
4	2025-04-20	Páscoa
5	2025-04-21	Tiradentes
6	2025-05-01	Dia do trabalho
7	2025-06-19	Corpus Christi
8	2025-09-07	Independência do Brasil
9	2025-10-12	Nossa Senhora Aparecida
10	2025-11-02	Finados
11	2025-11-15	Proclamação da Repúbl...
12	2025-11-20	Dia da consciência negra

JSON

- JSON data type
- Store up to 2GB
- .modify operator
- JSON index
- JSON_OBJECTAGG
- JSON_ARRAYAGG
- JSON_CONTAINS
- JSON_QUERY WITH ARRAY WRAPPER

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Regular Expressions

- REGEXP_LIKE
- REGEXP_REPLACE
- REGEXP_SUBSTR
- REGEXP_INSTR
- REGEXP_COUNT
- REGEXP_MATCHES
- REGEXP_SPLIT_TO_TABLE [2]

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