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SQL Server 2025 editions and versions — and how they compare to previous releases. (as of November 2025)

SQL Server 2025 — Versions & Build History

Version / Build	Release / Stage	Notes
17.0.1000.7	RTM / GA (General Availability) — November 18, 2025	This is the official "SQL Server 2025" release.
17.0.925.4	Release Candidate (RC1) — 2025-09-16	Pre-GA release for testing and early adopters.
17.0.900.7	RC0 — 2025-08-21	Pre-GA release stage.
17.0.800.3	Public Preview (CTP 2.1) — 2025-06-16	Early public preview build before RCs.
17.0.700.9 / 17.0.600.9 / 17.0.17.0	Earlier Community Technology Previews (CTP 2.0, CTP 1.5, CTP 1.0) — 2024-11-19 through 2025-04-10	Beta / preview builds.

- The "version number" for SQL Server 2025 is **17.x** (i.e. "SQL Server 17.0").
- The "database compatibility level" associated with SQL 2025 is **170**.
- According to Microsoft's product lifecycle documentation, SQL Server 2025's **mainstream support ends January 6, 2031**, and **extended support ends January 6, 2036**.

🧰 SQL Server 2025 — Editions (Licensing / SKU)

With SQL Server 2025, the edition lineup has been updated. According to Microsoft:

Edition	Description / Key Notes
Enterprise	Full-feature, enterprise-grade edition (as in prior versions) — for large scale, mission-critical workloads.
Standard	General-purpose edition; in 2025, resource limits increased to **up to 32 CPU cores** and **256 GB memory**, and full **Resource Governor** is now available in Standard (allowing e.g. tempdb RG) — a significant upgrade from previous versions.
Standard Developer	A new "flavor" of Standard — free to use for development and testing — with feature parity to Standard edition. This helps developers mirror production Standard environments.
Enterprise Developer	The legacy "Developer" edition, tied to Enterprise features (for testing/dev only). Upgrades from prior Developer edition or equivalent.
Express	Free, lightweight edition — in 2025, database-size limit increased to **50 GB per database**. Also, prior "Express Advanced" has been consolidated into a *single* unified Express.
Evaluation	Trial edition (time-limited), useful for testing before committing to licensing. Upgradable from prior Evaluation or supported older editions.

✅ Notably — Discontinued / Removed Edition

- **Web edition**: Previously available in older versions, but **Web edition is discontinued in SQL Server 2025**. According to the release notes, 2022 was the final version supporting Web edition.
- If you previously used Web edition and are upgrading to 2025, it will migrate (depending on upgrade path) to either Enterprise or Standard edition.

🔄 Upgrade/Compatibility Paths to 2025

According to Microsoft, you can upgrade from the following older versions to SQL Server 2025 (17.x):

- SQL Server 2014 (SP3 or later)
- SQL Server 2016 (SP3 or later)
- SQL Server 2017
- SQL Server 2019
- SQL Server 2022

From any supported edition (Enterprise, Standard, Developer, Express, Business Intelligence, Evaluation), there are defined upgrade paths to the new 2025 editions.

📊 Quick Reference Summary Table

Edition / Build / Name	Version / SKU	Use Case / Notes
SQL Server 2025 (RTM)	17.0.1000.7	Production-ready, officially supported starting Nov 18 2025
Enterprise	2025 Enterprise	Full-featured for large/mission-critical workloads
Standard	2025 Standard	General-purpose; increased core (32) + memory (256 GB) limits, Resource Governor now available
Standard Developer	2025 Standard Developer	Free for development & testing; mirrors Standard edition features
Enterprise Developer	2025 Enterprise Developer	Free for development & testing; mirrors Enterprise features
Express	2025 Express	Free, lightweight; 50 GB per DB size limit — good for small/embedded DBs or dev environments
Evaluation	2025 Evaluation	Time-limited trial, for evaluation or proof-of-concept
(No more Web Edition)	N/A	Web SKU discontinued in 2025; upgrade paths map Web → Standard or Enterprise

📝 What's New / Different in 2025 vs Previous Versions

- SQL Server 2025 is version **17.x** (not to be confused with SQL Server 2017) — this means new "major version" bump.
- Standard Edition's resource limits significantly increased (cores & memory), bringing better performance potential for Standard customers.
- The "Standard Developer" SKU is new — letting dev/test environments match production Standard configuration.
- Express edition improved — DB size per database increased to 50 GB.
- Web edition is removed as of 2025 — organizations using Web need to plan migration to Standard or Enterprise.
- SQL Server 2025 includes many engine improvements: AI-ready features, enhanced JSON and RegEx support, engine performance optimizations, new locking mechanisms, enhanced concurrency, and other modernizations.

SQL Server 2025 vs SQL Server 2022 comparison table — focused on **editions, resource limits, features, licensing differences, and upgrade considerations**.

⭐ SQL Server 2025 vs SQL Server 2022

Full Comparison Table (Editions, Limits, Features)

1. Editions & Availability

Feature / Edition	SQL Server 2022	SQL Server 2025
Enterprise	✓	✓
Standard	✓	✓ (with higher limits + more features)
Developer (Enterprise Dev)	✓	✓
Standard Developer	❌	✓ **(new)**
Express	✓ (10 GB DB limit)	✓ (50 GB DB limit)
Evaluation	✓	✓
Web edition	✓	❌ **(discontinued)**
Big Data Clusters	❌ (removed in 2022)	❌

2. Hardware / Resource Limits (Important for capacity planning)

Resource	SQL Server 2022 Standard	SQL Server 2025 Standard	SQL Server 2022/2025 Enterprise
Maximum CPU cores	24	**32**	OS max
Maximum memory (DB engine)	128 GB	**256 GB**	OS max
Maximum memory (columnstore)	32 GB	**256 GB**	OS max
Max DB size	524 PB	524 PB	524 PB
Express Max DB size	10 GB	**50 GB**	—

3. Key Engine / Feature Differences

Feature Area	SQL Server 2022	SQL Server 2025
Database compatibility level	160	**170**
Cardinality Estimator improvements	Yes	**New advanced CE / adaptive optimization**
Intelligent Query Processing	v2	**v3 (more scenarios: UDF inlining, memory grant tuning)**
Improved JSON functions	Limited	**Native JSON arrays, JSON_TABLE, faster parsing**
New RegEx (regular expression functions)	❌	**✓ (native SQL REGEXP functions)**
AI-integration capabilities	Foundational	**Expanded "AI-ready engine" enhancements**
Always On enhancements	Yes	**Faster failover, improved sync**
TempDB enhancements	Minimal	**Resource Governor now works in Standard**
Security	Ledger, Always Encrypted enhancements	**More granular key management + improved auditing**

4. Edition-Specific Feature Differences

Feature	2022 Standard	2025 Standard	Notes
Resource Governor	❌	✓ **Added**	Major upgrade for Standard licensing
PolyBase	✓	✓	—
In-Memory OLTP	Limited	Limited	—
Transparent Data Encryption	✓	✓	—
Columnstore indexes	✓	✓	Memory limit now higher in 2025

5. Management, Performance, and Dev Improvements

Area	SQL Server 2022	SQL Server 2025
Query Store	Enabled by default	**Smarter auto-tuning + rollback protection**
Extended Events	Mature	**Extended coverage for waits, memory, JSON ops**
Developer environment	Developer edition only	**Standard Developer + Enterprise Developer**
TempDB performance	Good	**Significantly improved for mid-tier setups**
Log throughput	Solid	**Higher parallel log writer + new flush pipeline**

6. Licensing Changes

Topic	SQL 2022	SQL 2025
Core licensing	Same	Same
Web edition	Available	**Removed**
Standard Developer SKU	❌	✓ New
Feature uplift in Standard	Moderate	**Major (RG, higher limits)**

7. Upgrade / Migration Differences

Migration Aspect	SQL 2022	SQL 2025
Can upgrade from SQL 2014 → 2022	✓	✓
Can upgrade from SQL 2022 → 2025	—	✓
Web edition upgrade path	Stays Web	**Upgrades to Standard or Enterprise**
Compatibility level after upgrade	160	170

🧩 What DOESN'T Change

These features remain consistent across 2022 → 2025:

- Licensing model (per core, CAL model, etc.)
- HA / DR availability groups structure
- SQL Agent, CDC, Replication, Mirroring support
- Windows / Linux availability
- Encryption model (TDE, Always Encrypted)

🎯 **Summary (Executive View)**

Area	Winner	Why
Performance	**SQL 2025**	New CE, faster JSON, improved parallelism
Standard Edition Value	**SQL 2025**	Higher resource limits + Resource Governor
Developer Experience	**SQL 2025**	Standard Developer SKU added
Express Edition	**SQL 2025**	DB size from 10 GB → **50 GB**
Feature Set	**SQL 2025**	JSON, RegEx, IQP v3, engine improvements
Upgrade Simplicity	Tie	Similar process

✅ 1. Full Side-by-Side Edition Comparison Matrix

SQL Server 2022 vs SQL Server 2025 — Enterprise vs Standard vs Express
This is a clean, high-resolution matrix that can be used for planning, licensing decisions, or upgrade discussions.

📊 SQL Server 2022 vs 2025 — Edition Comparison Matrix

A. Core Features & Engine Capabilities

Feature / Capability	2022 Express	2022 Standard	2022 Enterprise	2025 Express	2025 Standard	2025 Enterprise
Database Engine	✓	✓	✓	✓	✓	✓
Max Database Size	**10 GB**	524 PB	524 PB	**50 GB**	524 PB	524 PB
Max Compute Cores	1 socket / 4 cores	**24 cores**	OS max	1 socket / 4 cores	**32 cores**	OS max
Max SQL Memory	1.4 GB	128 GB	OS max	1.4 GB	**256 GB**	OS max
Max Columnstore Memory	N/A	32 GB	OS max	N/A	**256 GB**	OS max
Table Partitioning	✗	✓	✓	✗	✓	✓
PolyBase	✓ (limited)	✓	✓	✓ (limited)	✓	✓
In-Memory OLTP	✗	Limited	✓	✗	Limited	✓
Columnstore Indexes	✗	✓	✓	✗	✓	✓
Query Store	✓	✓	✓	✓	✓	✓
Intelligent Query Processing	✓	✓	✓	✓	**IQP v3**	**IQP v3**
JSON Functions	Basic	Basic	Basic	**Advanced JSON + JSON_TABLE**	**Advanced**	**Advanced**
Regular Expressions (REGEXP_)	✗	✗	✗	✓	✓	✓

B. High Availability / Disaster Recovery

HA / DR Feature	2022 Express	2022 Standard	2022 Enterprise	2025 Express	2025 Standard	2025 Enterprise
Basic Availability Groups	✗	✓	—	✗	✓	—
Advanced Availability Groups	✗	✗	✓	✗	✗	✓
Readable Replicas	✗	✗	✓	✗	✗	✓
Failover Cluster Instances	Limited	✓	✓	Limited	✓	✓
Distributed AGs	✗	✗	✓	✗	✗	✓
Online Index Rebuild	✗	Partial	✓	✗	Partial	✓
Accelerated Database Recovery	✓	✓	✓	✓	✓	✓

C. Security & Compliance

Security Feature	2022 Express	2022 Standard	2022 Enterprise	2025 Express	2025 Standard	2025 Enterprise
Transparent Data Encryption (TDE)	✗	✓	✓	✗	✓	✓
Always Encrypted	✓	✓	✓	✓	✓	✓
Ledger (Blockchain tables)	✓	✓	✓	✓	✓	✓
Row-Level Security	✓	✓	✓	✓	✓	✓
Dynamic Data Masking	✓	✓	✓	✓	✓	✓
Enhanced Key Management	Basic	Basic	Advanced	Basic	**Improved**	**Improved**

D. BI, Analytics, ETL

Capability	2022 Express	2022 Standard	2022 Enterprise	2025 Express	2025 Standard	2025 Enterprise
SSIS (on-server)	Limited	✓	✓	Limited	✓	✓
SSAS Tabular	Limited	Limited	✓	Limited	Limited	✓
SSRS	Separate install	Separate install	Separate install	Separate install	Separate install	Separate install
Machine Learning Services	✗	Limited	✓	✗	Limited	✓

E. Resource Governor & Performance Workload Control

Feature	2022 Express	2022 Standard	2022 Enterprise	2025 Express	2025 Standard	2025 Enterprise
CPU/Memory Resource Governor	✗	✗	✓	✗	✓	✓
IO Resource Governance	✗	✗	✓	✗	✓	✓
TempDB Governance	✗	✗	✓	✗	✓	✓

F. Licensing & Edition Notes

Licensing Area	2022 Standard	2025 Standard	2022 Enterprise	2025 Enterprise	2022 Express	2025 Express
Core Licensing	✓	✓	✓	✓	N/A	N/A
CAL Licensing Option	✓	✓	✗	✗	N/A	N/A
Web Edition Available	✓	✗	✓	✓	✓	✓
"Standard Developer" SKU	✗	✓ **(New)**	—	—	—	—

⭐ **Key Takeaways** → Summary of biggest differences **from 2022 → 2025**:

Standard Edition: HUGE upgrade

- CPU limit: **24 → 32 cores**
- Memory: **128 GB → 256 GB**
- Columnstore memory: **32 GB → 256 GB**
- **Resource Governor added** (previously Enterprise-only)

Express Edition: major capacity boost

- DB size **10 GB → 50 GB**

New features

- Native **REGEXP** functions
- Full **JSON_TABLE** + faster JSON
- Intelligent Query Processing **v3**

- Faster logging + concurrency improvements
- AI-ready engine enhancements

Edition changes

- **Web Edition discontinued**
- New **Standard Developer** edition introduced

✅ 2. SQL Server 2022 → SQL Server 2025 Migration Planning Checklist

This is a practical, production-ready checklist you can use as a template.

🚀 SQL Server 2022 → SQL Server 2025 Migration Checklist

1. Pre-Migration Assessment

✓ Confirm OS compatibility (Windows Server/Linux version)
✓ Check hardware requirements & memory/CPU alignment
✓ Review SQL Server features used (ensure supported in 2025)
✓ Review edition changes (e.g., Web edition discontinued)
✓ Inventory all instances, databases, SQL Agent jobs
✓ Inventory linked servers, SSIS packages, SSRS, SSAS
✓ Validate that third-party applications support SQL 2025
✓ Review breaking changes & deprecated features
✓ Confirm storage performance requirements

2. Database Compatibility Review

✓ Check database compatibility level (160 in 2022)
✓ Plan for **170 compatibility** after upgrade
✓ Test queries for optimizer behavior differences
✓ Enable Query Store to capture baselines
✓ Capture wait stats, top queries, regressions

3. Application & Workload Testing

✓ Test using 2025 Preview/Dev/Standard Dev edition
✓ Validate ODBC/OLEDB/ADO.NET driver compatibility
✓ Test ETL/SSIS package execution
✓ Validate replication & availability group configurations
✓ Test JSON, XML, T-SQL, triggers, CLR
✓ Validate Full-Text Search behavior

4. HA / DR Planning

✓ Validate cluster/AG version support
✓ Check AG replicas version upgrade path
✓ Review backup/restore strategy
✓ Validate log shipping
✓ Validate DR site connectivity
✓ Review failover testing plan

5. Upgrade Strategy

Choose one:

- **In-place upgrade** (fast, simpler)
- **Side-by-side migration** (safer, recommended)
- **Backup/Restore** (classic approach)
- **Log shipping to new version**
- **AG based rolling upgrade**

Checklist:

✓ Perform full backup before migration

✓ Test restore on new version

✓ Validate encryption & certificates

✓ Validate SQL Agent jobs

✓ Validate server-level objects (logins, credentials, linked servers)

6. Post-Migration Tasks

✓ Set compatibility level to 170 (optional at first)

✓ Enable Query Store (if not already enabled)

✓ Monitor query regressions

✓ Update statistics

✓ Rebuild indexes

✓ Validate performance baselines

✓ Validate application functionality

✓ Configure backups and maintenance jobs

7. Documentation & Rollback Plan

✓ Document all configuration changes

✓ Keep a fallback snapshot/backup

✓ Validate rollback path (restore to 2022 if needed)

✓ Share final checklist with stakeholders