

What Is New in Recent Versions of Python

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August 23, 2024

Python Guild @ Gen™

- The talk is a live demo accompanied by examples:

<https://github.com/s3rvac/talks/tree/master/2024-08-23-What-Is-New-in-Recent-Versions-of-Python/examples>

- The primary focus is on new features
- The selection is opinionated ;-)

What Python Versions Are We Going To Cover

- Python 3.10 (released in October 2021)
- Python 3.11 (released in October 2022)
- Python 3.12 (released in October 2023)
- Python 3.13 (to be released in October 2024)

- Structural pattern matching
- New type union operator

- Exception groups and `except*`
- Exceptions can be enriched with notes
- A built-in module for parsing of TOML files: `tomllib`

- Type parameter syntax
- `typing.override()` decorator
- Syntactic formalization of f-strings

- A better interactive interpreter
- Experimental support for running without GIL
- Experimental JIT compiler

Primary References

- [What's New in Python 3.10](#)
- [What's New in Python 3.11](#)
- [What's New in Python 3.12](#)
- [What's New in Python 3.13](#)
- [Python Enhancement Proposals \(PEPs\)](#)