

Q12 Quality Assurance Landscape

What Is Q12?

More information about Q12
<https://www.mgm-tp.com/q12.html>

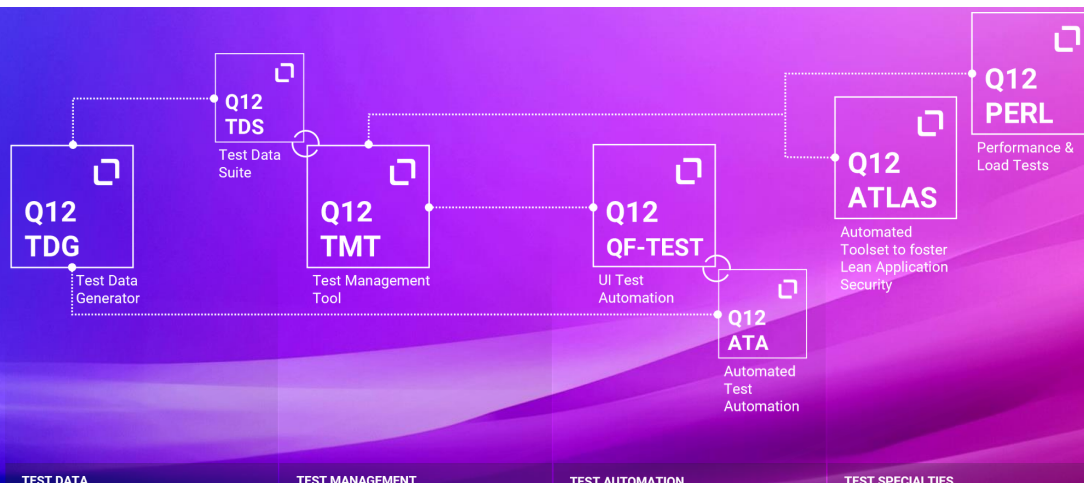
Efficient quality assurance for enterprise software is hardly conceivable without specialized tools. They structure processes, reduce manual effort, and create the basis for reproducible results. At mgm, the Q12 Quality Assurance Landscape forms the core of our QA tools. The company's own

toolchain was developed based on the requirements of real projects and covers all central areas of modern QA – from test planning and automation to security, performance, and accessibility.

How Is Q12 Structured?

Q12 comprises several specialized tools that can be used individually or flexibly combined. Some of them are specifically designed for applications based on the [A12 development platform](#), while the others can be used in all enterprise applications (A12 and non-A12).

- A12-specific
 - Q12-TDS (Test Data Suite)**
 Functional testing of data models with a focus on rules, field definitions, mappings, and calculations in model-based A12 applications
 - Q12-TDG (Test Data Generator)**
 Automatic generation of valid test data for complex forms in model-based A12 applications
 - Q12-ATA (Automated Test Automation)**
 Automated generation of code for use in UI test automation in model-based A12 applications
- Q12-TMT (Test Management Tool)**
 Central platform for documenting test cases and reporting on test execution
 - Q12-QF-TEST (UI Test Automation)**
 Creation, management, and execution of tests for automated testing of graphical user interfaces
 - Q12-ATLAS (Automated Toolset for Lean Application Security)**
 Orchestration of analysis tools for automated application security testing
 - Q12-PERL (Performance & Load Tests)**
 Analysis, execution, and monitoring of performance and load tests



What Is Special About Q12?

- **Model-driven automation**

Model-based low-code development is changing the QA process and requires specialized tools. Q12 offers tailor-made solutions that are specifically designed for A12 applications. They embed quality assurance early on in the development process in an automated and highly efficient manner.

- **Customizable tooling**

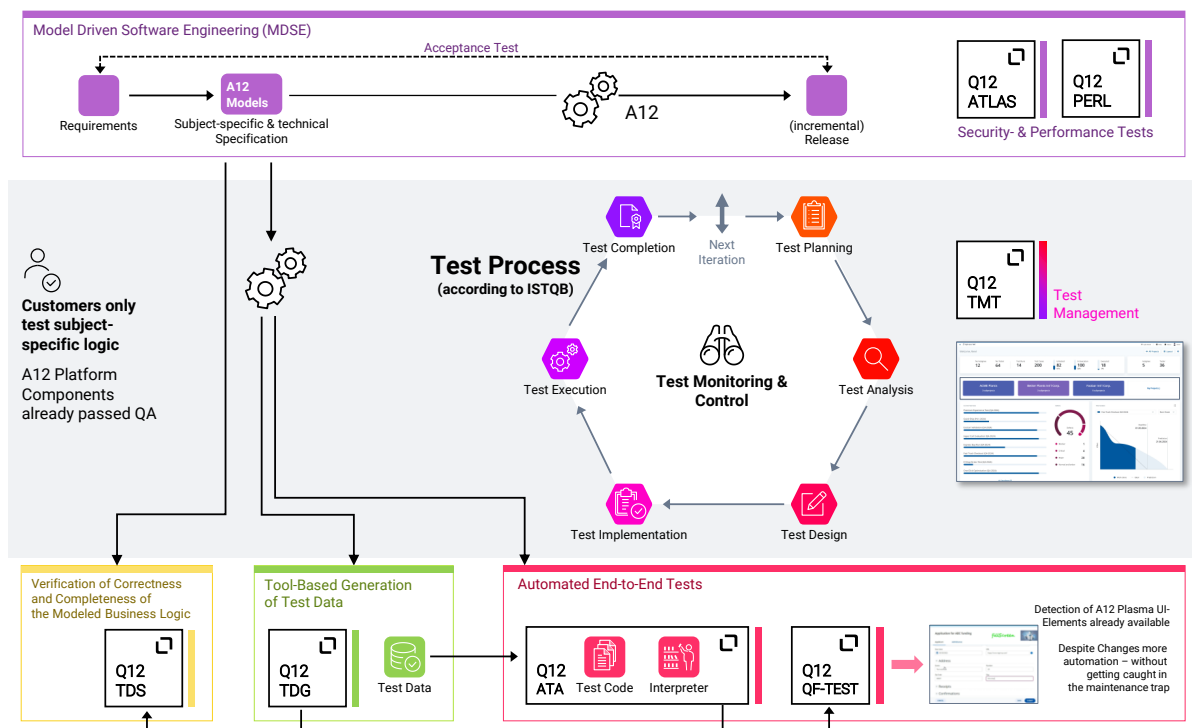
Q12 is expandable. The tools can be integrated with third-party tools. If necessary, mgm can adapt the tools to the organizational or technical specifics of the customer's organization or add specific features.

- **Control framework for AI use**

AI and low code combine to deliver enormous productivity benefits. Q12 establishes an effective control and governance framework for AI-based A12 applications and minimizes the risks of AI-related errors and hallucinations.

- **Tried and tested in enterprise projects**

All tools in Q12 have been developed based on the needs and requirements of large enterprise software projects. They address all the key challenges in quality assurance for mature business applications.



For Which Application Scenarios Is Q12 Designed?

- **A12 applications**

Thanks to specialized tools, Q12 opens up the principles of model-based software development for quality assurance. In conjunction with the universally applicable tools, this creates a holistic QA solution in the A12 environment. The clever use of models shifts QA activities to early project phases, reduces manual work, and creates a level of automation that is difficult to achieve in traditional projects.

- **Enterprise software without A12 reference**

For enterprise applications outside the A12 environment, the universal Q12 tools provide a powerful foundation for modern quality assurance across all development phases. They support the quality assurance of complex business and web applications through integrated test management, automated test execution, and intelligent analysis functions in the areas of performance, load, and security.

