

Quality as a Service

[DTH]



Improves the quality of enterprise software by adopting a structured, service-oriented approach to software testing

Main benefits

Improves requirements checking and code quality, avoids regression

Quality as a Service is S2E's service-oriented approach to software testing to help our partners adopt a structured process to ensure the match between functional requirements and business application development. Adopting a dedicated software testing service means ensuring verified, higher quality release cycles that meet specific functional requirements, avoiding costly rollback and regression activities.

Scope

Medium and large-sized companies with teams dedicated to the development of proprietary applications both for internal use and for end customers.

These companies design and implement customized software applications that must meet functional requirements consistent with business objectives, whose quality and adherence to the requirement is fundamental for an effective user experience that does not manifest unexpected product behaviour.

Challenges facing companies

The difficulty of justifying investments aimed at guaranteeing the quality of the product means that testing activities are carried out in an unstructured and non-prioritized manner, entrusted to the same development team that hardly manages to fully meet the requirement. In addition, the verification of the product's adherence to functional requirements is often entrusted to the business that, although mastering the requirement, is not specialized in software testing and does not have the necessary time to adequately cover all the necessary cases.

The advantages offered

Having a QaaS service ensures that IT managers and product owners have at their disposal specialized and certified professionals to verify what is developed by developers, allowing the latter to concentrate exclusively on development. End users of the software product benefit from a superior user experience, adhering to expectations, with reduced risk of inoperability and errors.



S2E: approach and proposed methodology

S2E's Quality as a Service is delivered by professionals capable of verifying and mastering both the technical and functional aspects crucial in verifying the quality of software development, integrating nimbly into the development and release processes adopted by the client company.

Thanks to a dynamic and proactive approach, we encourage the use of industry best practices for the creation and execution of systematic tests capable of guaranteeing high coverage that grows over time. Through testing activities, we document and follow the evolution of the requirement while generating documentation useful to increase and preserve the client's knowledge base.

The service makes extensive use of automation and automatic tests for the systematic and massive repetition of tests capable of accelerating the emergence of criticalities in a timely manner.

Future development benefits

The main advantages of Quality as a Service are:

1. Rapid identification and resolution of defects within the application before production releases.
2. Automated testing to maximize the effectiveness of repetitive cases.
3. Reduced load on the development team of software testing activities.
4. Drafting of documentation in order to maintain application know-how.

Offer model

Quality as a Service is structured with the presence of a focal point, to whom our partners can turn for any need, and the operation is entrusted to engineers (the number of engineers depends on the volume of activity).

In the on-boarding phase of the service, we start an analysis phase aimed at understanding the typical features of the development cycle, such as the frequency of release cycles, the technologies involved, and the types of tests required, and we check that the documentation provided to us (if present) is up-to-date, otherwise we update it. At the offer level, the service provides a guaranteed minimum bandwidth or basic stream that can be increased, with appropriate notice, to be able to handle any work peaks (variable bandwidth or variable stream).

Meet the team: our expertise

The Quality as a Service is provided by certified professionals, who are experts both in the management of automatic and manual software testing, quality assurance and business support activities, and in the planning and organisation of structured activities that are flexible according to the scope of the service offered and the customer's needs.



Our service levels

Quality as a Service activities are provided in accordance with the service levels agreed with the customer. Due to the typicality of the service, third party actors are often included in their definition, such as the development team and the customer structure, whose involvement is fundamental to the improvement of software quality through the resolution of the alerts encountered thanks to Quality as a Service. The most common KPIs, which can be customised and adopted at the customer's choice, include:

KPI	Description	SLA
Test analysis and writing	Average time spent analysing and writing a single test case	1 hour
Board creation and other organisational tasks	Average time to operationalise the organisation of the service and the tools to support it	Varying and agreeable
Test execution	Average time to perform a manual test, for each specific test case identified	1 hour*
Bug Opening	Time required for opening and describing a bug	30 minutes
Test bug	Time required to perform a manual test to verify the resolution of a previously opened bug	30 minutes*
Automatic tests	Time required for the creation of an automatic test	Varying and agreeable
Taking charge signalling	Time elapsing between the opening of a report by the customer and its acknowledgement by S2E	30 minutes
Report Management	Time that S2E takes to address its share of the reporting without including the timing of the other actors involved	To be defined with the other actors
Resolution of signalling	Time taken by the service to resolve the report, including intervention by all actors involved	To be defined with the other actors

*for tests and complex situations the average time will be agreed with the customer after monitoring