

Dialogue control

Development of a software component for detecting and controlling dialogues

Customer requirements

Automating certification-relevant tests according to the ISO 11783 standard required a software component that unambiguously detects and controls dialogues in software that is based on Microsoft Windows.

The component configuration for detection and control was to be flexibly and dynamically modifiable independent of the software component so that no changes in the software component itself would be needed.

comlet solution

Detection of any dialogue under Microsoft Windows was achieved based on dialogue title recognition and a screenshot comparison.



Moreover, the architecture of the software component was adapted so that, further platforms (such as Linux) can be supported.

The control of the dialogues was optimized in a project-specific manner so that it involved only the entry of a character strings and the simulation of mouse clicks for pressing a button.

The configuration of dialogue detection and control was achieved in a flexible XML structure that included a validation scheme.

The software component itself is implemented as a shared library and includes a Python 2.7 interface to communicate with the test automation control.



Technology used

C++, Python, Windows, Linux, MinGW, Microsoft Visual Studio, Google Test Framework, CMake.

