

PikeOS®

Security Certification Kit

SYSGO's PikeOS Security Certification Kit is a new product that helps customers prepare their certification in projects aiming Common Criteria for examination and evaluation of IT security (EAL) from the Federal Office for Information Security (BSI) or the Airbus SAR SAL up to the highest levels. The Certification Kit covers a strong separation in time and space of user applications in different security criticalities. This separation is established by PikeOS and does not allow interferences (e.g. grabbing RAM or CPU time) or any communications unless they are explicitly allowed by configuration, i.e. a very strong white list security policy.

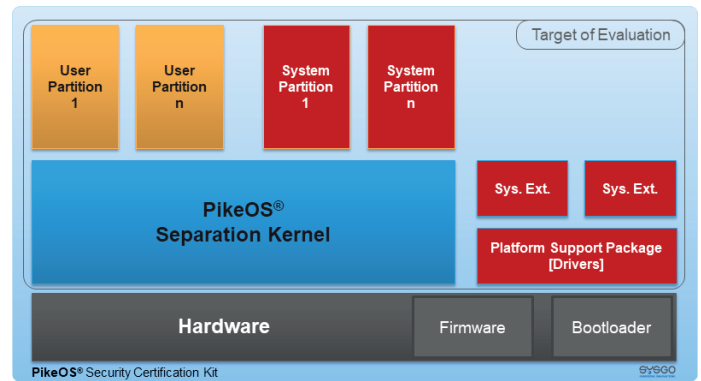
Benefits

- Reduction of certification costs
- Integration of certified and non-certified applications
- Keep the system expandable for new security features while preservation of the certification level
- Provides support and input to work with certification agencies
- Provides compliance to export regulations
- Trustworthy and approved in avionics projects

Use cases

One of the most important documents when starting a certification project is the Security Manual that is delivered with the Certification Kit. It can also be ordered upfront to a certification project in order to start planning and gathering information. To comply with different security standards the supplier and/or developer has to establish, document and maintain procedures for problem reporting and corrective actions. These procedures especially cover the following aspects:

- Define the documentation needed for problem reporting and/or corrective actions, with the aim of giving feedback to the responsible management
- Define analysis of the information collected in the problem reports to identify its causes



- Define the practices to be followed for reporting, tracking and resolving problems identified both during the development phase and during software maintenance

Features

For different architectures, such as x86-AMD64, ARMv7 or ARMv8, the product is aligned to basic customer requirements and artefacts needed for certification projects, such as:

- PikeOS Security Target
- Security Management and Development Plan (SMDP) (incl. Secure Development and Delivery), SW Development -, SW Verification, SW Quality Assurance – and SW Configuration Management Plan
- SW Requirements-, Design- and Coding Standard
- PikeOS Master Document List (MDL), Software Configuration Index Document (SCI), SW Aspects of Certification (SAS), PikeOS Security Target (Testing) or Stack Analysis
- Different Artefacts, such as e.g. High Level Requirement (HLRQ) or Design Documents or description of interfaces, Verification and Validation artefacts for security
- PikeOS Tool validation report
- PikeOS Security Manual