



Green Hills Software Ltd
 Goodsons Mews, Wellington Street
 Thame, OX9 3BX
 Tel: 01844 267950 • Fax: 01844 267955
 Email: sales-uk@ghs.com • Web: www.ghs.com

OS gets first EAL6+ security certification

The INTEGRITY®-178B operating system has been certified by the National Information Assurance Partnership to Common Criteria Evaluation Assurance Level (EAL) 6+, High Robustness

INTEGRITY: The only secure operating system

This certification is the first of its kind – the highest Common Criteria security level achieved by an operating system. Only an EAL6+ High Robustness operating system is certified to protect classified information and other high value resources at risk of attack from hostile and well funded attackers. This is secure by anyone's definition.

No other operating system has even begun the stringent EAL6+ NIAP/NSA certification process (those products which have begun a certification process are listed at www.niap-ccevs.org/cc-scheme/in_evaluation). Furthermore, Common Criteria states that 'EAL4 is the highest level at which it is likely to be economically feasible to retrofit to an existing product line'. INTEGRITY was designed for EAL7 – the highest level of security – and thus was able to meet the NSA's High Robustness requirements.

US government protection profile for separation kernels in environments requiring high robustness (SKPP)

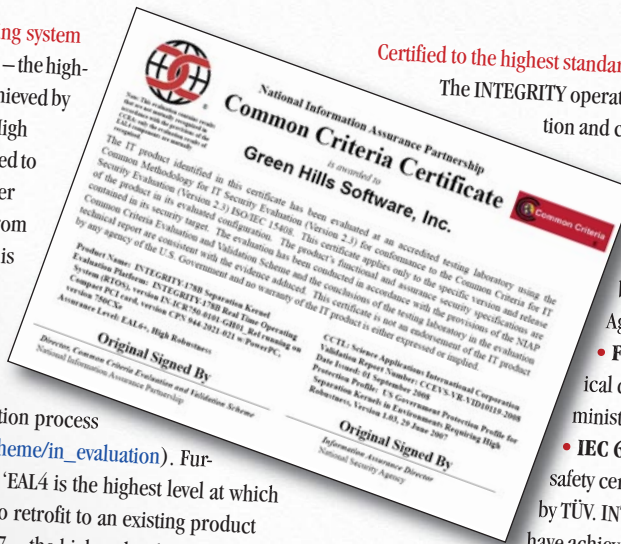
INTEGRITY-178B was certified against the Common Criteria's SKPP, whose High Robustness designation represents the gold standard for operating system security certification, requiring 'security services and mechanisms that provide the most stringent protection and rigorous security countermeasures'. The security gap between EAL4+ certified products and SKPP certified products is immense: while EAL4+ does not even require examination of the product source code, SKPP requirements include the use of formal methods to prove the security policies mathematically, formal specifications, formal correspondence between design and implementation, complete test coverage of all functional requirements and penetration testing by the NSA, which has complete access to the source code.

Recognising High Assurance software processes and standards as a mandatory requirement for embedded and enterprise computing systems around the world, a large team of Green Hills Software experts began work in 1999 on compliance with some of the world's most demanding software assurance standards. As a result, INTEGRITY's ongoing certification accomplishments started with RTCA/DO-178B Level A certification in 2002.

Certified to the highest standards

The INTEGRITY operating system's pedigree also includes certification and compliance with other demanding government and industry software reliability standards, such as:

- **RTCA/DO-178B Level A** – the highest level of avionics safety certification granted by the FAA and the European Aviation Safety Agency;
- **FDA Class III** – the most life critical medical devices approved by the Food and Drug Administration; and
- **IEC 61508 SIL 3** – the highest level industrial safety certification granted to an operating system by TÜV. INTEGRITY is the only operating system to have achieved more than one of these certifications.



INTEGRITY: Proven, deployed technology

The INTEGRITY operating system's pedigree includes a service history dating back to 1997, when it was first adopted by US defence systems that required absolute security and total reliability. It is flying the Boeing B-1B bomber, the Boeing 787 Dreamliner flight controls and dozens of other aircraft. In addition, INTEGRITY is securing military and intelligence computers, network routers, mobile devices, and radios. It also has widespread adoption in medical, industrial control, automotive, and telecommunications.

The ultimate open platform

With its open standards, POSIX conformant interface and ability to host arbitrary general purpose operating systems, such as Windows and Linux, in virtual machines, INTEGRITY can run more application software than any other operating platform, while maintaining the absolute highest level of security for critical components, algorithms, applications, and subsystems.

INTEGRITY enables solutions to many long standing computer security problems, including safe internet browsing on corporate PCs; protection of critical enterprise servers; unhackable digital rights management; and multi level security for government laptops, desktops, PDAs, and servers.