



j t s e c
BEYOND IT SECURITY

IEC 62443-4-1

Practices & Requirements

Practice	Requirement	Definition
Practice I-> Security Management	SM-1	Development process
	SM-2	Identification of responsibilities
	SM-3	Identification of applicability
	SM-4	Security Expertise
	SM-5	Process scoping
	SM-6	File integrity
	SM-7	Development environment security
	SM-8	Controls for private keys
	SM-9	Security requirements for externally provided
	SM-10	Custom developed components from third-party
	SM-11	Assessing and addressing security-related issues
	SM-12	Process certification
	SM-13	Continuous improvement
Practice II-> Security Management	SR-1	Product security context
	SR-2	Threat model
	SR-3	Product security requirements
	SR-4	Product security requirements content
	SR-5	Security requirements review

Practice III-> Security Management	SD-1	Secure design principles
	SD-2	Defense in depth design
	SD-3	Security design review
	SD-4	Secure design best practices
Practice IV-> Secure implementation	SI-1	Security implementation review
	SI-2	Secure coding standards
Practice V-> Security verification and validation testing	SVV-1	Security requirements testing
	SVV-2	Threat mitigation testing
	SVV-3	Vulnerability testing
	SVV-4	Penetration testing
	SVV-5	Independence of testers
Practice VI-> Management of security-related issues	DM-1	Receiving notifications of security-related issues
	DM-2	Reviewing security-related issues
	DM-3	Assessing security-related issues
	DM-4	Addressing security-related issues
	DM-5	Disclosing security-related issues
	DM-6	Periodic review of security defect management practice
Practice VII-> Security update management	SUM-1	Security update qualification
	SUM-2	Security update documentation
	SUM-3	Dependent component or operating system security update documentation
	SUM-4	Security update delivery
	SUM-5	Timely delivery of security patches

Practice VIII-> Security guidelines	SG-1	Product defense in path
	SG-2	Defense in depth measure expected in the environment
	SG-3	Security hardening guidelines
	SG-4	Secure disposal guidelines
	SG-5	Secure operations guidelines
	SG-6	Account management guidelines
	SG-7	Documentation review