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Australian Standard™

Information technology—Security techniques—Evaluation criteria for IT security

Part 1: Introduction and general model

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-012, Information systems—Security and identification technology. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

This Standard is identical with, and has been reproduced from ISO/IEC 15408-1:1999, *Information technology—Security techniques—Evaluation criteria for IT security*—Part 1: *Introduction and general model*.

The objective of this Standard is to define criteria, which for historical and continuity purposes are referred to herein as the Common Criteria (CC), to be used as the basis for evaluation of security properties of IT products and systems. By establishing such a common criteria base, the results of an IT security evaluation will be meaningful to a wider audience. The CC will permit comparability between the results of independent security evaluations.

This Standard is Part 1 of AS ISO/IEC 15408, *Information technology—Security techniques—Evaluation criteria for IT security*, which is published in parts as follows:

Part 1: Introduction and general model (this Standard)
Part 2: Security functional requirements
Part 3: Security assurance requirements

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) In the source text ‘ISO/IEC 15408’ should read ‘AS ISO/IEC 15408’.

(c) A full point substitutes for a comma when referring to a decimal marker.

CONTENTS

Page

Page

Page

List of Figures

Page

List of Tables

AUSTRALIAN STANDARD

Information technology — Security techniques — Evaluation criteria for IT security —

Part 1:
Introduction and general model

1 Scope

This multipart standard ISO/IEC 15408 defines criteria, which for historical and continuity purposes are referred to herein as the Common Criteria (CC), to be used as the basis for evaluation of security properties of IT products and systems. By establishing such a common criteria base, the results of an IT security evaluation will be meaningful to a wider audience.

The CC will permit comparability between the results of independent security evaluations. It does so by providing a common set of requirements for the security functions of IT products and systems and for assurance measures applied to them during a security evaluation. The evaluation process establishes a level of confidence that the security functions of such products and systems and the assurance measures applied to them meet these requirements. The evaluation results may help consumers to determine whether the IT product or system is secure enough for their intended application and whether the security risks implicit in its use are tolerable.

The CC is useful as a guide for the development of products or systems with IT security functions and for the procurement of commercial products and systems with such functions. During evaluation, such an IT product or system is known as a Target of Evaluation (TOE). Such TOEs include, for example, operating systems, computer networks, distributed systems, and applications.

The CC addresses protection of information from unauthorised disclosure, modification, or loss of use. The categories of protection relating to these three types of failure of security are commonly called confidentiality, integrity, and availability, respectively. The CC may also be applicable to aspects of IT security outside of these three. The CC concentrates on threats to that information arising from human activities, whether malicious or otherwise, but may be applicable to some non-human threats as well. In addition, the CC may be applied in other areas of IT, but makes no claim of competence outside the strict domain of IT security.

The CC is applicable to IT security measures implemented in hardware, firmware or software. Where particular aspects of evaluation are intended only to apply to certain methods of implementation, this will be indicated within the relevant criteria statements.

Certain topics, because they involve specialised techniques or because they are somewhat peripheral to IT security, are considered to be outside the scope of the CC. Some of these are identified below.

a) The CC does not contain security evaluation criteria pertaining to administrative security measures not related directly to the IT security measures. However, it is recognised that a significant part of the security of a TOE can often be achieved through administrative measures such as organisational, personnel, physical, and procedural controls. Administrative security measures in the operating environment of