American National Standard

Information technology - Security techniques - Network security - Part 2: Guidelines for the design and implementation of network security

Developed by

incits

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Where IT all begins

Approved American National Standard

ANSI

INCITS/ISO/IEC 27033-2:2012[2014]

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2. The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 27033-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*.

This first edition of ISO/IEC 27033-2 cancels and replaces ISO/IEC 18028-2:2006, which has been technically revised.

ISO/IEC 27033 consists of the following parts, under the general title *Information technology — Security techniques — Network security*:

⎯ *Part 1: Overview and concepts*

⎯ *Part 2: Guidelines for the design and implementation of network security*

⎯ *Part 3: Reference networking scenarios – Threats, design techniques and control issues*

The following parts are under preparation:

⎯ *Part 4: Securing communications between networks using security gateways*

⎯ *Part 5: Securing communications across networks using Virtual Private Networks (VPNs)*

Securing IP network access using wireless will form the subject of a future Part 6.

Further parts may follow because of the ever-changing and evolving technology in the network security area.

This corrected version of ISO/IEC 27033-2:2012 corrects the title on the cover page and on page 1.

Information technology — Security techniques — Network security

Part 2:
Guidelines for the design and implementation of network security

1 Scope

This part of ISO/IEC 27033 gives guidelines for organizations to plan, design, implement and document network security.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7498 (all parts), *Information technology — Open Systems Interconnection — Basic Reference Model*

ISO/IEC 27000:2009, *Information technology — Security techniques — Information security management systems — Overview and vocabulary*

ISO/IEC 27001:2005, *Information technology — Security techniques — Information security management systems — Requirements*

ISO/IEC 27002:2005, *Information technology — Security techniques — Code of practice for information security management*

ISO/IEC 27005:2011, *Information technology — Security techniques — Information security risk management*

ISO/IEC 27033-1, *Information technology — Security techniques — Network security — Part 1: Overview and concepts*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 7498 (all parts), ISO/IEC 27000, ISO/IEC 27001, ISO/IEC 27002, ISO/IEC 27005, and ISO/IEC 27033-1 apply.