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Software and systems engineering — Incident management

Ingénierie du logiciel et des systèmes — Gestion d'incident

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Systems and Software Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Software and systems engineering — Incident management

1 Scope

This document defines a generic incident management process and supporting documentation that can be used to implement incident management and to manage incidents within most organizations, projects or operations activities for a system, service, software, or product. This document also provides supporting diagrams describing the process and example documents.

This document is applicable to incident management in all life cycle models (e.g. incremental, waterfall, evolutionary, agile). This document covers incidents identified across the life cycle, including those that arise during both development (e.g. defects) and operation (e.g. those handled by service management).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO, IEC and IEEE maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

— IEEE Standards Dictionary Online: available at: http://dictionary.ieee.org

NOTE Definitions for other systems and software engineering terms typically can be found in ISO/IEC/IEEE 24765, available at www.computer.org/sevocab.

3.1
defect
imperfection or deficiency in a work product where that work product does not meet its requirements or specifications

Note 1 to entry: Requirements are not always documented and can contain defects.

[SOURCE: ISO/IEC/IEEE 32675:2022, 3.1, modified — The words ‘or characteristic’ have been removed; the words "where" and "work product" have been added; note 1 to entry has been added.]

3.2
incident
anomalous or unexpected event, set of events, condition, or situation at any time during the life cycle of a project, product, service, or system

[SOURCE: ISO/IEC/IEEE 15288:2023, 3.17, modified — Note 1 to entry has been deleted.]

3.3
incident management
process of recognizing, logging, investigating, classifying, and acting on *incidents* (3.2), and recovery to the normal state

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3.4
incident report
documentation of the occurrence, nature and status of an *incident* (3.2)

Note 1 to entry: Incident reports are also known as anomaly reports, bug reports, *defect* (3.1) reports, error reports, and trouble reports, amongst other terms.

[SOURCE: ISO/IEC/IEEE 29119-3:2021, 3.4, modified — In note 1 to entry, "issues" and "problem reports" have been removed.]

3.5
incident management report
documentation summarizing the occurrence, nature and status of recorded *incidents* (3.2) over a specified period

3.6
priority
degree of urgency to resolve an *incident* (3.2) or an underlying *problem* (3.7), based on its impact to the stakeholders as well as the cost and risk of the fix

Note 1 to entry: The priority is time-variant, as it is dependent on the current phase of the project life cycle

3.7
problem
cause of one or more actual or potential *incidents* (3.2)

[SOURCE: ISO/IEC 20000-10:2018, 3.2.10]

3.8
severity
degree of impact that an *incident* (3.2) or underlying *problem* (3.7) has on the development, testing or operation of a system, software or product

4 Conformance

4.1 Intended usage

The incident management process shall be in accordance with Clause 5. The test documentation shall be in accordance with Annex C.

It is recognized that particular projects or organizations may not need to use the complete process defined by this document. Therefore, implementation of this document typically involves selecting a set of activities suitable for the software and systems development, testing or operations. There are two ways that an organization can claim to conform to the provisions of this document.

The organization shall assert whether it is claiming full or tailored conformance to this document.

4.2 Full conformance

Full conformance is achieved by demonstrating that all of the requirements of the process defined in Clause 5 and the test documentation defined in Annex C have been met.

4.3 Tailored conformance

When this document is used as a basis for establishing an incident management process that does not qualify for full conformance, the subset of activities for which tailored conformance is claimed shall be recorded. Tailored conformance is achieved by demonstrating that all of the requirements for the recorded subset of activities have been satisfied.

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