
I-0438: Lack Of Integration Guidance

TYPE: NIAP Interpretation
NUMBER: I-0438
STATUS: Ready to Send to Management/CCIMB

TITLE: Lack Of Integration Guidance
MOST RECENT REPOST: [\[cc-cmt_00089\]](#)

SOURCE REFERENCE: CC v2.1 Part 3 Clause 11 AGD
CEM v1.0 Part 2

RELATED TO: <None>

ISSUE:

There is a lack of information to support integrating a TOE into a larger system.

STATEMENT

A new component, Integrator Guidance AGD_NIAP-0438-ING, is added to the CC and CEM that provides the ability to specify guidance for integrators of the TOE.

SPECIFIC INTERPRETATION

To address this interpretation, the following changes are made to CC v2.1:

- CC Part 3, Subclause 2.5, Table 2.1 is modified to show "Integrator Guidance", AGD_NIAP-0438-ING, as a third entry for Class AGD.
- The following is added after CC Part 3, Subclause 2.6.4.2, paragraph 108:

2.6.4.NIAP-0438 Integrator Guidance (AGD_NIAP-0438-ING)

Requirements for Integrator guidance help ensure that the TSF is properly integrated into the system of which the TOE is a part. Integrator guidance is the primary vehicle to help integrators understand the security functions provided by the TOE, including both those functions that require the integrator to ensure adequate environmental support and those functions that require proper TOE configuration to achieve the desired security capability in a specific environment.

- CC Part 3, Clause 11, Figure 11.1 is modified to append a new family, AGD_NIAP-0438-ING, with one component.
- The following family is added to CC Part 3, Clause 11:

Integrator guidance (AGD_NIAP-0438-ING)

Objectives

Integrator guidance refers to written material that is intended to be used by those persons responsible for integrating the TOE into an IT system in a manner for maximum security. The secure operation of the TOE is dependent upon the correct performance of the TSF, which in turn is dependent upon proper integration into the system of which the TOE is a part. Integrator guidance is intended to help integrators understand the security functions provided by the TOE, including both those functions that require the integrator to ensure adequate environmental support and those functions that require proper TOE configuration to achieve the desired security capability in a specific environment.

The information needs of a system integrator are frequently different from those of a system administrator or user. Hence the content of CC compliant administrator guidance (AGD_ADM) and user guidance (AGD_USR) is likely to be insufficient for the system integrator. The purpose of the AGD_NIAP-0438-ING family is to fulfill integrator information needs through guidance documentation for the system integrator.

Component levelling

This family contains only one component.

Application notes

The requirements in AGD_NIAP-0438-ING.1.1C, AGD_NIAP-0438-ING.1.2C, AGD_NIAP-0438-ING.1.3C, and AGD_NIAP-0438-ING.1.6C encompass those aspects of TOE definition and integration that are essential for the TOE to provide the intended security capabilities when integrated into a larger system.

The requirements in AGD_NIAP-0438-ING.1.4C and AGD_NIAP-0438-ING.1.8C ensure that assumptions made about the use of the TOE and the environment of the TOE are appropriately covered in the integrator guidance.

The concept of secure values, as employed in AGD_NIAP-0438-ING.1.5C, has relevance where an integrator has control over default or fixed security parameters. Guidance needs to be provided on secure and insecure settings for such parameters in the context of the TOE as part of a larger system. This concept is related to the use of the component FMT_MSA.2 from CC Part 2.

AGD_NIAP-0438-ING.1 Integrator guidance

Dependencies:

ADV_FSP.1 Informal functional specification

Developer action elements:

AGD_NIAP-0438-ING.1.1D The developer shall provide integrator guidance addressed to system integrators.

Content and presentation of evidence elements:

AGD_NIAP-0438-ING.1.1C The integrator guidance shall describe the security functions and interfaces available to the integrator of the TOE.

AGD_NIAP-0438-ING.1.2C The integrator guidance shall describe how to integrate the TOE in a secure manner.

AGD_NIAP-0438-ING.1.3C The integrator guidance shall contain warnings about functions and privileges that should be controlled in a secure processing environment.

AGD_NIAP-0438-ING.1.4C The integrator guidance shall describe all assumptions regarding user behaviour that are relevant to secure integration of the TOE.

AGD_NIAP-0438-ING.1.5C The integrator guidance shall describe all security parameters under the control of the integrator, indicating secure values as appropriate.

AGD_NIAP-0438-ING.1.6C The integrator guidance shall describe, for each security function, the integration that needs to be performed, including changing the security characteristics of entities under the control of the TSF.

AGD_NIAP-0438-ING.1.7C The integrator guidance shall be consistent with all other documentation supplied for evaluation.

AGD_NIAP-0438-ING.1.8C The integrator guidance shall describe all security requirements for the IT environment that are relevant to the integrator.

Evaluator action elements:

AGD_NIAP-0438-ING.1.1E The evaluator shall confirm that the information provided meets all requirements for content and presentation of evidence.

Additionally, the following changes are made to CEM v1.0 Part 2:

- The following is appended to the CEM Part 2 v1.0 as an 'Integrator Guidance' supplement:

Evaluation of integrator guidance (AGD_NIAP-0438-ING.1)

Objectives

The objective of this sub-activity is to determine whether the integrator guidance describes how to integrate the TOE in a manner consistent with achieving a secure system.

Application notes

The term integrator is used to indicate a person responsible for integrating the TOE into an IT system in a manner for maximum security. Integrator guidance is intended to help integrators understand the security functions provided by the TOE, including both those functions that require the integrator to ensure adequate environmental support and those functions that require proper TOE configuration to achieve the desired security capability in a specific environment.

The information needs of a system integrator are frequently different from a system administrator or user, and hence the content of CC compliant administrator and user guidance is likely to be insufficient for the system integrator. The purpose of the AGD_NIAP-0438-ING family is to fulfill integrator information needs through guidance documentation for the system integrator.

Input

The evaluation evidence for this sub-activity is:

1. the ST;
2. the integrator guidance;
3. other documentation required by assurances in the ST (for consistency determination in AGD_NIAP-0438-ING.1-7)

Evaluator actions

This sub-activity comprises one CC Part 3 evaluator action element:

1. AGD_NIAP-0438-ING.1.1E.

Action AGD_NIAP-0438-ING.1.1E

AGD_NIAP-0438-ING.1.1C

AGD_NIAP-0438-ING.1-1 The evaluator shall examine the integrator guidance to determine that it describes the security functions and interfaces available to the integrator of the TOE.

The integrator guidance should contain an overview of the security functionality that is visible at the interfaces an integrator will need to access in order to effectively and securely integrate the TOE into a larger system.

The integrator guidance should identify and describe the purpose, behaviour, and interrelationships of the security interfaces and functions.

For each security interface and function, the integrator guidance should:

1. describe the method(s) by which the interface is invoked (e.g. command-line, programming-language system calls, menu selection, command button);
2. describe the parameters to be set by an integrator, their valid and default values;
3. describe the immediate TSF response, message, or code returned.

AGD_NIAP-0438-ING.1.2C

AGD_NIAP-0438-ING.1-2 The evaluator shall examine the integrator guidance to determine that it describes how to integrate the TOE in a secure manner.

The integrator guidance describes how to integrate the TOE according to the TSP in an IT environment that is consistent with the one described in the ST.

AGD_NIAP-0438-ING.1.3C

AGD_NIAP-0438-ING.1-3 The evaluator shall examine the integrator guidance to determine that it contains warnings about functions and privileges that should be controlled in a secure processing environment.

The configuration of the TOE may allow users to have dissimilar privileges to make use of the different functions of the TOE. This means that some users may be authorised to perform certain functions while other users may not be so authorised. These functions and privileges should be described by the integrator guidance to the extent necessary to enable the integrator to ensure that the TOE is integrated in a manner consistent with achieving a secure system.

The integrator guidance identifies the functions and privileges that must be controlled, the types of controls required for them, and the reasons for such controls. Warnings address expected effects, possible side effects, and possible interactions with other functions and privileges.

AGD_NIAP-0438-ING.1.4C

AGD_NIAP-0438-ING.1-4 The evaluator shall examine the integrator guidance to determine that it describes all assumptions regarding user behaviour that are relevant to the secure integration of the TOE.

Assumptions about the user behaviour may be described in more detail in the statement of the TOE security environment of the ST. However, only the information that is of concern to the secure integration of the TOE need be included in the integrator guidance.

AGD_NIAP-0438-ING.1.5C

AGD_NIAP-0438-ING.1-5 The evaluator shall examine the integrator guidance to determine that it describes all security parameters under the control of the integrator indicating secure values as appropriate.

For each security parameter, the integrator guidance should describe, as it pertains to integration of the TOE, the purpose of the parameter, the valid and default values of the parameter, and secure and insecure use settings of such parameters, both individually or in combination.

AGD_NIAP-0438-ING.1.6C

AGD_NIAP-0438-ING.1-6 The evaluator shall examine the integrator guidance to determine that it describes, for each security function, the integration that needs to be performed, including changing the security characteristics of entities under the control of the TSF.

Each security function is detailed, such that the integrator knows what actions to take in integrating the TOE in order to achieve a secure system.

AGD_NIAP-0438-ING.1.7C

AGD_NIAP-0438-ING.1-7 The evaluator shall examine the integrator guidance to determine that it is consistent with all other documents supplied for evaluation.

The ST in particular may contain detailed information on any warnings to the TOE integrators with regard to the TOE security environment and the security objectives.

For guidance on consistency analysis see Annex B.3.

AGD_NIAP-0438-ING.1.8C

AGD_NIAP-0438-ING.1-8 The evaluator shall examine the integrator guidance to determine that it describes all IT security requirements for the IT environment of the TOE that are relevant to the integrator.

If the ST does not contain IT security requirements for the IT environment, this work unit is not applicable, and is therefore considered to be satisfied.

This work unit relates to IT security requirements only and not to any organisational security policies.

The evaluator should analyse the security requirements for the IT environment of the TOE (optional statement in

the ST) and compare them with the integrator guidance to ensure that all security requirements of the ST that are relevant to the integrator are described appropriately in the integrator guidance.

FURTHER CONSIDERATIONS:

This component may be added to all EALs in the same manner that the other AGD families are represented in every EAL.

PROJECTED IMPACT:

Negligible impact anticipated.

SUPPORT:

The existing guidance families (AGD_ADM and AGD_USR) are written to reflect the needs of administrators and user. Compliant documents are likely to meet these needs without adequately addressing the needs of system integrators. Overloading the term "user" or "administrator" to include integrators would result in a term inconsistent with common usage. Therefore, the need for a new guidance family is apparent. The existing CC family AGD_ADM was used as the model for AGD_ING, providing a family at the same level of specification as that currently existing in the CC for guidance documentation.