
I-0415: User Attributes To Be Bound Should Be Specified

TYPE: NIAP Interpretation
NUMBER: I-0415
STATUS: Ready to Prepare for Management/CCIMB

TITLE: User Attributes To Be Bound Should Be Specified
WOULD SUPERSEDE: [I-0351](#) User Attributes To Be Bound Should Be Specified

SOURCE REFERENCE: CC v2.1 Part 2 Subclause 7.6 FIA_USB.1
CC v2.1 Part 2 Subclause G.6 FIA_USB.1

RELATED TO: [I-0351](#) User Attributes To Be Bound Should Be Specified
[I-0416](#) Association Of Access Control Attributes With Subjects And Objects
[I-0417](#) Association Of Information Flow Attributes W/Subjects And Information

ISSUE:

PP/ST authors should be encouraged to specify which user attributes are to be bound to subjects created on behalf of a user.

STATEMENT

The component FIA_USB.1 is modified to provide an explicit assignment of attributes.

SPECIFIC INTERPRETATION:

To address this interpretation, the following changes are made to CC v2.1, Part 2:

- FIA_USB.1 is relabeled as FIA_USB.1-NIAP-0415. Unless otherwise noted in these changes, all normative and informative material associated with FIA_USB.1 is incorporated unchanged into FIA_USB.1-NIAP-0415, and all references to FIA_USB.1 in the CC, CEM, or other Common Criteria documentation are changed to refer to FIA_USB.1-NIAP-0415.
- The FIA_USB.1.1 element is replaced with FIA_USB.1.1-NIAP-0415 as follows (additions marked thusly; deletions marked ~~thusly~~):

FIA_USB.1.1-NIAP-0415: The TSF shall associate the ~~appropriate~~ following user security attributes with subjects acting on behalf of that user. ~~assignment: list of user security attributes to be bound~~.

- In subclause G.6, the following text is added after paragraph 1006:

Operations

Assignment:

In FIA_USB.1.1-NIAP-0415, the PP/ST author should specify those user attributes that are to be bound to subjects created to act on behalf of users. At the time a PP/ST is developed, the PP/ST author knows the significant attributes of the FSPs of the TOE, and which of those attributes are to be derived from user-based information. Thus, it is possible for the PP/ST author to specify which user attributes are to be bound to subjects created on the user's behalf.

PROJECTED IMPACT:

Negligible impact anticipated.

SUPPORT:

At the time a PP/ST is developed, the PP/ST author knows the significant attributes of the FSPs of the TOE, and which of those attributes are to be derived from user-based information. Thus, it is possible for the PP/ST author to specify which user attributes are to be bound to subjects created on the user's behalf.

However, in CC v2.1, the words of the FIA_USB.1.1 element use the word "appropriate". In order to specify the specific attributes to be bound, the PP/ST author must refine the element, and the evaluator must determine if the specified attributes are indeed "appropriate"; further, the evaluator must determine if there are appropriate attributes not included in the refined element. This creates a risk of inconsistent evaluator interpretation.

The ideal approach is to replace the need for refinement with an explicit assignment. The assignment should be driven by the attributes that are needed to enforce the TSP. For example, an access control policy based on user identity would require the user identity information be bound to the subject.

Note: This interpretation is superseding a previously-approved formal interpretation primarily to reflect modifications to the interpretation format. The intent of the interpretation has not been changed, although some specifics of the criteria changes or the support may have been clarified or corrected.