

DEFECT REPORT FORM

1. Defect Report Number: 217
Title: Use of Operation and Error Code in Security Parameters
2. Source:
3. Addressed to:
4. (a)
(b)
5. Date circulated by WG Secretariat:
6. Deadline for Response from Editor:
7. Defect Report Concerning:
ITU-T X.511 (1997) | ISO/IEC 9594-3:1997

8. Qualifier:

Error and Omission

9. References in Document:

Clause 7.10

10. Nature of Defect:

- a) The syntax of operationCode in Security Parameters is currently defined as an Object Identifier. However, Remote Operation Service (ROS) Operation Codes may be either Integer or Object Identifier and currently all the X.500 operation codes are defined as Integers
- b) Since error codes are not protected a similar attack can occur on error responses to the attack on operation codes. Where both a successful response and error contains signed Security Parameters with no extra parameters (e.g. Modify Response and Abandon Error) the unprotected part of a PDU may be altered to change an error to success without detection.

11. Solution Proposed by the Source:

In clause 7.10

- a) Replace syntax for operationCode in SecurityParameters to be:

operationCode [6] Code OPTIONAL

Code should be imported from:

Remote-Operations-Information-Objects

{joint-iso-ccitt remote-operations(4) informationObjects(5) version1(0)}

and in the paragraph describing **operationCode** delete "object identifier". Also, at end of paragraph change "or results" to ", results or errors".

- b) Add to the SecurityParameters syntax:

errorCode [9] Code OPTIONAL

and add the following description:

The **errorCode** is used to secure the error code where an error is returned in response to an operation.

12. Editor s Response: