

1. Why is it meaningless to have compartments at the UNCLASSIFIED level (such as (UNCLASSIFIED, { NUC }) and (UNCLASSIFIED, { EUR })))?

为什么级别为公开时无需分类?

因为公开的不分类也都可读, 不能随便写入

2. Given the security levels TOP SECRET, SECRET, CONFIDENTIAL, and UNCLASSIFIED (ordered from highest to lowest), and the categories A, B, and C, specify what type of access (read, write, both, or neither) is allowed in each of the following situations. Assume that discretionary access controls allow anyone access unless otherwise specified.

安全级别、分类, 在自主访问控制授予相应权限下, 下面情况的访问类型?

1) Paul, cleared for (TOP SECRET, { A, C }), wants to access a document classified (SECRET, { B, C }). 无

2) Anna, cleared for (CONFIDENTIAL, { C }), wants to access a document classified (CONFIDENTIAL, { B }). 无

3) Jesse, cleared for (SECRET, { C }), wants to access a document classified (CONFIDENTIAL, { C }). 读

4) Sammi, cleared for (TOP SECRET, { A, C }), wants to access a document classified (CONFIDENTIAL, { A }). 读

5) Robin, who has no clearances (and so works at the UNCLASSIFIED level), wants to access a document classified (CONFIDENTIAL, { B }). 无

3. Prove that any file in the DG/UX system with a link count greater than 1 must have an explicit MAC label.

证明 DG/UX 系统中连接数大于 1 时, 必须有显示标签。

1) 硬连接

- 如果 mount 到一个无标签的文件系统 A, A 上所有文件和目录的标签均为 mount 点的标签, 如果 A 上有一个文件 x1, A 上另一个文件 x2 为硬连接指向 x1 则二者标签必须改为显示
- 如果 mount 到一个无标签的文件系统 A, A 上建立文件 x3, x3 为硬连接指向非挂载系统上文件 x4, 建立文件 x3 时 A 上相应目录标签改为显示标签
- 如果非挂载系统上文件 x5 建立指向挂载文件系统 A 上 x6, 则 x6 以及它的上级目录标签必须改为显示标签

2) 符号连接

符号连接是文件, 和文件的标签性质相同

4. In the DG/UX system, why is the virus prevention region below the user region?

病毒区在下面, 上级程序可读, 但上级程序不可写保护系统不被篡改

5. In the DG/UX system, why is the administrative region above the user region?

管理区在上面, 可检查下面用户程序、系统程序的一致性, 可检查用户数据的正确性; 下层产生的日志信息写入管理区。符合安全性。

