Abstract: A layer of abstraction for use by access control lists is provided for the process of creation and maintenance of user permissions on computer resources. First, a set of permissions can be associated with any number of computer resources. Also, computer resources can store references to any number of sets of permissions, and when use is requested, the sets of permissions are combined into a merged set that determines whether permission is granted. The extra level of abstraction results in an extra layer of information that allows individuals administering permissions to computer resources the ability to understand why they are set. The extra layer of information also results in a history of permissions for the computer resource since multiple references to sets of permissions can be stored.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(8): G06F 12/14 (2007.01)
   USPC: 726/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
   IPC(8): G06F 12/14 (2007.01)
   USPC: 726/21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
   USPC: 726/1

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
   USPTO WEST (PGPB, USPT, EPAB, JPAB); GOOGLE
   Search Terms Used: access control, permission, set, database, filter, merge, ACL, query

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>US 2004/0088563 A1 (HOGAN et al.) 06 May 2004 (06.05.2004)</td>
<td>1-15</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed
  "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  "&" document member of the same patent family

Date of the actual completion of the international search: 10 July 2007 (10.07.2007)

Date of mailing of the international search report: 26 MAR 2008

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