

CLAIMS

1. A computer-implemented method for unambiguously identifying entities in a database system, the method comprising:
 - storing data items in a table of a database, wherein the data items are stored as records comprising a plurality of attributes;
 - storing naming rules for selected combinations of the attributes of the data items;
 - prioritizing the naming rules;
 - determining a hash value for each of the selected combinations of the attributes of the data items, and
 - identifying duplicate data items using the determined hash values and the prioritized naming rules.
2. The method according to claim 1, wherein the database system is a relational database system.
3. The method according to claim 1, wherein the database system is a configuration management database.
4. The method according to claim 1, further comprising merging the identified duplicate data items by maintaining the determined hash values as a multi-valued key for a merged data item.
5. The method according to claim 4, further comprising merging other data items that are in composite relationship with the identified data items.
6. The method according to claim 4, further comprising maintaining a pointer to a same row identifier of one of the merged data items for the determined hash values.
7. The method according to claim 1, further comprising:
 - maintaining an index of the table; and
 - maintaining a pointer in a search tree related to the index, such that the

pointer points to the same record identifiers of a combined data item.

8. The method according to claim 1, further comprising:
using a create SQL statement adapted for a creating of the naming rule and its related priority.
9. The method according to claim 1, further comprising:
using a multi-value primary key for sorting records in the table of the database.
10. The method according to claim 1, wherein a multi-value primary key is used for clustering cluster data on multi-node database engines.
11. The method according to claim 9, wherein a multi-value primary key is comparable to a single value column data item.
12. The method according to claim 1, further comprising
collecting statistical database data for data blocks for single-valued primary keys and multi-valued primary keys.
13. A computer system for unambiguously identifying entities in the database system, the computer system comprising:
one or more computer processors, one or more computer-readable storage media, and program instructions stored on the one or more of the computer-readable storage media for execution by at least one of the one or more processors capable of performing a method, the method comprising:
storing data items in a table of a database, wherein the data items are stored as records comprising a plurality of attributes;
storing naming rules for selected combinations of the attributes of the data items;
prioritizing the naming rules;
determining a hash value for each of the selected combinations of the attributes of the data items, and
identifying duplicate data items using the determined hash values and the

prioritized naming rules.

14. The computer system according to claim 13, wherein the database system is a relational database system.
15. The computer system according to claim 13, wherein the database system is a configuration management database.
16. The computer system according to claim 13, further comprising merging the identified duplicate data items by maintaining the determined hash values as a multi-valued key for a merged data item.
17. The computer system according to claim 16, further comprising merging other data items that are in composite relationship with the identified data items.
18. The computer system according to claim 16, further comprising maintaining a pointer to a same row identifier of one of the merged data items for the determined hash values.
19. The computer system according to claim 13, further comprising:
 - maintaining an index of the table; and
 - maintaining a pointer in a search tree related to the index, such that the pointer points to the same record identifiers of a combined data item.
20. A computer program product for unambiguously identifying entities in a database system, the computer program product comprising:
 - one or more non-transitory computer-readable storage media and program instructions stored on the one or more non-transitory computer-readable storage media capable of performing a method, the method comprising:
 - storing data items in a table of a database, wherein the data items are stored as records comprising a plurality of attributes;
 - storing naming rules for selected combinations of the attributes of the data items;

prioritizing the naming rules;
determining a hash value for each of the selected combinations of the attributes of the data items, and
identifying duplicate data items using the determined hash values and the prioritized naming rules.