

with the document ID of each document file on the file system, associated-folder information including the folder name of a folder related to the document file. In S101, the first attribute assignment unit 17 adds the folder names of all the folders from the root to the folder X to the associated-folder information associated with the document ID of the document file X, and thereby associates these folder names with the document ID of the document file X. Fig. 7 illustrates the associated-folder table in the case where the document file of the document A is stored in the "human resources" folder.

[0032]

Note that in S101, the first attribute assignment unit 17 may associate only the folder name of the folder X with the document ID of the document file X.

[0033]

(Document Attribute Acquisition Unit)

Then, the document attribute acquisition unit 18 reads the document file X from the file system unit 14. After that, the document attribute acquisition unit 18 analyzes the document file X, and acquires attribute information about the attributes of the document file X. In this example, the document attribute acquisition unit 18 acquires words (for example, nouns) included in the text in the document file X as attribute information (102). Each of the

words acquired in S102 corresponds to "data attribute information". Note that in S102, in place of words included in the text in the document file X, the document attribute acquisition unit 18 may acquire the file name of the document file X as attribute information.

[0034]

After S102, each of folders that are not on the path from the root to the folder X is selected from among the files present on the file system. Each time a folder is selected, the steps of S103 and S104 are performed for the selected folder (hereinafter referred to as a folder Y).

[0035]

(Folder Attribute Acquisition Unit and Comparison Unit)

That is, the folder attribute acquisition unit 20 acquires the attribute information about the attributes of the folder Y. After that, the comparison unit 22 compares the attribute information about the attributes of the folder Y with the attribute information acquired by the document attribute acquisition unit 18, and determines whether the comparison result satisfies a predetermined condition (S103). More specifically, the folder attribute acquisition unit 20 acquires the folder name of the folder Y. After that, the comparison unit 22 determines whether the folder name of the folder Y includes any of the words acquired by the document attribute income unit 18 (S103).

information from the file system unit 14, and outputs the read document file (S202). In the case of the present exemplary embodiment, the retrieval unit 26 outputs a thumbnail image of the read document file. Further, in S202, the retrieval unit 26 also outputs a thumbnail image of the document file stored in the folder Z.

[0041]

As illustrated in Fig. 8, the folder name of the "accounting" folder is associated with the document file of the document A stored in the "human resources" folder. Accordingly, if the "accounting" folder is opened, not only the document file originally stored in the "accounting" file, but also the document file of the document A is output. Thus, when the human resources staff member wishes to refer to the document file of the document A, the staff member is able to easily find the document file of the document A without opening the "human resources" folder.

[0042]

(Summary)

As described above, in the information processing apparatus 2, when a document file is stored in a folder, the second attribute assignment unit 24 associates, with the document file, another folder related to the document file (see S103 and S104 of Fig. 6). Further, when a folder is opened, the inspection unit 26 outputs a document file with

which the opened folder is associated (see S202 of Fig. 9). This reduces the time and effort it takes for the human resources staff member to find a document file that has been classified in accordance with previous classification criteria and from a previous viewpoint, when the staff member wishes to refer to the document file.

[0043]

Further, in the information processing apparatus 2, the first attribute assignment unit 17 associates not only the other folder, but also the folder storing the document file, with the document file (see S101 of Fig. 6). Therefore, even if a document file that the human resources staff member wishes to refer to has been classified in accordance with previous classification criteria and its storage location has been changed many times, the time and effort it takes for the staff member to find the document file is reduced.

[0044]

Further, in the information processing apparatus 2, the first attribute assignment unit 17 associates, with the document file, a higher-level folder of the folder storing the document file. Further, the second attribute assignment unit 24 associates, with the document file, a higher-level folder of the other folder related to the document file (see S101 and S104 of Fig. 6). In addition to this, the

retrieval unit 26 outputs not only a document file with which an opened folder is associated, but also a document file associated with the higher-level folder of the opened folder (see S201 and S202 of Fig. 9). This also reduces the time and effort it takes for the human resources staff member to find a document file that has been classified in accordance with previous classification criteria, when the staff member wishes to refer to the document file.

[0045]

Exemplary embodiments of the present invention are not limited to the exemplary embodiment described above.

[0046]

For example, the file system unit 14 may be implemented by a database server provided separately from the information processing apparatus 2.

Reference Signs List

[0047]

2 information processing apparatus; 4 controller; 6 primary memory; 8 hard disk; 10 operation input unit; 12 display unit; 14 file system unit; 16 document file management unit; 17 first attribute assignment unit; 18 document attribute acquisition unit; 20 folder attribute acquisition unit; 22 comparison unit; 24 second attribute assignment unit; 26 retrieval unit; and 28 folder.

CLAIMS

[Claim 1]

An information processing apparatus comprising:

setting means that sets certain data as an element of a certain data group;

data attribute acquisition means that analyzes the certain data, and acquires data attribute information about attributes of the certain data on the basis of an analysis result;

group attribute acquisition means that acquires group attribute information about attributes of another data group; and

association means that associates, if a comparison result between the group attribute information about attributes of the other data group and the data attribute information about attributes of the certain data satisfies a predetermined condition, the group attribute information with the certain data.

[Claim 2]

The information processing apparatus according to Claim 1, further comprising:

retrieval means that retrieves, if any of data groups is selected, data with which group attribute information about attributes of the data group is associated.

[Claim 3]

The information processing apparatus according to Claim 1 or 2, further comprising:

means that associates, with the certain data, group attribute information about attributes of a higher-level data group of the other data group if the comparison result satisfies the condition.

[Claim 4]

The information processing apparatus according to Claim 1 or 2, further comprising:

means that associates, with the certain data, group attribute information about attributes of the certain data group.

[Claim 5]

The information processing apparatus according to Claim 4, further comprising:

means that associates, with the certain data, group attribute information about attributes of a higher-level data group of the certain data group.

[Claim 6]

The information processing apparatus according to Claim 1, wherein:

the data is document data representing a document;

the data attribute acquisition means acquires a word included in the certain data as the data attribute information;

the group attribute acquisition means acquires a name of the other data group as the group attribute information; and

the association means associates the name of the other data group with the certain data if the word included in the certain data is included in the name of the other data group.

[Claim 7]

A program causing a computer to function as:

setting means that sets certain data as an element of a certain data group;

data attribute acquisition means that analyzes the certain data, and acquires data attribute information about attributes of the certain data on the basis of an analysis result;

group attribute acquisition means that acquires group attribute information about attributes of another data group; and

association means that associates, if a comparison result between the group attribute information about attributes of the other data group and the data attribute information about attributes of the certain data satisfies a predetermined condition, the group attribute information with the certain data.

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the words acquired in S102 corresponds to "data attribute information". Note that in S102, in place of words included in the text in the document file X, the document attribute acquisition unit 18 may acquire the file name of the document file X as attribute information.

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After S102, each of folders that are not on the path from the root to the folder X is selected from among the files present on the file system. Each time a folder is selected, the steps of S103 and S104 are performed for the selected folder (hereinafter referred to as a folder Y).

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Further, in the information processing apparatus 2, the first attribute assignment unit 17 associates not only the other folder, but also the folder storing the document file, with the document file (see S101 of Fig. 6). Therefore, even if a document file that the human resources staff member wishes to refer to has been classified in accordance with previous classification criteria and its storage location has been changed many times, the time and effort it takes for the staff member to find the document file is reduced.

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Further, in the information processing apparatus 2, the first attribute assignment unit 17 associates, with the document file, a higher-level folder of the folder storing the document file. Further, the second attribute assignment unit 24 associates, with the document file, a higher-level folder of the other folder related to the document file (see S101 and S104 of Fig. 6). In addition to this, the

retrieval unit 26 outputs not only a document file with which an opened folder is associated, but also a document file associated with the higher-level folder of the opened folder (see S201 and S202 of Fig. 9). This also reduces the time and effort it takes for the human resources staff member to find a document file that has been classified in accordance with previous classification criteria, when the staff member wishes to refer to the document file.

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CLAIMS

[Claim 1]

An information processing apparatus comprising:

setting means that sets certain data as an element of a certain data group;

data attribute acquisition means that analyzes the certain data, and acquires data attribute information about attributes of the certain data on the basis of an analysis result;

group attribute acquisition means that acquires group attribute information about attributes of another data group;

association means that associates, if a comparison result between the group attribute information about attributes of the other data group and the data attribute information about attributes of the certain data satisfies a predetermined condition, the group attribute information with the certain data; and

means that associates, with the certain data, group attribute information about attributes of a higher-level data group of the other data group if the comparison result satisfies the condition.

[Claim 2]

The information processing apparatus according to Claim 1, further comprising:

retrieval means that retrieves, if any of data groups is selected, data with which group attribute information about attributes of the data group is associated.

[Claim 3]

The information processing apparatus according to Claim 1 or 2, further comprising:

means that associates, with the certain data, group attribute information about attributes of the certain data group.

[Claim 4]

The information processing apparatus according to Claim 3, further comprising:

means that associates, with the certain data, group attribute information about attributes of a higher-level data group of the certain data group.

[Claim 5]

The information processing apparatus according to Claim 1, wherein:

the data is document data representing a document;

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and

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[Claim 6]

A program causing a computer to function as:

setting means that sets certain data as an element of a certain data group;

data attribute acquisition means that analyzes the certain data, and acquires data attribute information about attributes of the certain data on the basis of an analysis result;

group attribute acquisition means that acquires group attribute information about attributes of another data group;

association means that associates, if a comparison result between the group attribute information about attributes of the other data group and the data attribute information about attributes of the certain data satisfies a predetermined condition, the group attribute information with the certain data; and

means that associates, with the certain data, group attribute information about attributes of a higher-level data group of the other data group if the comparison result satisfies the condition.