As described in Patent Document 2, the following application execution system is also known. A personal computer of a user is connected to an application service provider (ASP) via a network such as the Internet. An accessible period is set for each application of evaluation version so that there is no charge within a trial period and, only when the user wants to use the application even after the trial period, the user is authorized to use the application by paying a license fee for the product version.

Citation List

Patent Documents

[0004]

Patent Document 1: Japanese Patent Application Laid-Open No. 2002-175436

Patent Document 2: Japanese Patent Application Laid-Open No. 2007-286899

Patent Document 3: Japanese Patent No. 3679760

Summary of the Invention

Problem to be Solved by the Invention

[0005]

In the portal site provision apparatus described in Patent Document 1, for example, charging is a prerequisite in the case of using a paid application. However, even in the case where, after starting using the application, the user decides the application is unnecessary and stops using it halfway, a normal charge could be incurred.

[0006]

In the application execution system described in Patent Document 2, the accessible period is set for the evaluation version so that there is no charge within the trial period. Only when the user wants to use the application even after the trial

period, the user is authorized to use the application by paying the license fee for the product version. Thus, no charge is required during initial use. For example regarding paid content such as a movie or music, however, the user inevitably needs to select whether or not to use the content in the middle of viewing. This complicates the operation. Besides, typically the evaluation version of the application is partially limited in functions, which is not convenient for the user.

[0007]

As described in Patent Document 3 as an example, a system of determining the amount of payment for the user according to the amount of use by the user is also known. In Patent Document 3, an image forming apparatus in which a program for controlling the processes of, for example, a combination machine integrating scanner, printer, copy, and fax functions is installed includes use amount management means for managing the use amount for each program using a counter. According to the control program in the image forming apparatus, for example, a predetermined operation which is a copy operation using an image processing application is counted and managed as the use amount, and the data is transmitted to an application vendor via a network so that the user is notified of the charge corresponding to the use amount of the application. However, this cannot be easily applied to the above-mentioned portal site that includes links relating to use of various applications, content, and services. Especially in the case where the portal site provides not only paid applications, content, and services for which the user pays use fees but also free applications, content, and services, the charging process when using an application, content, or a service provided on the portal site is complex.

[0008]

The present invention accordingly has an object of providing a portal site fee distribution and recovery system that provides a portal site enabling the use of various paid and free applications, content, services, and the like, and summarizes a use fee (incentive) corresponding to a use record as a distribution fee and a result reward (affiliate) corresponding to a use record as a recovery~~distribution~~ fee, where the

the embodiment of the present invention.

FIG. 26 is a flowchart showing a use record and fee reference process in the embodiment of the present invention.

Modes for carrying out the Invention

[0016]

The following describes an embodiment of a portal system according to the present invention based on drawings. FIG. 1 is a schematic block diagram of a portal system 1 according to the present invention. As shown in the drawing, the portal system 1 is connected with servers 2A, 2B, and 2C of a plurality of vendors and a client terminal 3 of a user via a network 4, and guides the user to applications, content, and services provided by the vendors. Each of the servers 2A, 2B, and 2C of the vendors stores a control program 5 corresponding to the application, content, or service provided by the vendor, and includes databases (hereafter referred to as "DB") 6, 7, and 8 for storing user information, content information, and log information. Although the schematic block diagram in FIG. 1 shows only the specific structure of the application vendor and omits the specific structures of the content vendor and the service vendor, each of the content vendor and the service vendor equally includes a program for operating the content or service provided by the vendor and DBs (not shown) for storing user information, content information, and log information.

[0017]

The portal system 1 includes a web server 10, a DB server 1120, and a record collection server 40. The web server 10 includes a portal server 10A11. The DB server 1120 includes a DB 21 for storing user information, a DB 22 for storing use procedure conversion rule information, a DB 23 for storing use record information, a DB 24 for storing amount conversion information, a DB 25 for storing weighting information, a DB 26 for storing use record analysis result information, a DB 27 for storing recovery fee information, a DB 28 for storing distribution fee information, a DB 29 for storing log conversion information, and a DB 30 for storing log-converted

standard log information (the DBs 29 and 30 are shown in FIG. 10). The record collection server 40 includes a record collection system 41.

[0018]

The client terminal 3 of the user includes a typical personal computer, notebook-size personal computer, PDA, mobile phone, smartphone, tablet terminal, or the like. The client terminal 3 includes at least a communication function of transmitting information to the portal server 10A~~11~~ via the network 4, a display function such as a display of displaying information from the portal server 10A~~11~~ or each of the servers 2A, 2B, and 2C of the provision vendors, and an input function such as a keyboard, a pointing device, or a touch panel. The communication function, the display function, and the input function will be described later.

[0019]

A process at the beginning of service use is described below, with reference to a block diagram in FIG. 2 and a flowchart in FIG. 3. When a user information transmission unit 31 (communication function) in the client terminal 3 of the user transmits user information at the beginning of service use (step S1), a user information registration unit 50 in the web server 10 registers the user information transmitted from the client terminal 3, in a user information table T stored in the user information DB 21 (step S2). FIG. 4 shows an example of the user information table T. The user information table T stores data including: a user code; a user name; a user address, age, OS used, and whether or not to use encryption as procedure information 1 to procedure information n; a belonging company name; a use state of each of service 1 to service n provided by the vendor; a user contract state; a deletion flag; a login date and time; a logout date and time; a terminal identification code; a login state; a use start date and time; and a use end date and time. The user information registration unit 50 determines the contract possibility for the user. For example, if the user is a corporate member, the user information registration unit 50 compares the information with corporate member information, to determine the belonging state of the user. The user information registration unit 50 also determines

whether or not the use is limited, according to the past record, etc. (step S3). The user information registration unit 50 thus identifies the user (step S4). In the case where the user information registration unit 50 fails to identify the user, the user information registration unit 50 changes the user information table T and sets the deletion flag for the user (step S5). In the case where the user information registration unit 50 identifies the user in step S4, on the other hand, a use procedure conversion and transmission unit 51 converts the user information according to a rule defined in a use procedure conversion rule table 10T stored in the use procedure conversion rule DB 22 in the DB server 11, and transmits the converted user information to each of the servers 2A, 2B, and 2C of the provision vendors (step S6). The use procedure conversion rule table 10T stores information for defining a rule when performing a use procedure for each provision vendor. As an example, as shown in FIG. 5, the use procedure conversion rule table 10T stores data including: an application name (hereafter simply referred to as "app name") provided by the vendor; a conversion number indicating a conversion rule for the use procedure; user procedure information; a type attribute (character string or numeric); and the number of digits. Thus, the use procedure conversion and transmission unit 51 transmits the user information converted according to the use procedure conversion rule table 10T to each of the servers 2A, 2B, and 2C of the provision vendors, and a use procedure processing unit 60 in each of the servers 2A, 2B, and 2C registers the user information in the user information DB 6 in the server (step S7). The use procedure processing unit 60 in each of the servers 2A, 2B, and 2C also transmits the user information registered in the user information DB 6 to a user authentication unit 52 in the web server 10, to set a use flag in the user information DB 21 in the DB server 11 (step S8). The user authentication unit 52 transmits a registration completion notification to the client terminal 3 of the user. A user authentication result display unit 32 (display function) in the client terminal 3 of the user displays the registration completion notification (step S9).

[0020]

defined in a log conversion information table 30T shown in FIG. 13. The log conversion information table 30T defines a rule for classifying logs not unified among vendors or types of apps provided, according to use function. In detail, the portal site provides various applications, content, and services and, when the user uses a paid application, content, or service, the user pays a use fee to the provision vendor (incentive). On the other hand, regarding various free services such as guide services or reservation services, for example, when the user makes a reservation or buys a product via a link on the portal site, a result reward (affiliate) may be paid to the operator of the portal site. Accordingly, a rule for classifying each application, content, or service as incentive or affiliate is defined. As an example, as shown in FIG. 13, the log conversion information table 30T stores data including; an app name; a rule type; a record type (incentive or affiliate); a type (bookdocument name, reservation type, information type); a process (information type); and a use time (reference time). Log information summarized in the record collection system 41 is converted according to the rule defined in the log conversion information table 30T, and the resulting log information (standard) is stored in the log information DB 30 in the DB server 1110 (step S43). The log type analysis unit 82 analyzes the log standardized in this way (step S44), classifies the log according to type, e.g. book content such as an electronic book, a reservation service for travel, move, etc., and a provision app such as map search, game, sightseeing guide, or route search as shown in FIGS. 14A, 14B, and 14C, and stores it in any of analyzed log information tables 40Ta to 40Tc. Further, the weighting unit 83 performs weighting in order to calculate a distribution amount (incentive fee) or a recovery amount (affiliation fee) according to the use record (step S45), and the use record storage unit 84 stores it in the use record information DB 23 in the DB server 11.

[0025]

The weighting process is described in detail below. The portal site according to the present invention provides various applications, content, and services, and there is a need to calculate a distribution amount paid from the portal

reception unit 101 collects the use record corresponding to the search condition from the use record information DB 23 in the DB server 11 (step S52). The use record transmission unit 103 transmits the collected use record information to the vendor terminal 70, and the use record display unit 74 in the vendor terminal 70 displays the quantified use record (steps S53, S54). Thus, the provision vendor can confirm the distribution amount paid from the portal operator to the provision vendor as an incentive or the recovery amount paid as an affiliate for a free application, content, or service according to the use record.

[0027]

In the present invention, a fixed charging system is employed when the user contracts with the portal site operator. When the user uses an application, content, or a service provided on the portal site, no charge is required. When the user uses a selected application, content, or service, a fee distribution amount (incentive) or a fee recovery amount (affiliate) is calculated according to the use record, and the portal site operator performs a fee distribution or fee recovery process for each provision vendor. This fee distribution and recovery system is described below. As shown in FIG. 18, the record collection system 41 in the record collection server 40 includes an execution planning unit 88, a use record extraction unit 89, a recovery and distribution information analysis unit 90, a use record transmission unit 91, a record correction unit 92, a recovery calculation unit 93, a distribution calculation unit 99, and a use information and fee transmission unit 100. The use record information DB 23 in the DB server 11~~20~~ stores a use record table 60T storing use record information shown in FIG. 20, and the use record analysis result DB 26 stores an analysis result table 70T shown in FIG. 21. The analysis result table 70T stores information about distribution (incentive) or recovery (affiliate) as a result of analyzing the use record table 60T. The amount conversion information DB 24, the recovery fee information DB 27, and the distribution fee information DB 28 store an amount conversion information table 80T, a recovery fee information table 90T, and a distribution fee information table 100T, respectively. The amount conversion information table 80T

CLAIMS

1. A portal site fee distribution and recovery system for a portal site that is connectable with servers of a plurality of vendors for providing a plurality of applications, content, services, and the like and a client terminal of a user via a network, the portal site fee distribution and recovery system comprising

a record collection system for collecting, when an application, content, or a service is used, a use record based on a use history of the application, content, or service,

wherein the record collection system includes a recovery and distribution information analysis unit for calculating a recovery fee by summarizing a result reward (affiliate) corresponding to the use record or a distribution fee by summarizing a use fee (incentive) corresponding to the use record.

2. The portal site fee distribution and recovery system according to claim 1, wherein the record collection system includes: an execution planning unit for performing scheduling by designating a period and summarizing record collection; and a record collection extraction unit for extracting a use record within the period summarized by the execution planning unit, and

wherein the recovery and distribution information analysis unit analyzes use record information extracted by the record collection extraction unit to classify the use record information into recovery fee information and distribution fee information, and stores the recovery fee information and the distribution fee information respectively in a recovery fee information database (DB) and a distribution fee information database (DB).

3. The portal site fee distribution and recovery system according to claim 1 or 2, comprising

a weighting unit for quantifying and summarizing the use record as points based on the use history, and setting an evaluation basis when calculating the points

as a fee.

4. The portal site fee distribution and recovery system according to claim 3, comprising

an amount conversion table in which a conversion rule for the points is set,

wherein points of recovery fee information and points of distribution fee information are converted into amounts according to the conversion rule and stored.

CLAIMS

1. A portal site fee distribution and recovery system for a portal site that is connectable with servers of a plurality of vendors for providing a plurality of applications, content, and services, and a client terminal of a user via a network, wherein

the portal site system comprises a web server, a DB server, and a record collection server;

the web server comprises a user information registration unit, a use procedure conversion and transmission unit, and a user authentication unit;

the DB server comprises a user information DB which stores user information transmitted from the client terminal, a use procedure conversion rule information DB which stores use procedure conversion rule information, and a use record information DB which stores use record;

the record collection server stores a record collection system;

the user information registration unit of the web server is configured to record the user information sent from the client terminal to the user information DB, when a user transmits the user information from the client terminal, and the use procedure conversion and transmission unit is configured to convert the user information according to a rule defined in a use procedure conversion rule table stored in the use procedure conversion rule information DB and transmit the converted user information to each of the servers of the provision vendors;

the portal site system comprises the record collection server, the record collection server specifying the user accessing the portal site based on the user information in the user information DB, executing a use procedure between the user and the vendor, when the specified user selects the application, content, or service provided by the portal site, collecting a use history of the client terminal transmitted from each provision vendor as a log, when the application, content, or service provided by the portal site is used, and collecting use record information based on the log;

the record collection server comprises an execution planning unit which performs scheduling by designating a period and summarizing use record; a use record extraction unit which extracts a use record within the period summarized by the execution planning unit; a recovery and distribution information analysis unit which determines a type of the record whether the use record is a fee distribution or fee recovery; a distribution calculation unit which calculates a distribution fee based on a conversion rate in a distribution fee information table; a use record transmission unit which transmits the use record of the service to each vendor; a recovery calculation unit which calculates a recovery fee; a use information and fee transmission unit which transmits the distribution fee or the recovery fee to each vendor; and a use record DB which records the use record as quantified points; and

the portal site system calculates a fee distribution amount and a fee recovery amount when the user uses a selected application, content, or service, according to the use record, and executes fee distribution and fee recovery process for each provision vendor.

2. The portal site fee distribution and recovery system according to claim 1, comprising

a weighing unit which quantifies and summarizes the use record as points based on the use history, and which sets an evaluation basis when calculating the points as a fee.

3. The portal site fee distribution and recovery system according to claim 2, comprising

an amount conversion table in which a conversion rule for the points is set,

wherein points of recovery fee information and points of distribution fee information are converted into amounts according to the conversion rule and stored.