embodiment, only two clusters are illustrated, but the number of clusters to be created is not limited to this. In Figs. 7 to 9, the equipment 2 is assumed to be an air conditioner. Figs. 8 and 9 are conceptual diagrams for describing generation of clusters by extracting air conditioners with high similarities from the air conditioners whose operation models are illustrated in Fig. 7, and the indices of the operation models themselves and indicated values have no special meanings.

[0042] After classifying every one of the operation models into one of the clusters, the cluster model setting unit 15 generates a cluster model for each cluster (step 303). The cluster model may be generated, for example, by calculating the average value or median value of operation models, or one of operation models representing the characteristics of the cluster may be adopted as the cluster model. In each of Figs. 8 and 9, the cluster model is indicated by a thick line. The cluster model setting unit 15 generates a cluster model for each cluster as described above, and stores it in the cluster model storage unit 23. With each cluster model, information that identifies each operation model used to generate the cluster model concerned or the equipment 2 corresponding to each operation model concerned is associated.

[0043] After the cluster models are generated as described above, the equipment selection processing unit 13 causes the user interface unit 14 to display one of the cluster models in response to an operation of the administrator (step 304). How to prompt the administrator to specify the operation model to be displayed is not particularly limited. The administrator refers to a cluster model selection screen (not illustrated) and selects one of the cluster models on the screen. More than one cluster model may be selected.

[0044] After the cluster model is selected by the administrator, the equipment selection processing unit 13 identifies the operation models used to generate the

[0084] Then, upon accepting the number of pieces of equipment n specified by the administrator, for example, the equipment selection processing unit 13 extracts pieces of the control target equipment having the first to n-th highest priorities. In this way, the equipment selection processing unit 13 narrows down the selected pieces of the control target equipment according to the priorities.

[0085] According to this embodiment, pieces of the control target equipment can be prioritized and narrowed down using the operation models of another piece of equipment (thermo-controller in the above example).

[0086] In the above example, the average operating time is used as an index value used for calculating the operation model of the related equipment, as an example, but this is not limiting and power consumption, surplus power, or the like indicated as examples in the first embodiment may be used. Alternatively, weather information/weather forecast, room temperature/suction temperature, the operating time of equipment 2 in the same room as the air conditioner (equipment 2), the number of occupants, the operating state (operating mode), and the like may be used.

[0087] In this embodiment, priorities are assigned by the administrator. However, priorities may be automatically assigned, for example, in descending order of the index value (average value, maximum value, mean value, etc.) indicated in the related equipment.

[0088] Eighth Embodiment

Fig. 17 is a block configuration diagram of a monitoring system in this embodiment. The components that are the same as those in the third embodiment are denoted by the same reference signs and description thereof will be omitted.

[0089] The monitoring system 10 in this embodiment has the selection reference model setting unit 16 and a number-of-occupants information acquisition unit 19 in

CLAIMS

[Claim 1] An equipment selection assistance apparatus comprising:

an operation record information acquisition means to acquire operation record information indicating an operation record of each piece of equipment installed in a facility;

an operation model generation means to generate, for each piece of equipment, an operation model indicating an operating state of each piece of equipment in a predetermined period, based on the operation record information;

a selection processing means to select control target equipment to be a target of demand control from pieces of equipment installed in the facility, based on operation models generated by the operation model generation means; and

a selection reference model setting means to set a selection reference model to be compared with each operation model generated by the operation model generation means,

wherein the selection processing means automatically selects the control target equipment, depending on a result of comparison between each operation model generated by the operation model generation means and the selection reference model set by the selection reference model setting means.

[Claim 2] The equipment selection assistance apparatus according to claim 1, further comprising

a display means to display operation models generated by the operation model generation means,

wherein the selection processing means selects, as the control target equipment,

equipment corresponding to an operation model selected by a user from the displayed operation models.

[Claim 3] The equipment selection assistance apparatus according to claim 1, further comprising:

a cluster model setting means to set, as a cluster model, an operation model corresponding to each cluster generated by classifying operation models generated by the operation model generation means according to similarities into a plurality of clusters; and

a display means to display cluster models set by the cluster model setting means,

wherein the selection processing means selects, as the control target equipment, one or more pieces of equipment corresponding to an operation model included in a cluster model selected by the user from the displayed cluster models.

[Claim 4] The equipment selection assistance apparatus according to claim 1,

wherein as a result of comparison between operation record information before and operation record information after the control target equipment selected by the selection processing means is demand-controlled, when it is determined that a power reduction effect is obtained by selecting the control target equipment as the target of demand control, the selection reference model setting means sets a selection reference model used in selecting the control target equipment as a selection reference model for selecting next control target equipment.

[Claim 5] The equipment selection assistance apparatus according to claim 1,

wherein the selection reference model setting means sets, as a selection reference model, a selection reference model used in selecting control target equipment with which a power reduction effect has been obtained in another facility.

[Claim 6] The equipment selection assistance apparatus according to claim 1, further comprising

an acceptance means to accept a condition for comparison between an operation model and a selection reference model to be performed by the selection processing means,

wherein the selection processing means selects control target equipment by comparing each operation model with the selection reference model in accordance with the condition for comparison.

[Claim 7] The equipment selection assistance apparatus according to claim 1, further comprising

an equipment information acquisition means to acquire equipment information in which pieces of equipment that operate in cooperation are associated with each other,

wherein when a plurality of pieces of control target equipment are selected, the selection processing means refers to the equipment information to identify pieces of equipment respectively associated with the plurality of pieces of control target equipment, assigns priorities to the plurality of pieces of control target equipment based on operation models of the identified pieces of equipment, and narrows down the plurality of pieces of control target equipment according to the priorities.

[Claim 8] The equipment selection assistance apparatus according to claim 1,

wherein the selection reference model setting means sets a selection reference model based on a change in the number of occupants in the facility acquired from an entrance and exit management system.

[Claim 9] The equipment selection assistance apparatus according to claim 1,

wherein the operational record of each piece of equipment is at least one of an operating time, surplus power, and power consumption.

[Claim 10] A program for causing a computer to function as:

an operation record information acquisition means to acquire operation record information indicating an operation record of each piece of equipment installed in a facility;

an operation model generation means to generate, for each piece of equipment, an operation model indicating an operating state of each piece of equipment in a predetermined period, based on the operation record information;

a selection reference model setting means to set a selection reference model to be compared with each operation model generated by the operation model generation means, and

a selection processing means to select control target equipment to be a target of demand control from pieces of equipment installed in the facility, depending on a result of comparison between each operation model generated by the operation model generation means and the selection reference model set by the selection reference model setting means.