Computer room facility management system

SweOS

Sensor Web Enablement Observation Service

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SweOS is a real-time computer room integrated management control system. It manages and monitors facilities (UPS, thermo-hygrostat, fire extinguishing equipment, etc.) and environment (temperature, humidity, smoke, leakage, voltage, current, power control) in the computer room and physical security (Intrusion detection, video surveillance, door opening and closing). This prevents computer accidents by predicting failures in advance, and minimizes work loss due to various computer accidents through rapid failure handling. This system is designed based on remote integrated security monitoring and control for distributed facilities and environments. Real-time monitoring and control anytime, anywhere, 365 days a year, wherever the network is connected.

01

TOTAL ONE-Stop Solution

Integration products of Equipment failure monitoring, the environmental monitoring, video surveillance. It provides one-stop service.

02

Open architecture

By using of an open architecture provides functional stability and scalability for porting new technologies.

03

Stability (non-disruptive)

Providing stable and effective services through the establishment of an operating system 24 hours a day, 365 days a year.

04

Convenient user interface

An easy-to-understand user-friendly GUI configuration support fast and accurate system operation.

05

Easy system expansion

Management Facility sensor system extensible with the relevant board.

06

Diversification of supported sensors

It supports both analog/digital type sensors to assist more efficient system configuration and operation.

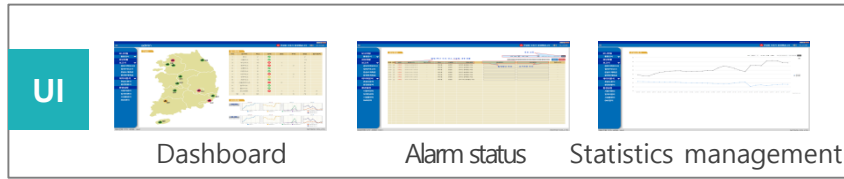**07**

Function configuration according to user needs

The system function can be configured according to the user's purpose, so it is possible to combine it into the desired management system type.
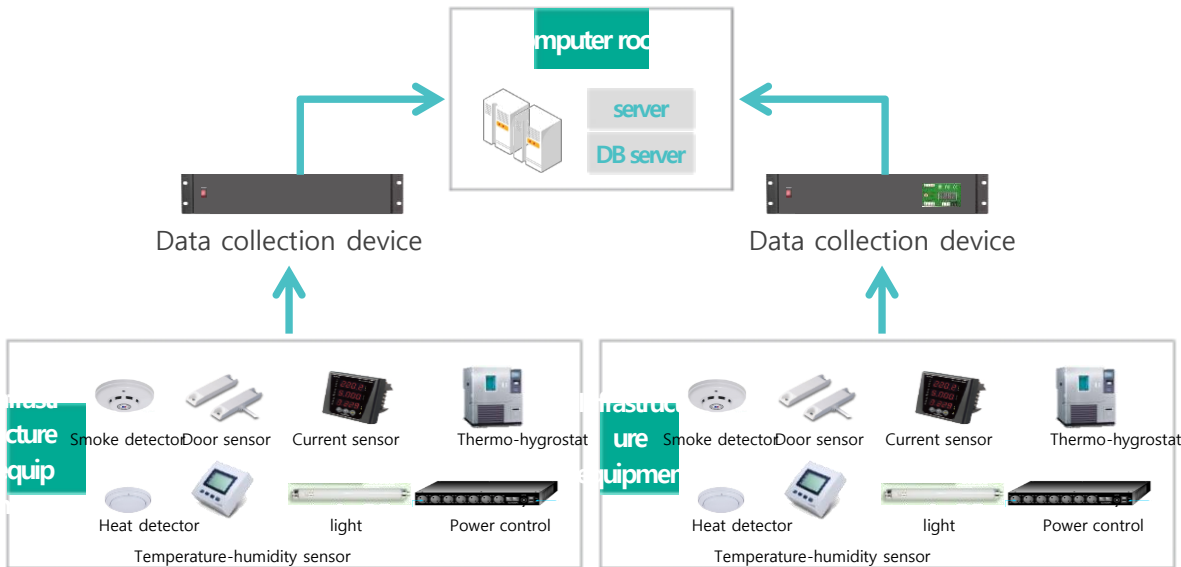
08

Reduce maintenance cost

Reduction of frequent management costs by automatic failure detection processing. Solving the problem of management duality and high cost through integrated management of management elements.
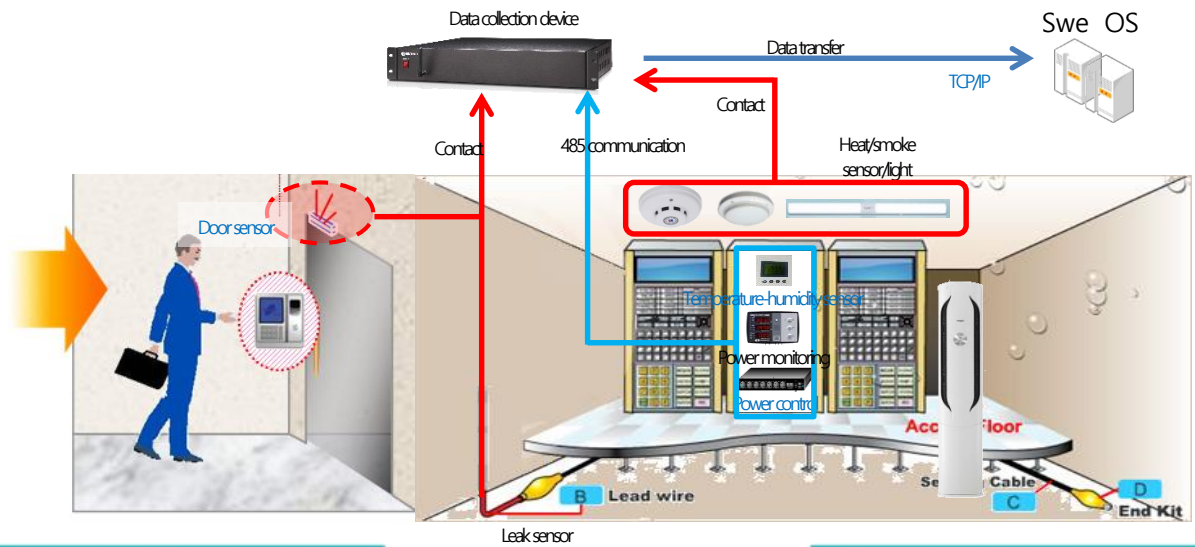
System configuration diagram

UI	Dashboard	Alarm status	Statistics management

Integrated monitoring

Computer room

server

DB server

Data collection device

Data collection device

Infrastructure equip

Smoke detector | Door sensor | Current sensor | Thermo-hygrostat

Heat detector | light | Power control

Temperature-humidity sensor

Infrastructure equipment

Smoke detector | Door sensor | Current sensor | Thermo-hygrostat

Heat detector | light | Power control

Temperature-humidity sensor

Sensor configuration diagram

Data collection device

Data transfer

Swe OS

TCP/IP

Contact

485 communication

Heat/smoke sensor/light

Contact

Door sensor

Temperature-humidity sensor

Power monitoring

Power control

Access Floor

B Lead wire

Sensor Cable

C

D

End Kit

Leak sensor

SweOS
Data Collection Unit

Facility failure management

> Real-time facility status

Failure detection and action through real-time status monitoring of computer facilities (UPS, rectifiers, etc.).
- Instant fault status identification through SNMP trap reception
- - Identify additional data polling by establishing serial communication for equipment

> Automatic alarm notification

Immediate notification of failure occurrence to the manager when a failure is detected through real-time status monitoring
- Immediately alarm to the administrator in case of failure
- - Pop-ups, emails, text messages, fault notification, voice alarm

> Alarm history management

Provides failure statistics information through the failure occurrence/recovery history database
- Data filtering by date, facility, region, and monitoring item
- History provides fault alarm and automatic recovery history
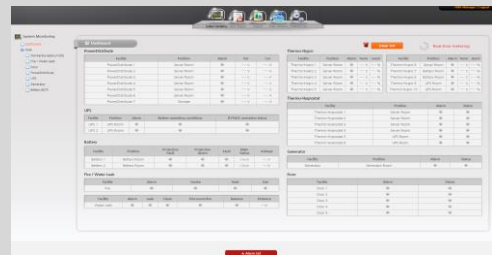
> Query history of alarm

Various search support for failure occurrence/recovery history
- Inquiry of failure history according to search conditions such as date, facility, region, alarm level, etc.
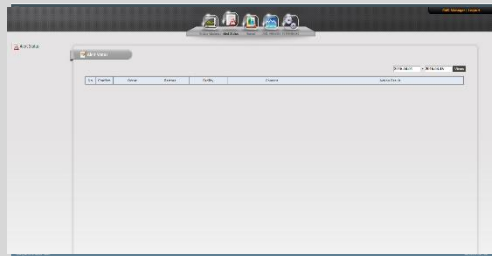- File storage and print mail attachment function for retrieved data

> Automatic facility control

Automatic error handling according to the set scenario when a failure occurs

Facility monitoring screen

Alarm history management screen

Environmental management

> Temperature/humidity management

Real-time monitoring of changes in temperature/humidity in the computer room
- Alarm occurs when temperature/humidity abnormal changes
- Monitoring and control of thermo-hygrostat operation status

> Fire monitoring

Real-time monitoring of fire occurrence in the computer room
- Failure alarm occurs when smoke, heat, or gas is detected

> Leak monitoring

Real-time leak (flooding) monitoring through leak sensor

> Electric energy management

Predicting power consumption for each facility through real-time power usage monitoring for facilities in the computer room and analysis of usage patterns.

Real-time monitoring screen

SweOS
Data Collection Unit

Video security management

> Real-time video monitoring

Real-time video monitoring of visitors and facilities through cameras installed in computer facilities
- Depending on the number of cameras installed in the system, up to 1CH-16CH can be monitored.
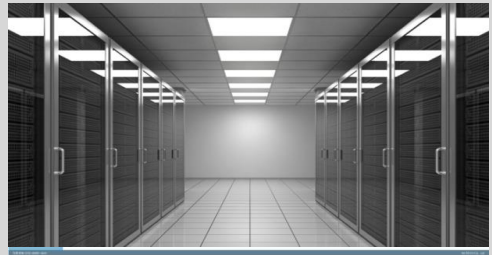
> Video recording/search

Supports recording of monitored video and various search for recorded video
- Video search function by date, time, event occurrence (snapshot)

> Access management

Confirmation of visitors through linking with the entry/exit system

Facility monitoring screen

Real-time monitoring screen
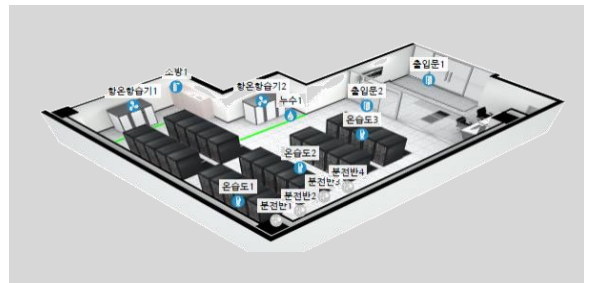

Others

> Authority management by level

Tree-type hierarchical user authority can be specified with the management area and authorization function for each user level (Manager, Suppoter) for facility, environment, and monitoring in the computer room.

> User threshold setting

User setting function for alarm generation threshold value, alarm level, monitoring status, automatic control status, alarm mail transmission, alarm text transmission, etc.

> Report

Equipment list report, alarm occurrence status report, and history data report are provided as a standard, and customized reports tailored to user requirements can also be saved as an Excel file, so it can be directly printed and used as a report for submission.

구 축 사 례

Business name	Date of deployment	assigned task
Kookmin Bank Yeouido headquarters	Sep/2009 ~ Oct/2009	TBM system construction
Yeouido KT headquarters	Jun/2010 ~ Jun/2010	TBM system construction
Kookmin Bank Yeomchang Branch	Jun/2010 ~ Jun/2010	TBM system construction
Gwanghwamun Kyobo Building	Jul/2011 ~ Aug/2011	TBM system construction
Homaesil-dong Traffic Control Room	Sep/2012~ Oct/2012	TBM system construction
Incheon V-ENS computer room	Jan/2013 ~ Feb/2013	TBM system construction
Rwanda Government Building 5	Feb/2013 ~ Apr/2013	TBM system construction
Korea Venture Investment	Jun/2013 ~ Oct/2013	TBM system construction
Sohari Kia Motors	Feb/2014 ~ Feb/2014	TBM system construction
Mann Humel	Mar/2014 ~ Mar/2014	TBM system construction
Labor Welfare Corporation Ulsan infrastructure construction	Jul/2014 ~ Jul/2014	TBM system construction
Gwangju Bank Head Office	Nov/2014 ~Dec/2014	TBM system construction
Ministry of Culture, Sports and Tourism	Nov/2014 ~ Nov/2014	TBM system construction
Hyundai Motor Company ₩ construction 3 places	Feb/2015 ~ Feb/2015	TBM system construction
Samsung Total Backup Computing Center	Mar/2015 ~ Mar/2015	TBM system construction
Hyundai Motor Company construction 3 places	Feb/2015 ~ Feb/2015	TBM system construction
Samsung Total Backup Computing Center	Mar/2015 ~ Mar/2015	TBM system construction
Hyundai Mobis CCR construction 13 locations	Apr/2015 ~ Mar/2016	TBM system construction

구 축 사 례

Business name	Date of deployment	assigned task
Kyrgyzstan election management system	May/2015 ~ May/2015	TBM system construction
Rwanda Kigali Computer Center	Sep/2015 ~ Sep/2015	TBM system construction
Pohang Accelerator Research Institute	Aug/2015 ~ Aug/2015	TBM system construction
Dubai nuclear power	Sep/2015 ~ Sep/2015	TBM system construction
National Disaster Safety Research Institute	Nov/2015 ~ Dec/2015	TBM system construction
Hyundai Mobis Seosan Driving Test Center	May/2016 ~ May/2016	TBM system construction
Cheongna Hana Financial Center Leakage Monitoring System	Dec/2016 ~ Dec/2016	TBM system construction
Incheon Airport temperature monitoring system	May/2017 ~ Jun/2017	TBM system construction
UPS monitoring of 1100 branches of Kookmin Bank	Aug/2017 ~ Sep/2017	TBM system construction
Daegu data center	Jan/2018 ~ Jan/2018	TBM system construction
Asiana Headquarters	Oct/2018 ~ Nov/2018	TBM system construction
Doosan Heavy Industries & Construction Computer Office	Jan/2019 ~ Jan/2019	TBM system construction
BC Card head office and 3 branches	Aug/2019 ~ Sep/2019	TBM system construction
Chosun University Computer Room	Oct/2019 ~ Oct/2019	TBM system construction
Hyundai Mobis Chungju 2nd factory outside the company	Nov/2019 ~ Nov/2019	TBM system construction
Hyundai Movex Computer Room	Dec/2019 ~ Dec/2019	TBM system construction
Hyundai Mobis Chungju Plant 2	Jan/2020 ~ Jan/2020	TBM system construction

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