



## Smart server room project of data processing center of a provincial finance department

Monitor. Integrate. Alert. Peace of Mind.

### Our Customer

This project will be constructed by AceVig in April 2023. The data processing center of the Department of Finance includes a master control room, data backup area, server area, network transmission area, auxiliary equipment area, and battery room.

More than 200 pieces of equipment are deployed throughout the data center to support and ensure the normal and safe operation of business systems such as the Department of Finance's local area network, metropolitan area network, wide area network and financial application support platform.



*As a key infrastructure for data storage, computing, and application, data centers have become strategic basic resources for the economy and society.*



### Customer demands

#### **Comprehensive environmental monitoring:**

Realize comprehensive real-time monitoring of environmental factors such as temperature, humidity, air quality, dust particles, smoke, and water leakage in the computer room.

#### **Equipment status monitoring and alarming:**

It is necessary to understand the operating status of 200 devices in real time, including key indicators such as CPU usage, memory usage, hard disk space, and network status.

#### **Data recording and analysis:**

It is hoped that the monitoring system can record various data of the computer room environment and equipment for a long time, and provide data analysis and optimization functions.

#### **Remote monitoring and management:**

Considering that the computer room may be located in a location that is not easily accessible directly, it is hoped to be able to remotely view real-time data, receive alarm notifications, perform parameter settings and configuration adjustments, etc.

#### **System security and reliability:**

The system is required to have high security protection capabilities and be able to resist network attacks and malicious intrusions.

## Service Process

1. The AceVig team gave a preliminary plan and quotation after communicating relevant content via voice.
2. In order to better understand the details of the computer room, engineers went on a business trip to the site to conduct inspections and marked several accident-prone points of the computer room equipment, and also proposed solutions.
3. After signing the contract, the goods will be shipped immediately.
4. Engineers debugged and installed it on site, and it was all installed and debugged in just one week.

## Solution technical features

### Intelligent sensing

The sensors in the data room transmit the sensed data to the Cowin monitoring host and then to the Cowin monitoring system. The Cowin DCIM system has a variety of built-in intelligent sensing algorithms that can predict hot spots in the computer room and potential equipment failures. When an abnormality is detected, the DCIM system will immediately trigger the alarm mechanism and notify the administrator via email, text message, or interface pop-up window.

### Digital image fusion

Rich visual display functions, intuitively display the real-time status of the computer room environment and equipment through charts, animations, etc. Administrators can use these visual tools to quickly understand the overall situation of the computer room, discover and deal with problems in a timely manner.

### Operate independently

The Cowin monitoring system is divided into multiple functional modules, such as data collection module, analysis and processing module, alarm notification module, etc. Each system module can work independently and collaboratively. Even if one module fails, other modules can still function normally.

### Remote operation and maintenance

Computer room administrators can remotely access and manage computer room equipment through mobile apps or browsers or computers without having to go to the site in person. Operation and maintenance personnel can view real-time data, adjust equipment parameters, perform fault diagnosis, etc. on the interface. These operating instructions are transmitted back to the Cowin DCIM system through the network to achieve remote control.

### Confidentiality and security

Administrators can assign different Cowin system access rights to users to ensure that users can only access their authorized resources. Use secure communication protocols such as SSL/TLS to ensure the confidentiality and integrity of data during transmission. System logs can record all user operations and system events for subsequent auditing and tracing.



## AceVig Equipment Used in This Application

- 24 Hikvision panoramic cameras
- 30 sets of Cowin-TH temperature and humidity sensors
- 6 sets of Cowin-168A smoke detectors
- 5 sets of Cowin-RS485 air conditioning intelligent controller
- 5 sets of Cowin location leaks
- 12 Cowin-D86 power distribution switches
- 12 sets of Cowin-RS communication conversion modules
- 1 Cowin-Screen 10.1-inch touch screen
- Cowin-DAM1U intelligent management host
- V4.8 Cowin data center monitoring and management software
- SMS, phone and voice integrated alarm system

