

EDCM

V600R022C00

Product Description

Date **2021-10-22**

Contents

1 Solution Description.....	1
2 Software Architecture.....	2
3 Networking Mode.....	3
4 Typical Application.....	4
5 Features and Benefits.....	5
5.1 App Remote O&M.....	5
5.2 GIS Home Page.....	6
5.3 Site Monitoring.....	6
5.4 Alarm Management.....	6
5.5 Security Management.....	7
5.6 System Management.....	7

1 Solution Description

The NetEco edge data center management solution provides multiple functions, such as GIS map positioning, device environment monitoring, video viewing, and alarm push, to improve remote O&M efficiency and reduce O&M costs.

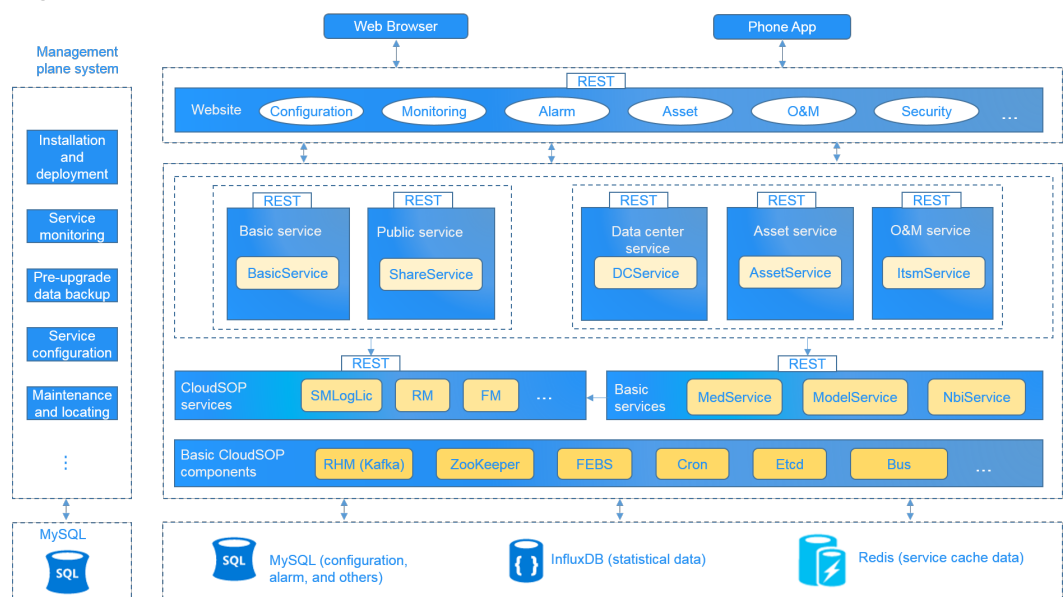
- Simplified architecture: No network management system (NMS) server is required. Access devices cooperate with cloud unified controller, simplifying O&M.
- Centralized management: An NMS can manage and monitor multiple data centers on the entire network in a centralized manner. Based on the online map, the NMS monitors the running status of the entire network in real time and clearly displays the locations of abnormal sites.
- Cloud-based troubleshooting: You can view network-wide abnormal alarms and drill to nodes layer by layer to easily locate fault causes.
- Mobile O&M: O&M using a mobile app enables you to learn about the network running status anytime and anywhere.

2 Software Architecture

The NetEco is a system solution for data center infrastructure and adopts the Browser/Server (B/S) architecture. The system centrally manages devices such as smart modules to implement unified monitoring, alarm, and O&M services. Users can access the NetEco server in web mode on a terminal running the Windows operating system. To ensure data transmission security, the NetEco supports encrypted transmission.

Figure 2-1 shows the software architecture of the NetEco.

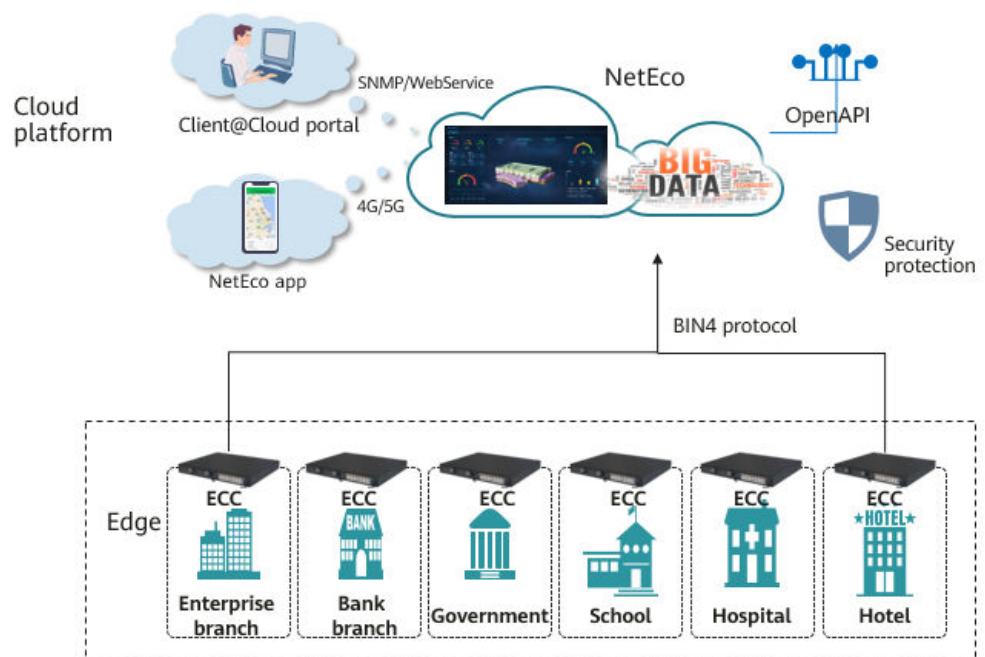
Figure 2-1 Software architecture



3 Networking Mode

The NetEco applies to small- and medium-sized data centers and supports access of multiple small- and medium-sized data centers. [Figure 3-1](#) shows the networking mode.

Figure 3-1 Networking mode



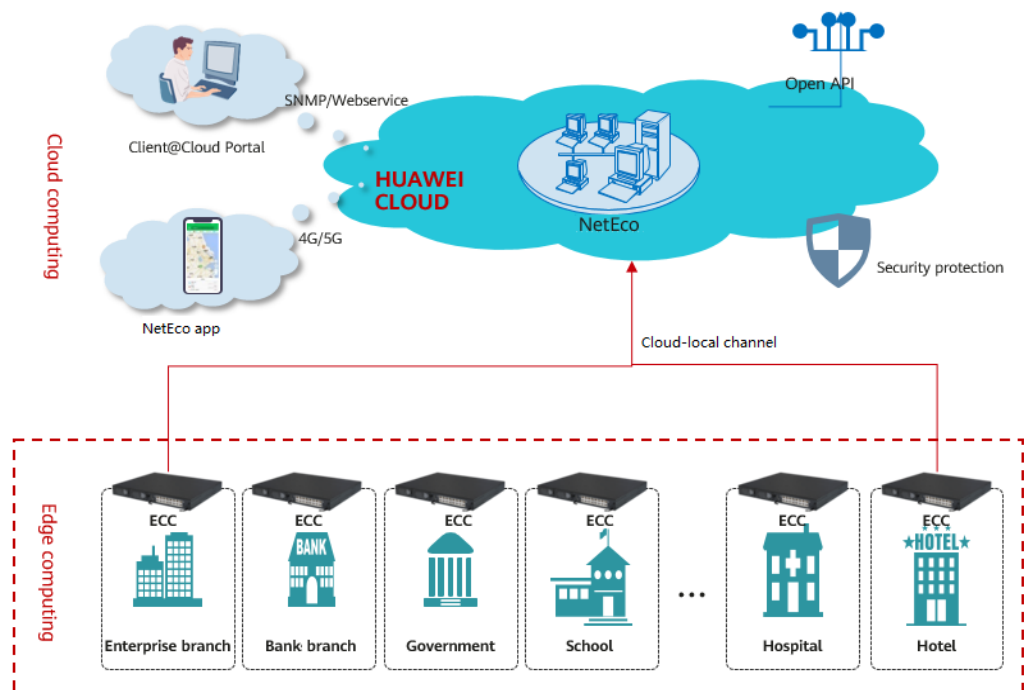
4 Typical Application

The NetEco applies to small- and medium-sized data centers of vertical industries that have a large number of widely distributed data centers.

The edge data center management (EDCM) solution mainly applies to small- and medium-sized data centers. Based on Huawei cloud platform, the NetEco implements centralized monitoring and cloud-based O&M of data centers.

Figure 4-1 shows the typical application scenario.

Figure 4-1 Application scenarios



5 Features and Benefits

The Edge Data Center Management is a cloud management system solution that provides remote monitoring and O&M for small- and medium-sized data centers of governments, education, healthcare, and enterprises.

The NetEco remote monitoring management system provides multiple functions, such as map positioning, device environment monitoring, video viewing, and alarm push, to improve remote O&M efficiency and reduce O&M costs.

The NetEco is the centralized O&M part of the Huawei data center infrastructure management solution. The system uses an open architecture and connects to various types of devices using device access packages.

The NetEco provides open interfaces for third-party products or vendors and can interconnect with devices from multiple mainstream vendors.

The devices that can be managed include the FusionModule500, FusionModule800, FusionModule1000A, UPS2000, FusionPower (UPS5000H series, 400–600 kVA, 800 kVA, 1.2 MW, and 1.6 MW), and power module.

- Devices: air conditioner, uninterruptible power system (UPS), power distribution unit (PDU), and environmental, video, and access control devices
- Component subsystem: power transformation and distribution subsystem and security subsystem

[5.1 App Remote O&M](#)

[5.2 GIS Home Page](#)

[5.3 Site Monitoring](#)

[5.4 Alarm Management](#)

[5.5 Security Management](#)

[5.6 System Management](#)

5.1 App Remote O&M

Site access: Connect sites to the NetEco system through the mobile app.

Remote O&M: Remote O&M through apps improves O&M efficiency and quality.

5.2 GIS Home Page

Monitors the running status of the entire network in real time based on the online map, alarm statistics, and maintenance data, and provides the site management and quick site search functions.

NOTE

The NetEco system provides only the capability to interconnect with a map service. The map service is provided by a third-party map service provider who is responsible for whether map data is available and accurate.

Site management: supports site information maintenance.

Quick site search: quickly locates abnormal sites.

5.3 Site Monitoring

Environment, energy consumption, key devices, alarms, and security monitoring are provided on the site monitoring page. Centralized monitoring of multiple sites minimizes the impact on services and reduces O&M costs.

- Environment monitoring: monitors the temperature, humidity, water, and smoke.
- Energy consumption monitoring: displays the PUE and load rate of sites in real time.
- Key device monitoring: monitors the UPS, air conditioners, and related power distribution devices in real time, and displays the energy flow diagram and air conditioner link diagram.
- Alarm monitoring: displays site alarm information in real time and quickly locates device faults.
- Security monitoring: monitors the cabinet door status and cameras in sites.

5.4 Alarm Management

The NetEco provides management functions such as monitoring network alarms, querying alarms, and setting remote alarm notifications. These functions help you quickly detect, locate, and rectify network faults.

- Alarm browsing: You can browse current alarms, historical alarms, and masked alarms, and switch between alarms.
- Alarm handling: Alarms can be acknowledged, unacknowledged, cleared manually, or cleared automatically. Users can rectify faults by referring to alarm handling suggestions and maintenance experience library.
- Alarm settings: You can set alarm rules to customize alarm monitoring policies based on their requirements, improving troubleshooting efficiency.

5.5 Security Management

The NetEco provides functions such as video management and access control management to ensure physical security of devices and environments and help you detect and handle exceptions in a timely manner.

- Video integration management: The NetEco can connect to IP cameras for integrating into the VCN5X0 and IVS1800 video management systems.
- Access control authorization management: The system monitors access control events.

5.6 System Management

- Rights- and Domain-based Management
This feature provides role-based user management functions such as adding, deleting, and modifying users as well as assigning user rights to implement centralized user management and authentication. Management is divided into two types: device and operation. Device rights and operation rights are assigned to users as required.
- Access Security Management
This feature allows you to set security policies for the system based on security requirements. The security policies include password policies, account policies, access control lists, mobile terminal login access control, and online user management. Customers can also assign corresponding access control rights to roles and bind roles to specific users.
- Log Management
This feature enables the system to automatically record operation logs, system logs, and security logs generated during system running. This function also supports log query and log export.