

# ***UPM***

Business-Oriented Network Performance Management

## Getting Started Guide

(UPM 6.3.1)

## Introduction

Colasoft UPM is a business performance management solution provided by Colasoft.

## Components

Colasoft UPM consists of nChronos Server (hereinafter referred to as “frontend”) and UPM Analysis Center (hereinafter referred to as “UPM Center”).

## Frontend

Frontend devices can be deployed at the critical nodes on the communication link for business system, and capture business communication data by switch port mirroring or network TAP. The frontend collects and analyzes the performance index parameters and application alarm information in real-time, and uploads to UPM Center via the management interface for overall analysis.

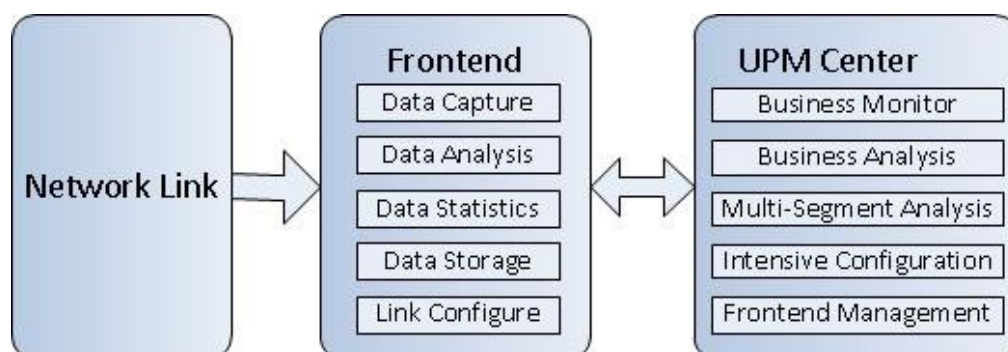
## UPM Center

UPM Center is deployed to converge frontend devices, collect the business performance indexes and alarm information uploaded by frontend devices, and display the analysis results.

## Architecture

UPM Center communicates with frontend using B/S (Browser/Server) architecture in determined hops to thereby intensively monitor and manage the whole network.

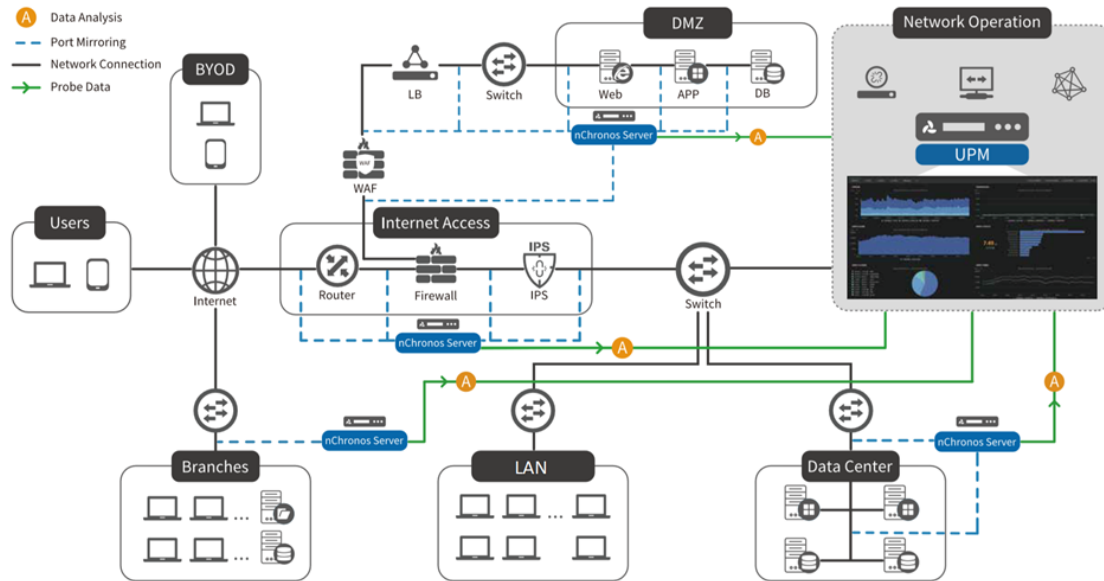
The architecture between UPM Center and frontend devices is visualized as the following figure:



## Deployment

Colasoft UPM is developed based on the idea of distributive deployment and intensive management. You can deploy frontend devices at any network links that need to be monitored to capture traffic. The frontend devices upload the data to UPM Center and UPM Center analyzes the data and shows the analysis results and manages the frontend devices.

The deployment of UPM is visualized as the following figure:

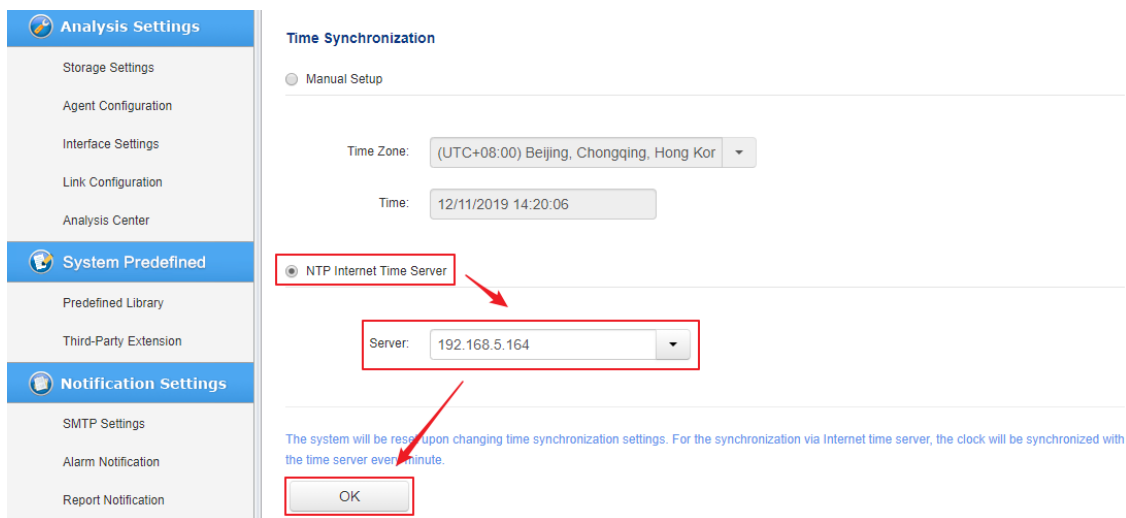


## Start to Use UPM

### Time Synchronization

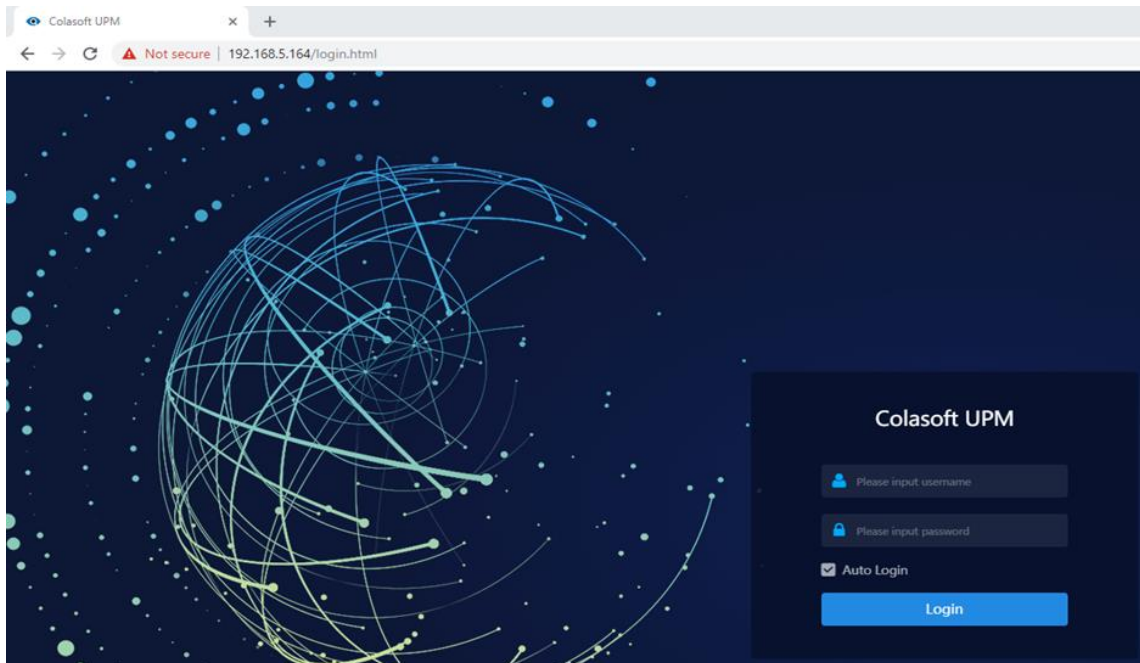
In order to guarantee data consistency between nChronos Server and UPM, users need to synchronize their time.

Login into nChronos Server webpage, click **Time Synchronization**->**NTP Internet time server**, input the IP address of UPM server, click **OK**.



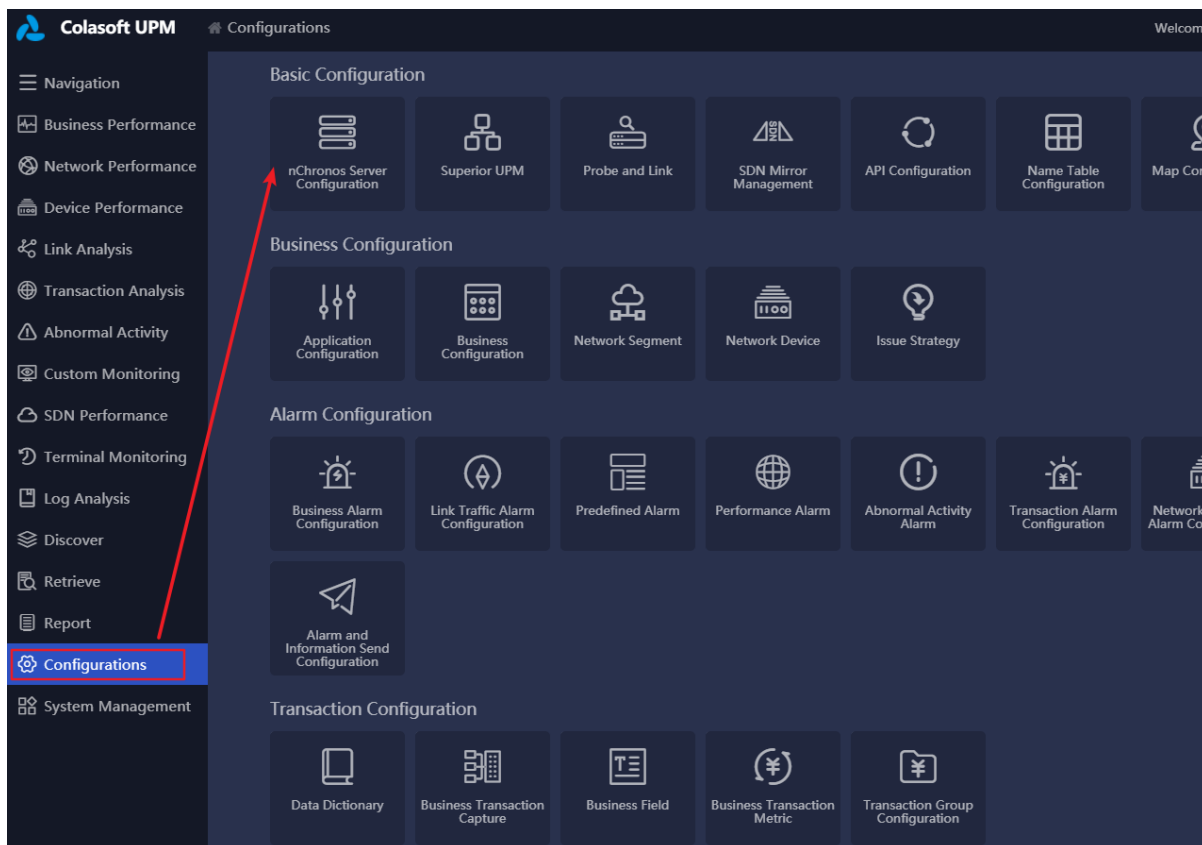
### UPM Login

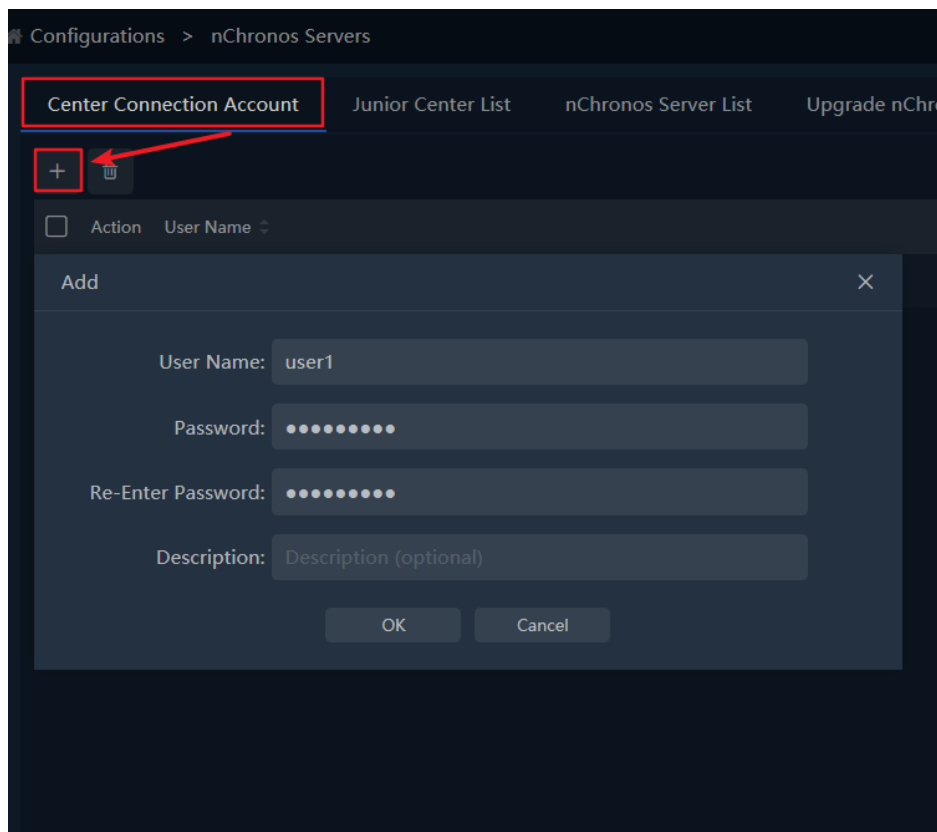
Input the IP address of UPM server in the address bar of browser: <https://192.168.5.164>, jump to the login page of UPM, input user account (csadmin) and password (!CSUPM23), click **Login**.



## Add Center Connection Account

Click **Configurations** -> **nChronos Server Configuration** -> **Center Connection Account** to add center connection accounts.





## Connect nChronos Server to UPM

Click **Analysis Center** on nChronos Server webpage to connect nChronos Server to UPM.

Input the following parameters:

- **nChronos Server name:** The name of current nChronos Server
- **Center address:** The address of UPM Center
- **Center port:** 22000 (uncheck SSL)/22100 (check SSL)
- **Username:** Center Connection Account username
- **Password:** Center Connection Account password

An example is shown as below.

**Analysis Settings**

- Storage Settings
- Agent Configuration
- Interface Settings
- Link Configuration
- Analysis Center**

**System Predefined**

- Predefined Library
- Third-Party Extension

**Notification Settings**

- SMTP Settings
- Alarm Notification

### Analysis Center

nChronos Server Name:

Center Address:

Center Port:

Username:

Password:

SSL:

✔ Succeeded in connecting to the Analysis Center: Colasoft UPM

## Add Probe

Click **Configurations** ->**Probe** ->**Probe and Link** ->**Probe and Link Configuration** to open the Add Probe page. Probes should be corresponding with the links of nChronos Server.

**Colasoft UPM** Configurations

**Basic Configuration**

- nChronos Server Configuration
- Superior UPM
- Probe and Link**
- SDN Mirror Management
- API Configuration
- Name Table Configuration

**Business Configuration**

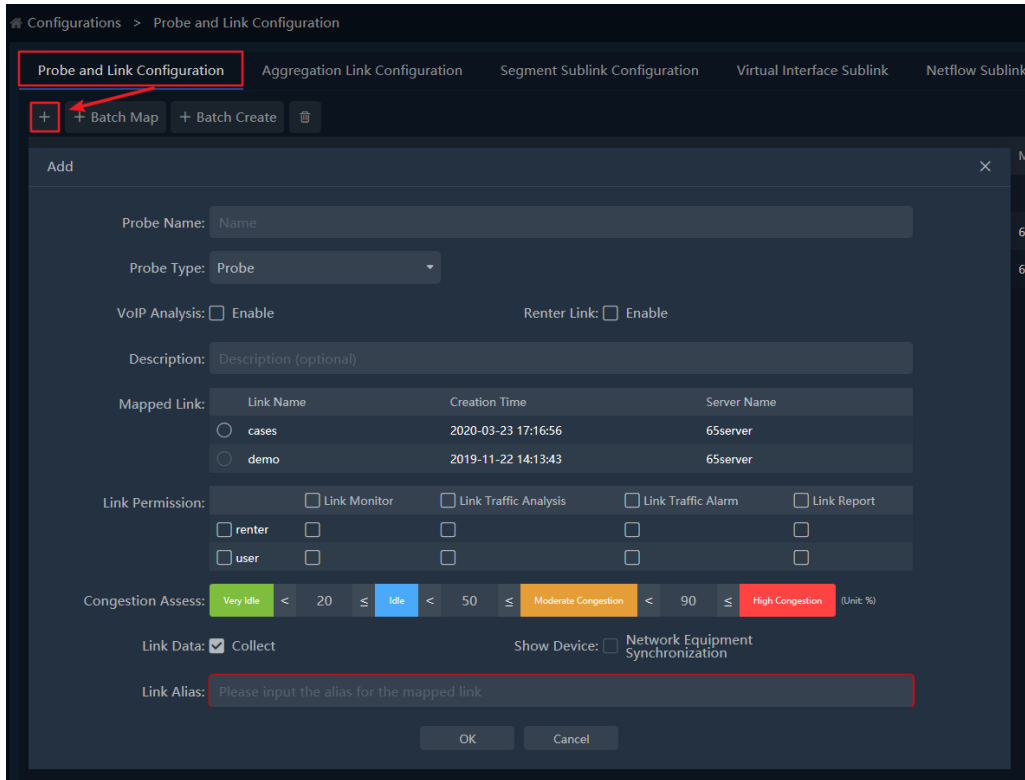
- Application Configuration
- Business Configuration
- Network Segment
- Network Device
- Issue Strategy

**Alarm Configuration**

- Business Alarm Configuration
- Link Traffic Alarm Configuration
- Predefined Alarm
- Performance Alarm
- Abnormal Activity Alarm
- Transaction Alarm Configuration

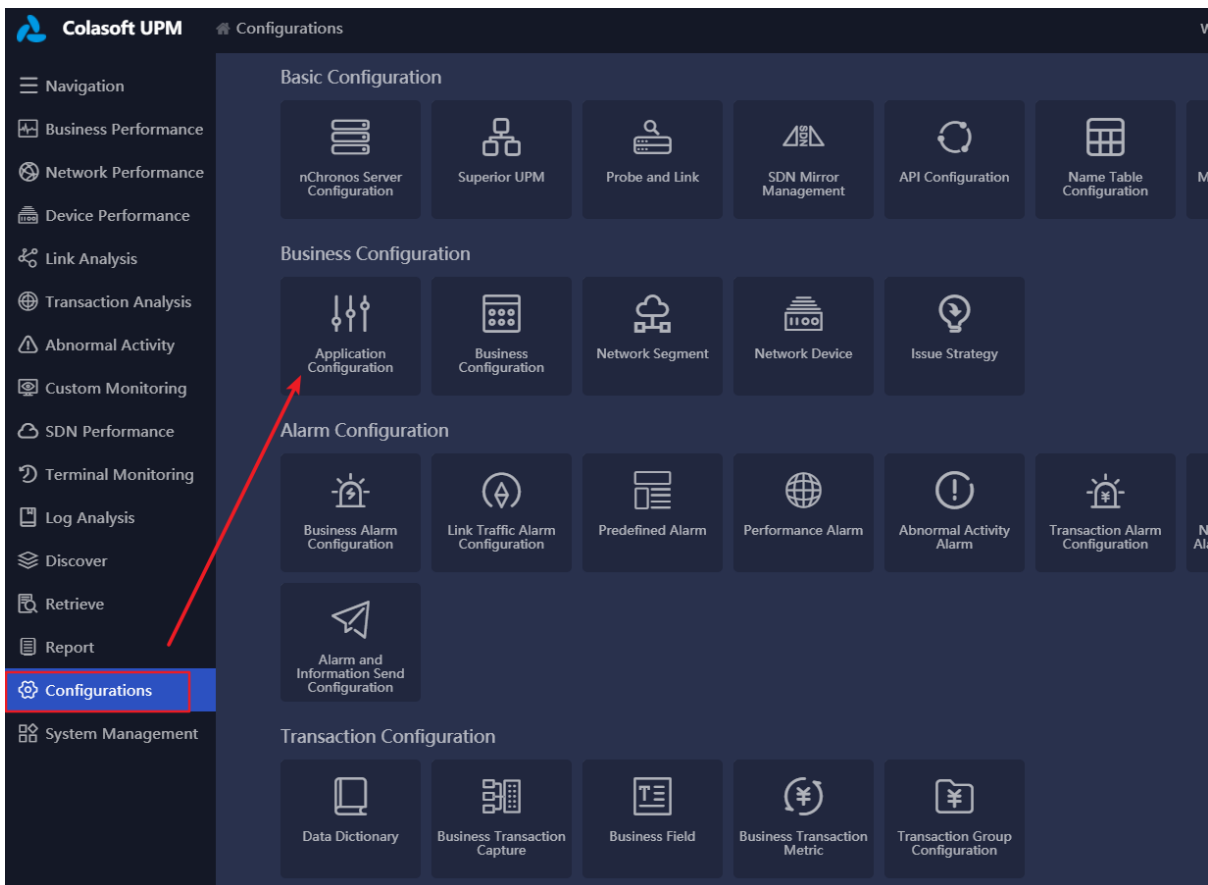
**Transaction Configuration**

- Data Dictionary
- Business Transaction Capture
- Business Field
- Business Transaction Metric
- Transaction Group Configuration



## Application Management


Click **Configurations** -> **Application Configuration** to add, delete or edit applications.



Action	ID	Status	Application	Alias	Description	Category	Application Type	Good Response Time	Normal Response Time	Bad Response Time	Very Bad Response Time	Cell
	30006	Enable	DB Server			Standard application	Short Connection	[0,200]	(200,800]	(800,10000]	(10000, +∞]	Loc
	30005	Enable	App Server			Standard application	Short Connection	[0,200]	(200,800]	(800,2000]	(2000, +∞]	Loc
	30004	Enable	Web Server			Standard application	Short Connection	[0,50]	(50,200]	(200,10000]	(10000, +∞]	Loc

Current page 1, total 1 page(s), total 3 record(s). Show for every page: 10 record(s)



To add an application, click button “” and input the parameters in following box. Then click **OK**.

**Add** ✕

Application:

Alias:

Description:

Category:

Type:

Rule:

Response Time Stamp: Good ≤ 200 < Normal ≤ 800 < Bad ≤ 2000 < Very Bad (Unit: Millisecond)

Note: When the response is "Very bad", it will be considered as a response timeout.

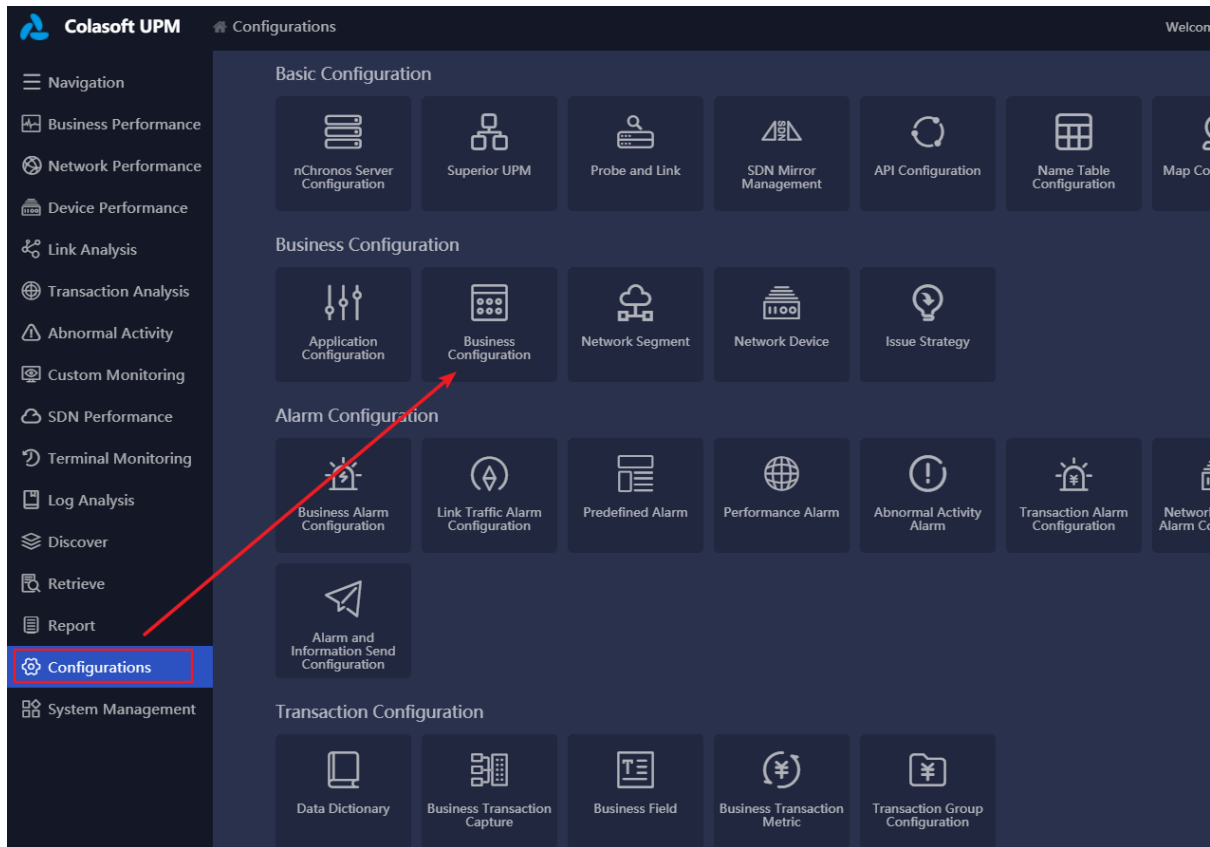
Add Application to:  Segment

Visible by Renter Users:

## Add Business

Click **Configurations** -> **Business Configuration** to add, delete or edit business.





Click button “” to add a business.

Following is an example of a simple business configuration for reference

I. Business Definition

Configure basic information of a business. After finishing business definition, click **Next**.

1 Business Definition 2 Business Logic Diagram Alarm

Name: Example

Auto-Configuration via API:  No Option

Operational Level: ★★☆☆

Description: Description (optional)

Business Group:  group2  group1

Business Privilege:  Monitor  Analysis  Alarm  Reports

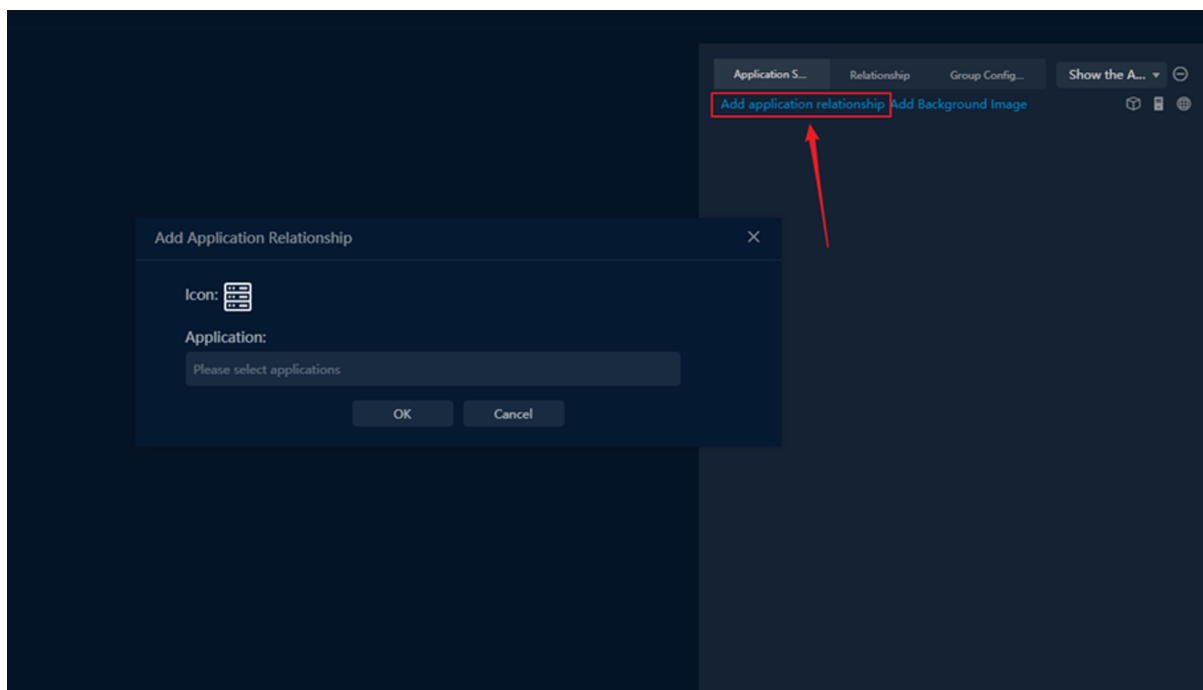
1

Pay attention to abnormal activity alarms:

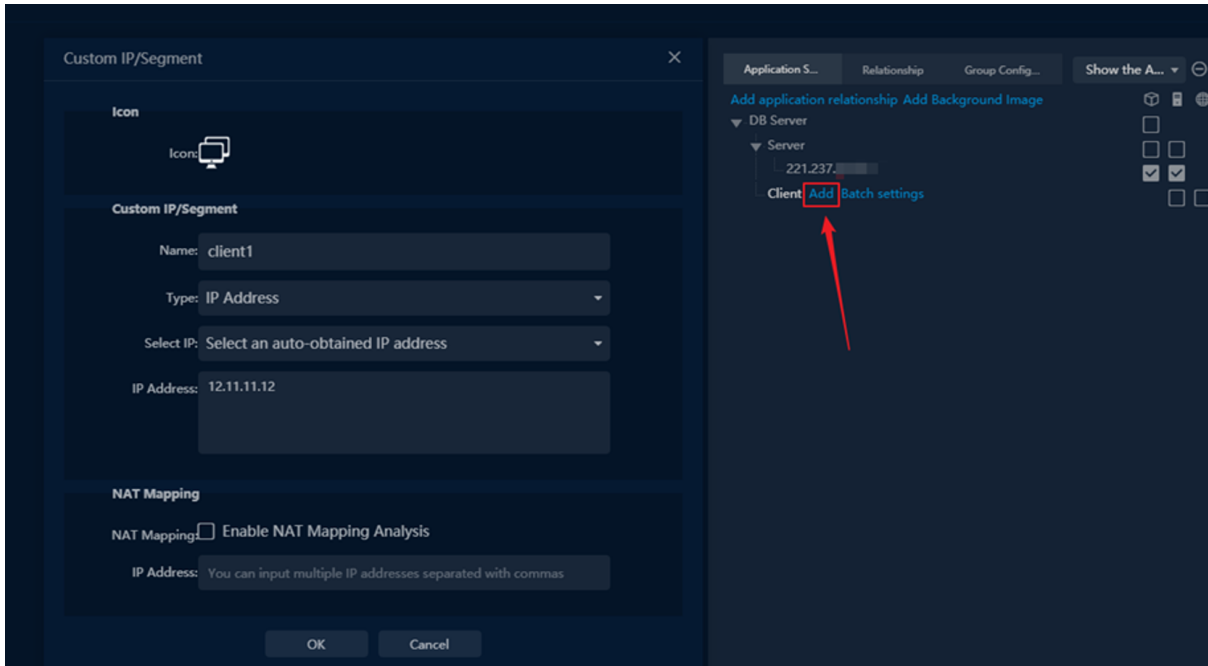
Next

## II. Business Logic Diagram

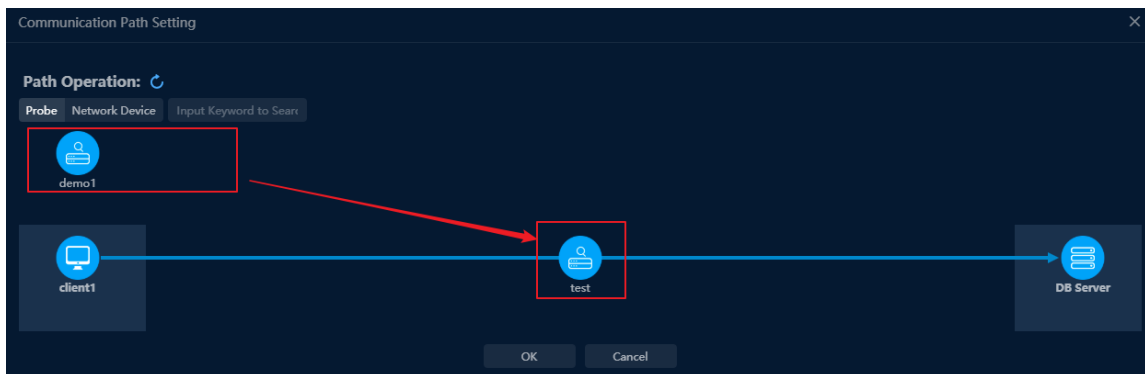
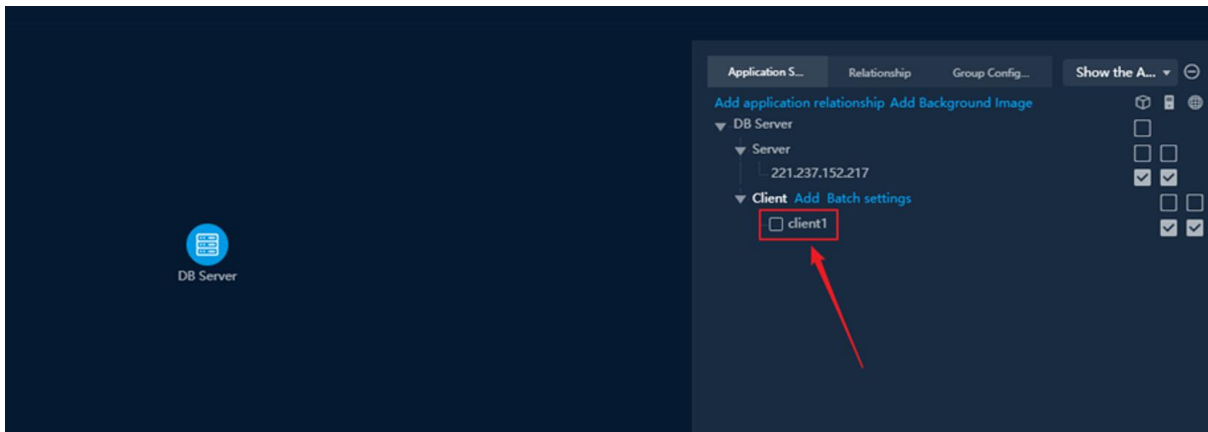
- i. Click **Add application relationship** to choose an application. DB Server is taken for an example here.

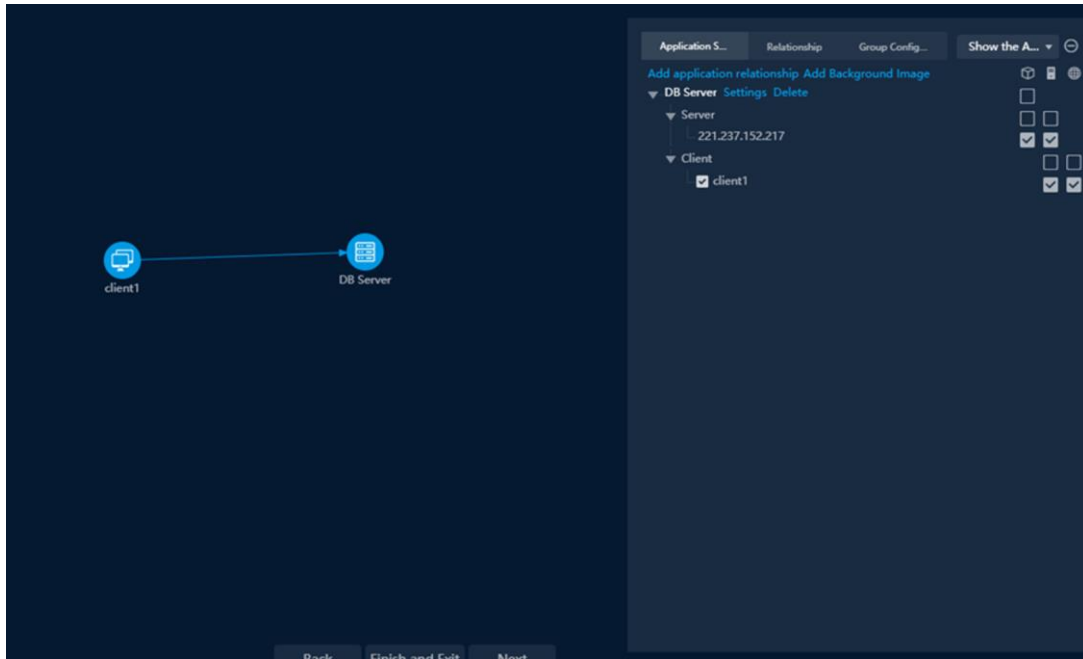


- ii. Add a client. Then click **OK**.



- iii. Check the client and the Path Setting box will pop up. Drag a probe to the relationship line and click **OK**. After that, the business is added successfully. Users can click **Finish and Exit** to complete the configuration, or click **Next** to set alarms.





### III. Alarm Settings

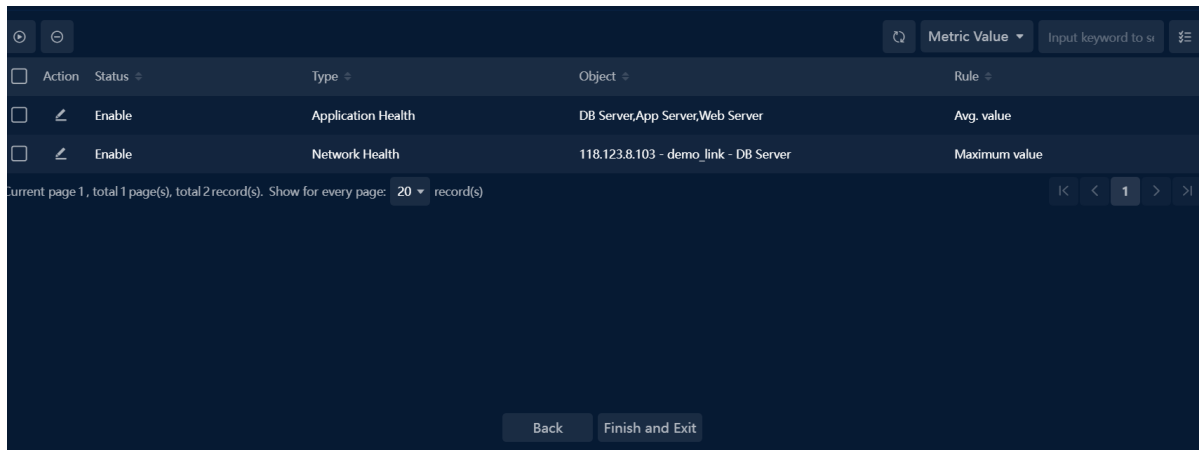
Users can set alarms through alarm templates already set or customize alarms.

Action	ID	Status	Alarm Name	Alarm Category	Level	Time Bucket	Alarm Type	Alarm Description
<input type="checkbox"/>	30282	On	Network Interruption(1)	Abnormal Transmission	Severe	60 Seconds	Application Monitoring Alarm	This alarm can find network interrupt
<input type="checkbox"/>	30281	On	Internal Packets Loss(1)	Abnormal Transmission	Severe	60 Seconds	Application Monitoring Alarm	Bad network quality within the netw
<input type="checkbox"/>	30280	On	Application Timeout(1)	Abnormal Application	Severe	60 Seconds	Application Monitoring Alarm	Adjust threshold value according to t
<input type="checkbox"/>	30279	On	High Internal Network Delay(1)	Abnormal Transmission	Severe	10 Seconds	Application Monitoring Alarm	Apply to assess the situation of inten
<input type="checkbox"/>	30278	On	Server O-Window(1)	Abnormal Host	Severe	10 Seconds	Application Monitoring Alarm	Apply to find performance problem f
<input type="checkbox"/>	30277	On	High application response time(2)	Abnormal Application	Major	60 Seconds	Application Monitoring Alarm	Adjust the value according to differes
<input type="checkbox"/>	30276	On	High application response time(1)	Abnormal Application	Major	60 Seconds	Application Monitoring Alarm	Adjust the value according to differes
<input type="checkbox"/>	30138	On	Network Interruption	Abnormal Transmission	Severe	60 Seconds	All Server Alarms	This alarm can find network interrupt
<input type="checkbox"/>	30137	On	Internal Packets Loss	Abnormal Transmission	Severe	60 Seconds	All Server Alarms	Bad network quality within the netw
<input type="checkbox"/>	30136	On	Application Timeout	Abnormal Application	Severe	60 Seconds	All Server Alarms	Adjust threshold value according to t
<input type="checkbox"/>	30135	On	High Internal Network Delay	Abnormal Transmission	Severe	10 Seconds	All Server Alarms	Apply to assess the situation of inten
<input type="checkbox"/>	30134	On	Server O-Window	Abnormal Host	Severe	10 Seconds	All Server Alarms	Apply to find performance problem f
<input type="checkbox"/>	30133	On	High application response time	Abnormal Application	Major	60 Seconds	All Server Alarms	Adjust the value according to differes

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### IV. Business Health Settings

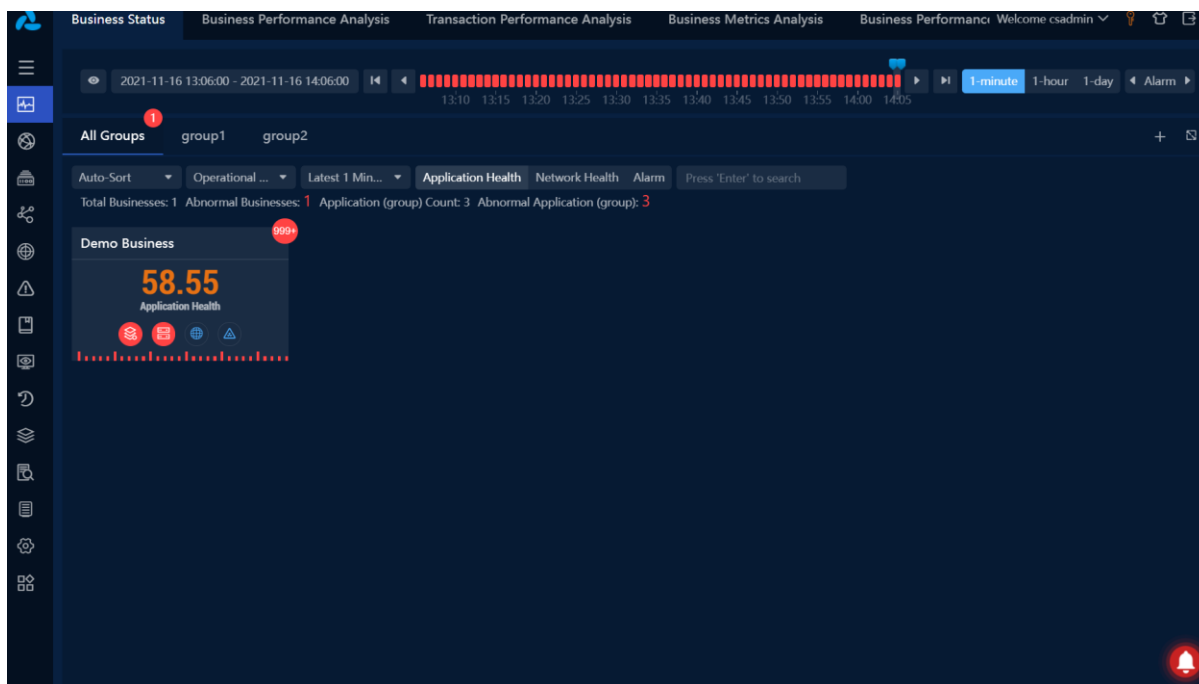
If users want to use health value function for monitoring applications and network, configure them in this step.



Finally, click **Finish and Exit** to complete the business configuration.

## Business Status Monitoring

Status of each business can be viewed on this page.



## Business Performance Analysis

Move the mouse over the business box and click the button **Analyze** on the Business Status Monitoring page to jump to the Business Performance Analysis page. Users can check related application data of the business on that page.

The page can also be accessed by clicking **Business Performance ->Business Performance Analysis**.

