

UPM

Business-Oriented Network Performance Management

Getting Started Guide

(UPM 6.4.0)



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**.

🔗 Analysis Settings	Time Synchronization
Storage Settings	Manual Setup
Agent Configuration	
Interface Settings	Time Zone: (UTC+08:00) Beijing, Chongqing, Hong Kor 🝷
Link Configuration	Time: 40/44/0040 44/00/00
Analysis Center	11111e. 12/11/2019 14.20.06
😧 System Predefined	NTP Internet Time Server
Predefined Library	
Third-Party Extension	Server: 192.168.5.164
Notification Settings	
SMTP Settings	The system will be resorupon changing time synchronization settings. For the synchronization via Internet time server, the clock will be synchronized with
Alarm Notification	the time server even minute.
Report Notification	ОК



UPM Login

Input the IP address of UPM server in the address bar of browser: <u>https://192.168.5.164</u>, jump to the login page of UPM, input user account at the first time, the UPM would generate the One-time Password for you, click **Login**, then UPM would ask you to fix the password.



Add Center Connection Account

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





Center Connection Accou	Int Junior Center List	nChronos Server List	Upgrade nChronos Server			
+					Metric Value 🔻	
Action User Name						
	Edit					
Current page 1, total 1 page(s),	User Name:	user1				
	Current Password:					
	Password:	••••••				
	Re-Enter Password:					
	Description:					
		ОК	Cancel			

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	Analysis Center						
Storage Settings	nChronos Server	server160					
Agent Configuration	Name:	SERVETTOZ					
Interface Settings	Center Address:	192.168.5.164					
Link Configuration	Center Port:						
Analysis Center	Contor Fort.	22100					
System Predefined	Username:	user1					
Predefined Library	Password:						
Third-Party Extension	SSL:	3					
Notification Settings							
SMTP Settings	Succeeded in connecting to the Analysis Center: Colasoft UPM						
Alarm Notification							

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					Please enter ke	y words Q	Welcome csadmin \checkmark	· 단 문			
Scene Center View	Basic Configura	tion										
දී Link Analysis	iii	Å	c ا	Q	Ħ	Q	(*/)	\mathbf{x}				
Here Business Performance	nChronos Server Configuration	Superior UPM	Probe and Link	API Configuration	Name Table Configuration	Map Configuration	Unit Conversion	Capture Filter				
Device Performance												
Transaction Analysis	Ţ	÷	Æ	≥ ≣	Ho	£						
💾 Web Logs	Storage Filter	Al Management	Baseline Collection	Metric Configuration Management	Baseline Algorithm Configuration	Configure Cloud Platform						
Siscover 😂												
û Alerts	Business Config	uration										
🖏 Search	ļļţ		£.		${\mathfrak P}$	▲						
Report	Application Configuration	Business Configuration	Network Segment	Network Device	Issue Strategy	Load Balancing Configuration						
Configurations												
System Management	Alarm Configur	ation										
	-ඁ෯ඁ-	(\Diamond)			(!)	-`¢`-		((•))				
	Business Alarm Configuration	Link Traffic Alarm Configuration	Predefined Alarm	Network Performance Alarm	Abnormal Activity Alarm	Transaction Alarm Configuration	Network Topology Alarm Configuration	Terminal Alarm Configuration				
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🔥 Colasoft UPM	Configurations > Probe A	d Link Configuration		Please enter key words	Q Welcome csadmin ∽ ♂ ⊡
Scene Center View	Probe And Link Configurat	Aggregation Link Configuration	Segment Sublink Configuration	Virtual Interface Sublink	Netflow Sublink Sflow Sub-link
් Link Analysis	+ + Batch Add + Ba				
Here Business Performance	Add				
👼 Device Performance					Demo Local Hc
Transaction Analysis	< Probe	lame: Name			
💾 Web Logs	Current Probe	Type: Probe			
S Discover	VolP Ar	alysis: 🔲 Enable	Tenant Link: 🔲 Enabl	le	
ධ Alerts	Descr	ntion: Description (optional)			
🔁 Search					
Report	Марре	Link:		Metric Value Input keyword to	
Configurations		Link Name	Creation Time	server Name	
er comgutations		O Malik-test	2024-06-12 09:49:35	nChronos120.79[Online]	
HY System Management					
	Backu	Link: Please select			
	Link Pri	ilege: 🗌 Link Monitor 🗌 Lir		fic Alarm 🗌 Link Report	
	Congestion /	ssess: Very kile < 20 < lider	< 50 ≤ Moderate Congestion <	90 ≤ High Congestion (Unit: %)	
	Linl	Data: 🗹 Collect	Device: 🗌 Synch	hronize Network Device	
	Lin	Alias: Please input the alias for the manual			
	Lin	The second and the second terms and the mapped			
	Alam	Alias: Please enter the name of the mapped			
Æ			OK Cancel		

Application Management

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





Application	Application Group					
	♥ ♥ ௴ ௴ Input IP address to search Any Ap	plic 🔻			🗘 目 Please input ke	
Operation	$ID \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Category 🗢	Application Type 🗘	Good Response Time 🗢	Normal Response Time ≑	Bad Response
□ ₫∠₿	30001 Enable DB Server	Standard application	Short Connection	[0,200]	(200,800]	(800,2000]
The current page 1	total 1 pages, total 1 records. Show 20 🔹 records per page.				К К	1 3 3

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

Add		×
Application:		
Alias:		
Description:		
Category:	Standard Application	
Туре:	Short Connection -	
Rule:		
Response Time Stamp:	Good ≤ 200 < Normal ≤ 800 < Bad ≤ 2000 < Very Bad (Unit: Milliseco	ind)
	Note: When the response is "Very bad", it will be considered as a response timeout.	
Add Application to:	Segment @	
Visible by Tenant:		
Specify Issue Strategy:	Please select 🗘 👻 🧇	
	OK Cancel	

Add Business

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



💫 Colasoft UPM	# Configurations	;				Please enter ke	ey words Q	Welcome csadmin \checkmark	₩ 🖯		
Scene Center View	Business Configuration										
🖧 Link Analysis	14	+ 📾	凸	à	\odot	٨					
🕾 Business Performance	♀ T Applicat	ion Business Configuration	Network Segment	Network Device	Issue Strategy	Load Balancing					
a Device Performance	Configura	ation				Configuration					
Transaction Analysis	Alarm Cor	nfiguration									
🖺 Web Logs	à			Æ	\bigcirc	×	a	((•))			
😂 Discover	-L2 Business /	Alarm Link Traffic Alarm	Predefined Alarm	Network Performance	Abnormal Activity Alarm	Transaction Alarm	Network Topology Alarm	Terminal Alarm			
↓ Alerts	Cenfigura	ation Configuration		Alarm		Configuration	Configuration	Configuration			
🔁 Search	F	L ⊡⊘	<u>;</u> '2	\triangleleft							
Report	Baseline A	D System alert	Blocking Defense	Alarm and Information							
⊘ Configurations	Configura	ation configuration		Send Configuration							
System Management	Transactio	n Configuration									
	ſ		TΞ	(¥)	۲						
	Data Dicti	bonary Business Transaction	Business Field	Business Transaction	Transaction Group						
		captore			Conngaration						
⊂.	Terminal C	Configuration									

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 Edit Business	2 Business Logic	Diagram	— 3 Alarm	Settings	(4) Business Health
Name:	Demo Business				
Business Level:	***				
Description:					
Business Group:					
Business Privilege:	Monitor	Analysis	Alarm	Reports	
Focus on abnormal activity alarms:					
		Finish and Exit	Next		

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



Edit Business —	· 2 Business Lo	gic Diagram		Alarm Settings		(4 Business He	alth	
	Add Application	Relationship		Structure Add Application Press 'Enter' to se	Relationship Add Image earch	Grouy Add Text X		he A ▼	
	Type: Icon: Application: Correlate Business:	Application Application	Group	er	α α				
		ОК	C						

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

	Edit Business	Business Logic Diag	ram ———	(3 Alarm Settings	(4	Business Health
					Structure Relatic Add Application Add Im Press 'Enter' to search ▼ DB Server ▶ Sørver		Show the A
≧	Custom IP/Segment				Client Add Discover		
	lcon:		E F +				
	Name:	clinet1					
	Туре:	IP Address					
	Select IP:	Select an auto-obtained IP address					
	IP Address:	192.1					
	NAT Mapping:	Enable NAT Mapping Analysis					
	NAT IP Address:						
		OK Cancel					
		Back	Finish an	d Exit			

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.



	🕑 Edit Business ——— 2	Business Logic Diagram	3	Alarm Se	Settings		(4 Bus	iness Healt	:h	
							ip Group Show the Add Text Add Rectangle			A ▼	
				▶ Serv ▼ Clier	ver ent						
	DB Server				Clinet1	Edit Path D	elete				
0					~						





III. Alarm Settings

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



General Edit Business		- 🔗 Business Logic Diagram		— ③ Alarm Settings —	Business Health	Business Health		
Expand/Collapse 🔄					Q Metric Value ▼ Input keywo			
	Action	ID ⇔ Status ⇔	Alarm Name ≑	Alarm Category Level		Alarm Descri		
Demo Business(30/30)		30081 On	Network Interruption(4)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	This alarm ca		
		30080 On	Network Interruption(3)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	This alarm ca		
		30079 On	Network Interruption(2)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	This alarm ca		
		30078 On	Network Interruption(1)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	This alarm ca		
		30077 On	Internal Pkts Lost(2)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	Bad network		
		30076 On	Internal Pkts Lost(1)	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	Bad network		
		30075 On	Internal Pkts Lost	Abnormal Transmission Seven	e 60 Seconds Application Monitoring Alarm	Bad network		
		30074 On	Application Timeout(2)	Abnormal Application Seven	e 60 Seconds Application Monitoring Alarm	Adjust thresł		
		30073 On	Application Timeout(1)	Abnormal Application Seven	e 60 Seconds Application Monitoring Alarm	Adjust thresł		
		30072 On	Application Timeout	Abnormal Application Seven	e 60 Seconds Application Monitoring Alarm	Adjust thresł		
		30071 On	Long Connection Interruption	Abnormal Application Seven	e 10 Seconds Application Monitoring Alarm	Apply to lon		
	Current page 1, tota	l 2 page(s), total 30 rece	ord(s). Show for every page: 20 🔻 re	ecord(s)				
			Back	Finish and Exit Next				

IV. Business Health Settings

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

		Colored Edit Business	🔗 Business Logic Diagram	Alarm Settings	4 Business Health			
۲					Q Metric Value ◄			
	Action	Status 🗢	Туре ≑	Object 🗢	Rule ≑			
	2	Enable	Application Health	DB Server	Avg. value			
	2	Enable	Network Health	clinet1 - Nico-Demo - DB Server	Maximum value			
Currer	it page 1	, total 1 page(s), total 2 record(s). Show for ev	very page: 20 v record(s)					
			Back	Finish and Exit				

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

Business Status Monitoring

Status of each business can be viewed on this page.



ふ	Business Status Business Performance Analysis Transaction Performance Analysis Business Metrics Analysis Conf Please enter key words Q Wekome csadmin 🗸 🗘 🗦
ۍ چو	ll 2024-06-20 12-48:00 - 2024-06-20 13:48:00
	All Groups + S
 ⊕	Auto-Sort Operational Application Health Network Health Alarm Press 'Enter' to search Total Businesses:1 Abnormal Businesses:1 Application (group) Count:1 Abnormal Application (group):1
Ľ	Demo Business 🥮
⊗ 4	58.55 Application Health
Ð	Induction
<u>خ</u>	
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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.

🔥 Colasoft UPM	Business Status	Business Performance Analysis	Transaction Performa	ance Analysis	Business Metri Ple	ase enter key words	Q Welcome cs	admin 🗸 🔂 📑
@ Scene Center View 샹 Link Analysis	ılı 2024-06-20 12:	50:00 - 2024-06-20 13:50:00 I◀ ◀	12:50 12:55 13:00 13:05	13:10 13:15 13:2	20 13:25 13:30 13:35 1	3:40 13:45́ ►1	<mark>1-minute</mark> 1-hour 1	
H Business Performance	Demo Business 🔻		cat Transaction track					53 @ E 4
Device Performance								
Transaction Analysis								
💾 Web Logs								
😂 Discover								
🗘 Alerts		13800 10.75 % 271.27 r	ns 26.44 ms	5 75.00 % 0.00 ms	→ 2.23 ms	3 92.68 % 0.00 ms	1015.51 ms	
🗟 Search		All clients	Web Server		App Server		DB Server	
Report								
Configurations								
음 System Management								
-								Q
全								