Vyopta Collaboration Performance Management

Analytics and Monitoring

Pre-Kickoff Checklist

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1 Getting Started - Preparing Your Environment

1.1 Overview

Vyopta's Collaboration Performance Management application provides an immersive view into your organization's investment in video & unified communications infrastructure, with insights on utilization, capacity and adoption as well as real-time monitoring capabilities. This guide is designed to help you prepare your environment for the installation. Please follow the subsequent steps in order to complete your installation.

1.1.1 Pre-Kickoff Checklist

- ☐ Provision a Vyopta Data Collector Server
- ☐ Open the Necessary Ports on Your Network
- ☐ Test VM Connectivity
- ☐ Sign up for a User Account
- ☐ Use our Vyopta Admin Portal to:
  - Create a Services Account
  - Download the Vyopta Data Collector Software

1.2 Provision a Vyopta Data Collector Virtual Machine / Server

A server must be provisioned on which the Vyopta Data Collector will be installed and configured. The Vyopta Data Collector is used to communicate with your video infrastructure in your internal, and in some cases, external environment. The server can be either a virtual machine (VM) or physical appliance. The server will need network access to your video infrastructure and will always be running.

Please see the table below for the recommended server / VM specifications:

CPU	Dual CPUs
Memory	8GB RAM
Disk Space	80 GB (OS and Data)
Network	1 Gbps NIC
Operating System	Windows Server (2012 R2, 2016, 2019) or CentOS 7/6+ or RHEL 7/6+
System Software	Java 11 (bundled with installer)

1.3   Enable access for the Vyopta Data Collector

For Vyopta to execute, access is needed as follows

1. From the Vyopta Data Collector to the Vyopta cloud application
2. From your UC infrastructure, cloud providers, and endpoints to the Vyopta Data Collector
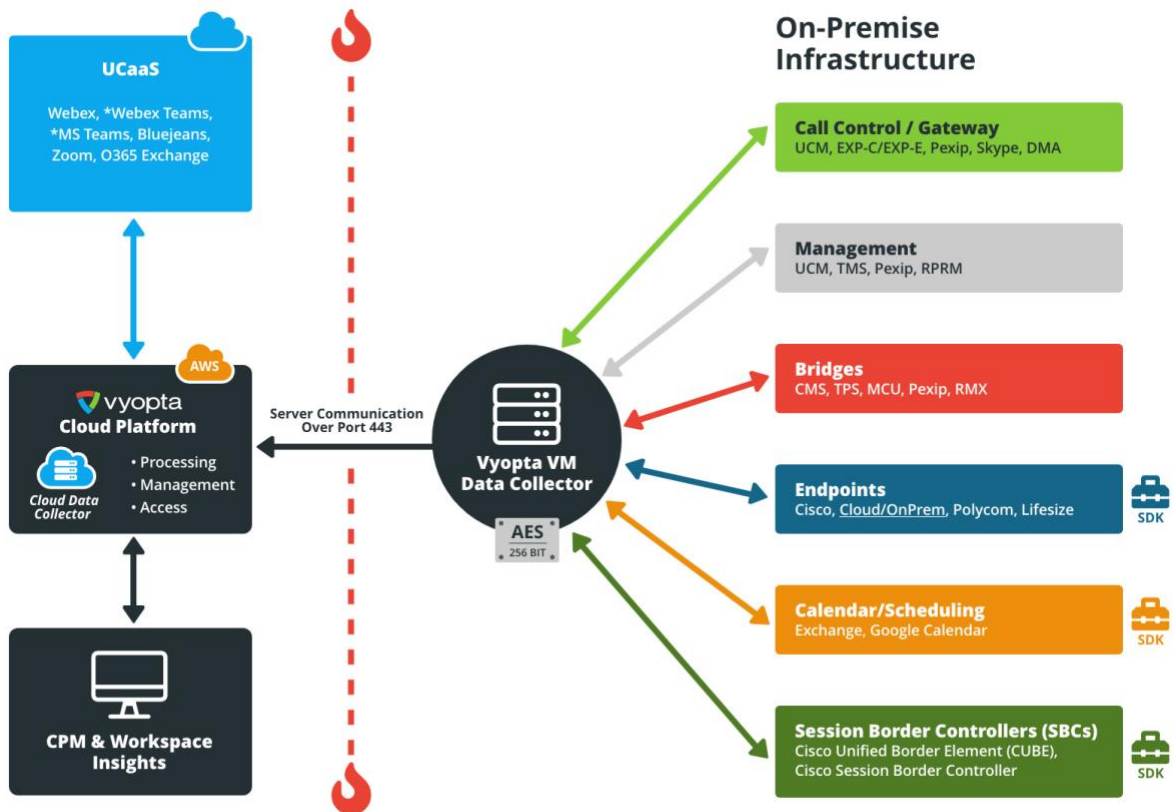
How you accomplish this step is dependent on your IT environment and infrastructure. Typically, it involves having the security / Admin team provide explicit access via your Firewall tools.

As a reminder, you must verify access at the Network level and at OS level on the VM/Server.

1.3.1   Enable Access from the Vyopta Data Collector to the Vyopta Cloud Platform

Next you will test the connection to Vyopta's Cloud from the Vyopta Data Collector (Virtual Machine or Server). Please perform the following tests using Remote Desktop (RDP) on the Vyopta Data Collector:

Test	Expected Result
Navigate to https://login.vyopta.com/	Confirm that you see an API response - *{"message":"no Route matched with those values"}*
Navigate to https://my.vyopta.com/	Confirm that you see the login screen
Navigate to https://my.vyopta.com/admin	Confirm that you see the login screen
Navigate to https://api.vyopta.com/	Confirm that you see an API response - *{"message":"no Route matched with those values"}*
Navigate to https://adr.vyopta.com/	Confirm that you see a confirmation screen - **You have successfully connected to adr.vyopta.com. You may now close this browser window and continue with your installation.**
Navigate to https://galaxy-admin-mq.vyopta.com/	Confirm that you see an API response - *HTTP 400 Error with No clientID header specified*

![vyopta logo]

1.3.2   Enable Access from your UC Environment to the Vyopta Data Collector

1.3.2.1   Vyopta Cloud Account & Port Requirements

Server	Account Type	Account Requirements	Port Number	Transport Layer	Traffic Origin	Traffic Destination	Allow Return Traffic	Notes
Vyopta Cloud Infrastructure								
login.vyopta.com	-	Vyopta Service Account with Admin Privileges	443	TCP	Data Collector & End Users	Vyopta Cloud Application Provisioning Server	Yes	
adr.vyopta.com	-	Vyopta Service Account with Admin Privileges	443	TCP	Data Collector	Vyopta Cloud Historical Document Server	Yes	
api.vyopta.com	-	Vyopta Service Account with Admin Privileges	443	TCP	Data Collector	Vyopta Cloud Real Time Document Server	Yes	Uses the service account on APPS server to relay real-time documents.
galaxy-admin-mq.vyopta.com/	-	Vyopta Service Account with Admin Privileges	443	TCP	Data Collector	Vyopta Cloud Real Time Document Server	Yes	Uses the service account on APPS server to relay real-time documents.
my.vyopta.com/ my.vyopta.com/admin	LOCAL END USER ADMIN AND VIEWER ACCOUNTS	Vyopta Administrator and Viewer Accounts setup and configured as needed	443	TCP	End Users	Vyopta Cloud Reporting UI Server	Yes	Used only for Vyopta end users to access and consume UI data.

1.3.2.2   Infrastructure Account & Port Requirements

Infrastructure Type	Account Type	Account Requirements	Port Number	Transport Layer	Traffic Origin	Traffic Destination	Allow Return Traffic	Device Notes
Local Video Infrastructure								
Cisco VCS-C / VCS-E Cisco Expressway-E / C	LOCAL	Read-only Admin with API access	443	TCP	Data Collector	VCS	Yes	All VCS cluster devices must be added.
Cisco TelePresence Server	LOCAL	User with API Access	443	TCP	Data Collector	TP Server	Yes	
Cisco TelePresence Server	LOCAL	User with API Access	22180 22280	TCP	TP Server	Data Collector	Yes	
Cisco MCU	LOCAL	Administrator Account	443	TCP	Data Collector	MCU	Yes	If MCU is in a cluster or stacked environment, only add Master MCU.
Cisco TelePresence Manager TMS & TMSPE	SQL DBA	Read-only DB Account with access to the TMSNG and TMSPE databases (Windows AD login not supported)	1433*	TCP	Data Collector	TMS	Yes	* 1433 is typically the default port. However, large enterprise SQL environments typically requires the SQL DBA to identify the actual port in use.
Cisco Unified Communications Manager API	LOCAL	CUCM Application User with Standard CCM Read-only, AXL User Group, Standard CTI Enabled, & Server Monitoring	443 8443 2748 2749*	TCP	Data Collector	CUCM	Yes	Typically only the CUCM publishers need to be added.
Cisco Unified Communications Manager FTP/SFTP	LOCAL	Vyopta embedded account	21 or 22	TCP	CUCM - Publisher	Data Collector	Yes	*FTP requires that passive FTP be open. If SFTP is selected, then only port 22 must be open.

*2748 is used for CTI and 2749 is used for TLS connection to CTI as referenced in this doc

- https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/port/9_0_1/CUCM_BK_T98E8963_00_tcp-port-usage-guide-90/CUCM_BK_T98E8963_00_tcp-port-usage-guide-90_chapter_01.html

Infrastructure Type	Account Type	Account Requirements	Port Number	Transport Layer	Traffic Origin	Traffic Destination	Allow Return Traffic	Device Notes
Local Video Infrastructure (cont.)								
Cisco Meeting Server (CMS) - API	LOCAL	User Account with API access	443*	TCP	Data Collector	CMS Server	Yes	* Port 443 is the default port. However, the management port is configurable within Acano and may be a different TCP port such as 445.
Cisco Meeting Server (CMS) CDR Forward	N/A	N/A	22280 22180	TCP	CMS Server	Data Collector	--	CMS pushes CDR data to the Vyopta Data Collector on TCP port 22280, which is the same port used for CTPS.
Cisco CUBE SSH	LOCAL	Admin Account	22	TCP	Data Collector	CUBE	Yes	
Cisco CUBE SNMP	N/A	SNMP	161	UDP	Data Collector	CUBE	Yes	
Cisco CUBE SNMP TRAP	N/A	SNMP Trap	162	UDP	CUBE	Data Collector	Yes	
Pexip Infinity Management Node	LOCAL	Admin Account	443	TCP	Data Collector	Pexip	Yes	Only requires PEXIP Infinity Management Node for historical and real time monitoring data collection.
Microsoft Skype for Business	SQL DBA	Read-only DB Account with access to the LcsCDR and QoEMetrics databases (Windows AD login not supported)	1433*	TCP	Data Collector	Skype for Business	Yes	* 1433 is typically the default port. However, large enterprise SQL environments typically require the SQL DBA to identify the actual port in use.
Microsoft Skype for Business	N/A	N/A	22180 22280	TCP	Skype for Business	Data Collector		Skype for Business SDN manager pushes realtime SDN messages to Vyopta Data collector on TCP port 22180
Polycom DMA	LOCAL	Admin Account	8443	TCP	Data Collector	Polycom	Yes	
Polycom RMX	LOCAL	Admin Account	80 or 443	TCP	Data Collector	Polycom	Yes	
Polycom RPRM	LOCAL	Admin Account	8443	TCP	Data Collector	Polycom	Yes	

1.3.2.3 Endpoint Account & Port Requirements

Infrastructure Type	Account Type	Account Requirements	Port Number	Transport Layer	Traffic Origin	Traffic Destination	Allow Return Traffic	Device Notes
Video Endpoints								
Cisco Endpoints	LOCAL	Endpoint Admin account	22, 80, 443	TCP	Data Collector	Cisco Endpoints	Yes	
Cisco Endpoints Feedback	N/A	N/A	22180	TCP	Cisco Endpoints	Data Collector	Yes	Endpoint HTTP feedback
Polycom	LOCAL	Endpoint default Admin account	22, 23, 24, 80, 443	TCP	Data Collector	Polycom Endpoints	Yes	
LifeSize	LOCAL	Endpoint Admin account	22,80	TCP	Data Collector	LifeSize Endpoints	Yes	
Dolby	LOCAL	Endpoint Admin account	443	TCP	Data Collector	Dolby Endpoints	Yes	

1.3.2.4 Cloud Provider Account & Port Requirements

Infrastructure Type	Account Type	Account Requirements	Port Number	Transport Layer	Traffic Origin	Traffic Destination	Allow Return Traffic	Device Notes
Cloud Video Providers								
BlueJeans	BlueJeans	Admin account with full Administrator privileges (necessary to generate API key and shared secret)	443	TCP	Data Collector	BlueJeans API	Yes	
WebEx Site Address	WebEx Site Address	WebEx Read-only Admin account or PDA access enabled	443	TCP	Data Collector	WebEx Site Address	Yes	Webex PDA is used for Control Hub Common Identity sites.
Zoom	Zoom	Admin account with full Administrator privileges (necessary to generate API key and shared secret)	443	TCP	Data Collector	Zoom API	Yes	

1.4 Sign Up for a Vyopta User Account

Create a Vyopta user account in the Vyopta Admin Portal. To log into the Admin Portal:

1. Open a web browser and navigate to the Vyopta Admin Portal website (https://my.vyopta.com/admin/).
2. Select Create an Account and enter your company email address. *Note: your email* **must** *be tied to the domain of your organization.*
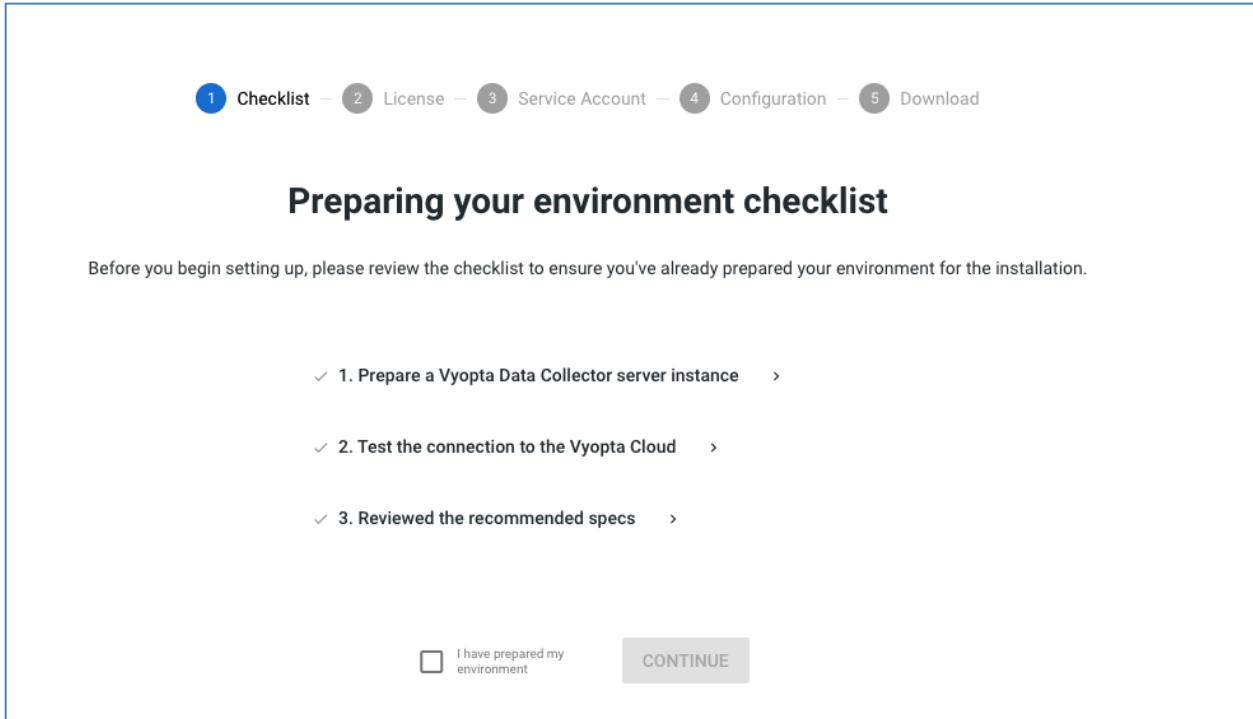
3. You will receive an email containing a link to sign up for a Vyopta user account. Fill out the form linked in the email to set up your user account.

Your Vyopta user account must have Administrator privileges for you to complete the remainder of the steps for the deployment. If you are the first account to register for your organization, you will automatically have Administrator privileges.

If, when you login to the Admin Portal, you only have access to the Profile menu, you do not have Administrator privileges and will need to request Administrator access. To request Administrator access, please contact your organization's current administrators. The list of administrators for your organization can be found on the Organization Profile page in the Applications Management Portal.

1.5 Use the Admin Portal to complete your Configuration

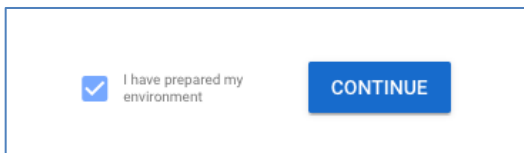4. Open a web browser and navigate to the Vyopta Admin Portal website (https://my.vyopta.com/admin/). Select the getting started menu item.

You'll see the previous steps in the checklist. You can expand the description by clicking on the ">".

1.5.1 Verify the checklist

Verify that you have completed the checklist up to this point.

1.5.2 Accept the license terms

① Checklist — ② **License** — ③ Service Account — ④ Configuration — ⑤ Download

License

Accept Vyopta and OpenJDK 11 (GPLv2) License
(Please note that VyoptaCollector uses OpenJDK for Java 11 runtime platform, which is covered under GPLv2 license agreement and related licenses)

You must accept the License Agreement to continue.

☐ I Accept the OpenJDK and Vyopta License Agreements

BACK   CONTINUE

1.5.3 Create your service account

The Vyopta service account does not require an active email address for the username or email address fields but does require your domain to be included in the email address, i.e. vyopta_svc@*<yourdomain>.*com. When you have entered the information for the Vyopta service account, record the password you assigned so it can be used later and click the Continue button.

1.5.4 Generate your configuration file

Configuration screen showing steps: 1 Checklist — 2 License — 3 Service Account — 4 Configuration — 5 Download

Configuration

The data collector requires a configuration file to be present alongside the collector.

☐ Use an existing vyoptacollector.xml configuration file

Generate Config File

Enter Service Account Credentials:

👤 Service Account ▼

🔒 Password

Collection Options:

○ All (Endpoints and Infrastructure)
◉ Endpoints Only
○ Infrastructure Only

Proxy Details:

Is there a proxy server that the collector must use to reach infrastructure, endpoints and the Vyopta Cloud?

No Proxy ▼

GET CONFIG FILE

BACK   CONTINUE

1.5.5   Download and Install the Vyopta Data Collector on the VM or Server

Finally, you will download and install the Vyopta Data Collector. You can download directly onto the Vyopta Data Collector machine using Remote Desktop (RDP) or download on a local machine and copy to the Vyopta Data Collector location.

Download

Download the Vyopta data collector

Windows: VYOPTACOLLECTOR.EXE (GA 4.4.0)

Linux: VYOPTACOLLECTOR.SH (GA 4.4.0)

Place vyoptacollector.exe (or .sh) in the desired folder along with vyoptacollector.xml, then run this command:

on windows:

```
vyoptacollector.exe –install
```

on linux:

```
chmod 755 vyoptacollector.sh
sudo ./vyoptacollector.sh –install
```

Note: This will run the collector as the vyoptacollector.sh file's owner user.

To run the service under specific user credentials, run the following command:

on windows:

```
vyoptacollector.exe –install –username <username> –password <password>
```

on linux:

```
chmod 755 vyoptacollector.sh
sudo ./vyoptacollector.sh –install –username <username> –password <password>
```

(To run the program without installing as a service, run vyoptacollector.exe or ./vyoptacollector.sh)

BACK   DONE

Follow the installer's instructions to complete the installation process.