

vAnalytics[™] Technical Deployment Guide

for

Historical and Real Time Video Collaboration

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2 Getting Started - Preparing Your Environment

2.1 Overview

Vyopta's vAnalytics[™] 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 of Vyopta's vAnalytics. Please follow the subsequent steps in order to completely and properly install Vyopta's vAnalytics.

2.2 Sign Up for a Vyopta Applications Management Portal User Account

To get started, you will need to create a user account in Vyopta's Applications Management Portal. To log into Vyopta's Applications Management Portal:

- 1. Open a web browser and navigate to the Vyopta website (<u>www.vyopta.com</u>).
- 2. Select login, in the upper right corner of the screen.
- 3. Select Create an Account and enter your company email address.
- 4. You will receive an email containing a link to sign up for a Vyopta Applications Management Portal user account. Fill out the form linked in the email to set up your user account.

Note: your email **must** *be tied to the domain of your organization.*

2.3 Obtain Administrator Access for your User Account

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



2.4 Configure a vAnalytics[™] Service Account

Once you have successfully configured your user account and obtained Administrator privileges, you are ready to provision a service account for vAnalytics. The service account is used to manage the vAnalytics Data Collector deployed within your environment.

To create the service account, log into the Applications Management Portal and navigate to the Admin > Users Page. Select the icon in the upper-right corner of the screen to add a new user. Fill out the information for the vAnalytics service account (Figure below); be sure to give the service account administrator privileges.

/y o pta					
Admin vC	ontrol®	vAnalytics™	vAccess™	vPublish™	Profile
Status Users	Endpoints	Infrastructure			
User Informatio	on				
Username*	vAnalytics	_svc @	test.org		
Name *	vAnalytics	Service Account			
Phone Number					
Password	•••••				
Roles	🗹 Admir	nistrator			

Figure 2-1: vAnalytics Service Account Setup

The vAnalytics service account does not require an active email address for the username or email address fields, but requires your domain be included in the email (i.e. vAnalytics_svc@<yourdomain>.com).

When you have entered the information for the vAnalytics service account, click the save button.



2.5 Prepare a vAnalytics[™] Data Collector

A server must be provisioned on which the vAnalytics Data Collector will be installed and configured. The 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 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 specifications:

CPU	Dual 2.4GHz or Higher
Memory	8GB RAM Recommended
Disk Space	160 GB OS and Data
Network	Single NIC
Operating System	Windows Server 2012 or 2008 R2
System Software	.NET Framework Version 4.5 (Tested to v4.6)



2.6 Test Connection to the Vyopta Cloud

It is important to test the connection to Vyopta's Cloud on the VM or server provisioned for vAnalytics[™]. To test the connection to the Vyopta Cloud, the Administrator must ensure https connectivity to the following Vyopta Cloud Servers: <u>apps.vyopta.com</u>, <u>rtadr.vyotpa.com</u>, <u>adr.vyopta.com</u> and <u>vanalytics.vyopta.com</u>.

Please perform the following tests from Remote Desktop (RDP) on the vAnalytics Virtual Machine:

- 1. Open a web browser and navigate to the Vyopta website (<u>www.vyopta.com</u>) and select login in the upper right corner of the screen.
- 2. Ensure you are directed to Vyopta's Applications Management Portal (apps.vyopta.com).
- 3. Navigate to <u>rtadr.vyopta.com</u> and confirm that you see the message similar to below.
- 4. Navigate to <u>adr.vyopta.com</u> and confirm that you see the message similar to below.
- 5. Finally, navigate to <u>vanalytics.vyopta.com</u> and confirm that you see the message similar to below.



You have successfully connected to vanalytics.vyopta.com. You may now close this browser window and continue with your installation.

Arrive here by mistake? For more information visit the <u>Vropta Website</u> or contact <u>Vropta Support</u>

Figure 2-2: Vyopta vAnalytics Test Connection Page

2.7 Download and Install the vAnalytics[™] Data Collector

To download and install the vAnalytics Data Collector, please do the following:

- 1. Download the vAnalytics Data Collector Installer (EXE) from the following URL: http://www.vyopta.com/support/documentation#collector
- 2. Once the application has downloaded, open and run the installer on the vAnalytics Data Collector provisioned in your environment (refer to step 2.6 in this guide).
- 3. Follow the installer's instructions to complete the simple installation process.



2.8 Complete vAnalytics[™] Configuration Utility Setup

Once the vAnalytics Configuration Utility is installed, you are almost ready to begin adding your infrastructure to the Data Collector. To complete the setup:

- 1. Go to Start > All Programs > Vyopta > vAnalytics and open the vAnalytics System Configuration Utility.
- 2. Once the vAnalytics Data Collector application has opened, click on "Get Started" to begin.
- 3. When ready, click the Proceed button and enter the previously created service account vAnalytics svc@<yourdomain>.com and your password.
- 4. Click "Next" to test your connection to the Vyopta Cloud.

Getting Started	Authentic	ation	Validation	Infrastructure Compor	nents Next Step
Connect to Vyo	pta Cloud	V			
vyopta Apps Serv	vice Account	vanalyti	cs_svc@test.org		
	Password	•••••	•		
Connect throug	h HTTP Proxy	12			

Figure 2-3: vAnalytics Configuration Utility

5. Once the connection is validated click "Next" and the utility will then bring you to the Add Infrastructure page. Click on "Add Infrastructure" to add a component of your video infrastructure.

Note: If you forget your organization's vAnalytics service account username or password, you can log into Vyopta's Applications Management Portal at <u>apps.vyopta.com</u> to view the name of the account and/or to change the password.



2.9 Operational Prerequisites

The following prerequisites must be met to successfully configure and operate Vyopta's vAnalytics™:

- 1. Network communication over specific ports between the vAnalytics Data Collector and all video infrastructure components within your video environment.
- 2. Service accounts with sufficient privileges (typically read-only administrative access) on each component of your video infrastructure.

The remainder of this guide is devoted to taking you through the steps necessary to configure vAnalytics for each of the supported video infrastructure components, detailed in Section 2.10 – Coverage and Compatibility.

2.10 Coverage and Compatibility

The following video infrastructure components are compatible with vAnalytics™:

- Cisco Video Communications Server (VCS) Control and Expressway
- Cisco Multipoint Control Unit (MCU)
- Cisco Telepresence Server (TPS)
- Cisco Telepresence ISDN Gateways
- Cisco Telepresence Management Suite & Provisioning Extension (TMS & TMSPE)
- Cisco Unified Communications Manager (CUCM)
- Cisco WebEx
- Cisco Meeting Server (CMS; formerly Acano Server)
- Microsoft Skype for Business (SfB)
- Pexip Management Node
- Polycom DMA with API License
- Polycom RMX
- Polycom RPRM with API License
- Vidyo Management Portal



3 Cisco VCS Control (VCS-C) & VCS Expressway (VCS-E)

3.1 Set up a Service Account for Cisco VCS Control (VCS-C) & Expressway (VCS-E)

To create a service account on the device, perform the following:

- 1. Log into the VCS with the proper administrator account.
- 2. Navigate to the Users > Administrator Accounts tab.

cisc	O Ciso	o TelePresen	ce Video Com	municati	on Server Contro	ы
Status	System	Configuration	Applications	Users	Maintenance	
Overvi	ew			Passwo	rd security	Т
System I	nformation			Adminis	strator accounts	1
System n	ame			Adminis	strator groups	Т
Up time				Active a	dministrator sessions	ate
Software	version			LDAP o	onfiguration	
IPv4 addr	055			2574 0	10.10.10.00	-

Figure 3-1: Administrator Accounts Tab

- 3. Select New.
- 4. Enter the following name for the service account: vyopta_svc
- 5. Set the Access level to *Read-only*.
- 6. Enter the service account password and confirm this password.
- 7. Set Web Access and API Access to *Yes* and State to *Enabled*.
- 8. Click Save.

Configuration		
Name	vyoptasvc	
Access level	Read-only	
Password		Strong
Confirm password		۲
Web access	Yes 🗧 🧃	
API access	Yes 🗧 🧃	
State	Enabled =	۲

Save Cancel

Figure 3-2: New Service Account

The Vyopta Service account is now added to the device. The service account must be added to each VCS Control and Expressway within the video environment.

Note: VCS Active Directory (AD) accounts are not supported. The account must be a local administrator.



3.2 Add VCS-C/VCS-E

To add a Cisco VCS-C or VCS-E requires the following:

- Access to the FQDN/IP address of the video device from the vAnalytics Data Collector
- Previously created user service account credentials on each video device

Note: If you have multiple VCS-C or VCS-E devices you must add a connector for each individual device including all peers and slaves.

Please follow the instructions below to add each video infrastructure device:

- 1. Select the correct VCS type in the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 1. Enter the description of the video device. This can include the device type, location, and other unique identifiers.
- 2. Enter the infrastructure hostname or IP address.
- 3. Enter the username and password created on the video device.
- 4. Click Validate to ensure that the vAnalytics application can connect to the video device.
- 5. If the connection to the video component succeeded, click the Save button.



Wyopta vAnalytics [™] Data Collect Vyopta vAnalytics [™] Da	tor Configuration Wizard		- • • • ×
Getting Started Auther	ntication Validation	Infrastructure Component	s Next Steps
Infrastructure Type Name Description Hostname Username	Cisco VCS Control / Express VCS Control VCS Control prod.vyopta.sample vyoptaprod	sway-C Protocol HTTPS Password eeentials for next component(s)	
Cancel		Validate	Save

Figure 3-3: VCS Configuration Example

Note: In a clustered VCS environment, please only add the primary/secondary devices. Please do not add the clustered, named environment.

3.3 Cisco Video Communications Server Control (VCS-C) & Expressway (VCS-E) Reference

Table

Cisco Video Communications Server (VCS) & Expressway (Edge/Core)				
Version	VCS x7.2 or above / Expressway x8.5 or above			
Device Access	Server IP/FQDN ; Add all VCS cluster devices if applicable.			
User/Service Account	Local Administrator read-only account with API access.			
TCP Ports	vAnalytics Data Collector to the VCS / Expressway device(s) TCP 443 (https)			



4 Cisco Telepresence Multipoint Control Unit (MCU), Telepresence Server (TPS), or Telepresence Integrated Services Digital Network (ISDN) Gateway

4.1 Set up a Service Account for Cisco Multipoint Control Unit (MCU), Telepresence Server

(TPS), or Integrated Services Digital Network (ISDN) Gateway

The instructions below are separated by device type. Please follow the relevant instructions to create a service account on the component being added:

Note: MCU supervisor blades and slave blades in an MCU cluster do not need to be added.

For Cisco Multipoint Control Units (Codian MCUs) or ISDN Gateways:

- 1. Log into the infrastructure with any Administrator account.
- 2. Click on the User tab.
- 3. Select Add New User.
- 4. Enter the User ID as vyopta_svc and Account Name as vyopta_svc
- 5. Enter and Re-enter the password.
- 6. Uncheck the box for Force user to change password on next login.
- 7. Set the Privilege level to *administrator*.
- 8. Leave the E.164 phone number blank.
- 9. When finished, add the User.

uluilu cisco		
Home Status Network Settings Streaming Conferences Users Endpo	oints Gateways Gatekeeper	
Harris > Users > Add user		
Add user		
	User Information	
	User 10	spek,os
	Name	WEDRING WEDRICH
	Password	****
	Re-enter password	****
	Disable user account	
	Lock password	
	Force user to change password on next login	
	Privilege level	administrator +
	E.164 phane number	
	Associated video endpoint	<none> 1</none>
		Add user

Figure 4-1: Add MCU User Service Account



For Cisco TelePresence Servers (TPS) perform the following:

- 1. Log into the infrastructure with any Administrator account.
- 2. Click on the User tab.
- 3. Select Add New User.
- 4. Enter in the User ID as vyopta svc and Account Name as vyopta svc.
- 5. Enter and re-enter the password.
- 6. Set the privilege level to *API access*.
- 7. When finished, select Add User.

atus Networ	k Configuration	Conferences	Endpoints	Users	Logs
dd new use	r				
User					
User ID					vyopta_svc
Name					vyopta_svc
Password					
Re-enter passwor	d				
Access rights					API access 🔻
				6	Add user

Figure 4-2: Add TPS User Service Account

Note: Please ensure that **http** is enabled for your TP Server. If it is not enabled, call quality will not be reported for TP Server in Real Time/Historical.

CISCO Cisco TelePresence Server	CISCO Cisco TelePresence Server
Status Network Configuration Conferences	Status Network Configuration Conferences
Network settings	
Service	Services
This Routes naged	This system is remotely managed
Services	Port A
TCP service QoS	TCP service IPv4
HTTP SSL certificates 0	НТТР 💟
HTTPS Connectivity 43	HTTPS 🗹
Incoming H Netstat 720	Incoming H.323
SIP (TCP)	SIP (TCP)
Encrypted SIP (TLS) S061	Encrypted SIP (TLS)
FTP 🛛 21	FTP 🔽

Figure 4-3: HTTP can be enabled within your TP Server under Network→ Services→ HTTP

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4.2 Enable CDR Permanent Storage on Cisco Codian (MCU) & ISDN Gateway

In order to maximize the number of call detail records stored on the MCU and ISDN Gateway you must enable CDR permanent storage by performing the following:

- 1. Log into the device with an administrator account.
- 2. Navigate to Logs -> CDR logs.
- 3. Click on the Enable CDR permanent storage button.

սիսի	MCU 4210
cisco	host: MCU4210 login: justimakin
Nome Status Network Settings Streaming Conferences Users Indusirets Saturarys Saturaryer	Topost Lap Tele
hans > Los > COR by	
Emotiling Event capture litter Event display litter Rysing 0.122/319 log	Audit lag CDR lag Feedback receivers Call Horse
Current status Enabled Current status Enabled Hexagen logget 489 Enable CDR permanent et When evaluation, the Cull Setue R In the versite of the cull setue R Filler status Engend etestiv	Disable COR permanent storage errord by a stored on the compact Radi card. When disabled, a small number of logs are stored in memory and car permanently stared.
489 Call Detail Records logged Casture Only deveload or delete CDRs when the well is not besting active calls Download as XML Download 0 to 286 as XML Delete 0 to 399	Page 12242 Contraction Contractions of

Figure 4-4: Click to enable CDR permanent storage

4.3 Add MCU, TP Server, or ISDN Gateway

To add a Cisco MCU, Telepresence Server, or ISDN Gateway requires the following:

- Access to the FQDN/ IP address of the video device from the vAnalytics Data Collector
- Previously created user service account credentials on each video device

Note: If you have multiple MCUs, TPS peers, or clusters you must add a connector for each individual device or blade. Do not add slave MCUs as all information is obtained from the Master MCU.



Please follow the instructions below to add each video infrastructure device:

- 1. Select the correct device type in the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the video device. This can include the device type, location, and other unique identifiers.
- 4. Enter the infrastructure hostname or IP address.
- 5. Enter the username and password created on the video device.
- 6. Click Validate to ensure that the vAnalytics application can connect to the video device.
- 7. If the connection to the video component succeeded, click the Save button.

── Vyopta vAnalytics [™] Data Collect	tor Configuration Wizard		= 0 X
Getting Started Authen	tication Validation	Infrastructure Component	s Next Steps
Infrastructure Type Name Description Hostname Username	Cisco Multipoint Control Unit Cisco 0000 MCU Cisco 0000 MCU New Descrip 12.345.67.89 vyoptaprod	t (MCU) ption Protocol HTTPS Password e	
Cancel		Validate	Save

Figure 4-5: MCU Configuration Example



4.4 Cisco TelePresence Multipoint Control Unit (MCU) Reference Table

Cisco TelePresence MCU	o TelePresence MCU	
Version	MCU version 4.1 or above	
Device Access	Server IP/FQDN	
User/Service Account	Local account with Administrator privileges	
TCP Ports	vAnalytics Data Collector to the MCU device(s) TCP 443 (https)	
	If MCU is in a cluster only the Master needs to be added	

4.5 Cisco TelePresence Server (TPS) Reference Table

Cisco TelePresence Serv	er (TPS)
Version	TPS 3.1 or above
Device Access	Server IP/FQDN
User/Service Account	Local account with API Access (or Administrator privileges)
TCP Ports	vAnalytics Data Collector to the TPS device(s) TCP 443 (https)

4.6 Cisco TelePresence ISDN Gateway Reference Table

Cisco TelePresence ISDN	l Gateway
Version	Version 2.1 or above
Device Access	Server IP/FQDN
User/Service Account	Local account with Administrator privileges
TCP Ports	vAnalytics Data Collector to the ISDN device(s) TCP 443 (https)



5 Cisco Telepresence Management Suite (TMS) SQL Server Database

5.1 Set up a Service Account for Cisco Telepresence Management Suite (TMS) SQL Server

Database

The service account required will be added to the appliance's SQL Database with read-only privileges. You must determine where the appliance's SQL Server Database is located in your environment; whether it is on the TMS appliance or located on a separate SQL server. Once this has been identified, you will require an Administrator account to the server to add the vAnalytics service account. This may require the assistance of a SQL Server Administrator in your organization to provide server access or to add the account manually.

For all instances where the TMS/TMSPE SQL databases are hosted on a separate SQL Server please consult with your organization's SQL Server DBA to create the required database read-only account.

There are two ways to identify where your TMS & TMSPE databases are located:

- 1. RDP to the TMS server as an administrator and run the '**TMS Tools'** application configuration utility from Start > Programs > Cisco TelePresence Management Suite. Please note that this is the recommended option as it highlights the connection port.
- 2. Log in to the TMS Web UI as an administrator and navigate to Administrative Tools > TMS Server Maintenance. Click on 'Database Files and Size Info' to view the database server in use. If the database server is '(local)\SQLTMS' then your database resides on the actual TMS server. Your database could also use the name of the actual server, e.g. 'TMSPROD\SQLTMS'. If the server name matches your TMS server then your database resides on the TMS server.

The read-only database account should be titled **vyopta_svc** which has the '**db_datareader**' and '**public**' roles as well as access to the '**tmsng**' and '**tmspe**' databases. For SQL databases residing on the TMS server (atypical), please contact <u>support@vyopta.com</u> for assistance with the TMS Preparation Installer.

Note: You will need to make sure that you obtain the assigned password and also the appropriate TCP/IP port for database access. The default for this is 1433 but other ports can be configured.

vy**ộ**pta

5.2 Add a TMS and TMS Provisioning Extension Connector

To add a connector for Telepresence Management Suite (TMS) and/or Telepresence Management Suite Provisioning Extension (TMSPE) you will need to prepare by completing the following prerequisites:

- Confirm access to the FQDN/IP address of the server hosting the SQL Database from the vAnalytics Data Collector.
- Obtain credentials for the Microsoft SQL Server Database Read-only Account.
- Identify whether a static or dynamic SQL port is used. (If dynamic, please identify and record the dynamic port value within Microsoft SQL Configuration Manager.)
- Verify that TCP/IP is enabled for the SQL Server within SQL Configuration Manager.

Please follow the instructions below to add TMS and repeat for TMSPE:

- 1. Select the correct TMS product type in the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name and description of TMS. This will be the name displayed for the video device in vAnalytics. This can include the device type, location, and other unique identifiers.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

3. Enter the SQL Server hostname or IP address. If the SQL Server Instance Name is not the default name MSSQLSERVER, you will have to add the SQL Server Instance Name as a suffix to the Hostname or IP address:

<Device Hostname>\<SQL Server Instance Name>

- 4. Enter the username and password created on the SQL Server.
- 5. Leave the Port Number and Database Name blank, it will use the default port numbers. If you have verified that the default port or database is not used, enter in the custom port number or database name.
- 6. Click Validate to ensure connectivity to the video device.
- 7. If the connection to the video component succeeded, click the Save button.



Cisco TelePr	esence Manager	ment System		•
TMS				1
				1
12.345.56.7	8	Port	1433	
leave blank i	f default	Database Name	tmsprod	
vyoptaprod		Password	•••••	
	Remember cred	 fentials for next compone	ent(s)	
			1995 A. 4	
	TMS 12.345.56.7 leave blank i vyoptaprod	TMS 12.345.56.78 leave blank if default vyoptaprod Remember cred	TMS 12.345.56.78 Port leave blank if default Database Name vyoptaprod Password Remember credentials for next compone	TMS 12.345.56.78 Port 1433 leave blank if default Database Name tmsprod vyoptaprod Password •••••••••• Image: Remember credentials for next component(s) Password ••••••••••••••••••••••••••••••••••••

Figure 5-1: TMS Configuration Example

Note: You must repeat the procedure above to add the TMSPE database.

5.3 Cisco TelePresence Management Suite (TMS) Reference Table

Cisco TelePresence Mar	nagement Suite (TMS)
Version	TMS version 13.2 or above
	Server IP/FQDN that hosts the SQL 'tmsng' and 'tmspe' databases
Device Access	While the TMS application server can host the SQL database this is typically not implemented in an enterprise environment. Please consult with your organization's DBA for more information.
User/Service Account	Local DBA read-only user account that has access to the 'tmsng' and 'tmspe' databases
TCP Ports	vAnalytics Data Collector to the SQL databases TCP 1433
	Note: Your SQL DBA may have set a separate TCP port other than the default. Please consult with your organization's DBA for more information.



6 Cisco Unified Communications Manager (CUCM)

6.1 Enable the AXL API User Role for Cisco Unified Communications Manager (CUCM)

The vAnalytics Data Collector leverages the AXL API for gaining access to CUCM registered endpoints. The AXL API User role is not enabled by default. The following steps will guide you in creating this required user role:

- 1. Log into the Cisco UCM with an Administrator Account.
- 2. Navigate to the Cisco Unified CM Administration tab.
- 3. Go to User Management > User Settings > Role and search for AXL User Group.
- 4. If the role already exists, then proceed to the next section, otherwise click Add New.
- 5. Under Application, select *Cisco Call Manager AXL Database*, and click Next.
- 6. Enter Standard AXL API Access as the name and Allow AXL APIs as the description.
- 7. Check the Allow to use API check box and click Save.
- 8. Go to User Management > User Settings > Access Control Group and select Add New.
- 9. Name the group AXL User Group and click Save.
- 10. Return to the Access Control Group page and search for AXL User Group once again.
- 11. Find the AXL User Group from the List, and select the 'i' button as shown below:

Access Con	ntrol Group (1 - 1 of 1)		Rows p	er Page
Access Find Control o Group	where Name contains + axl		Find Clea	r Filter
	Name [▲]		Roles	(
	AXL User Group	í		6
Add New	Select All Clear All Delete Selected			

Figure 6-1: Add Role To AXL User Group

- 12. Select Assign Role to Group and find the *Standard AXL API Access* role.
- 13. Select the role, click the "Add Selected" button, and click the save button. The role will now be listed in this User Group.



6.2 Set up a Service Account for CUCM

Next, you will create an application user service account on your Call Manager publisher:

- 1. Log into the CUCM publisher with the Administrator account.
- 2. Go to User Management > Application User > Add User.
- 3. Enter vyopta_svc for the Username.
- 4. Set a password for the account.
- 5. Assign the following groups to the user account:
 - AXL User Group
 - Standard CCM Read-Only
 - Standard CCM Server Monitoring
 - Standard CTI Enabled
 - Standard CTI Allow Control of Phones supporting Connected Xfer and conf
- 6. Endpoints that you will be monitoring in real time should be moved from the 'Available Devices' to the 'Controlled Devices' list under the Device Information section. You can use the 'Device Association' or 'Find more phones' button to better navigate the endpoints in your CUCM environment.

Application User Con	figuration	
- Device Information —		
Available Devices	Auto-registration Template COMSOLIPC CSFALBURNS CSFALFREDORAMIR CSFANDREWCHEN	Device Association Find more Route Points
	**	
Controlled Devices	CSFCHRISGENTSCH CSFHARESHSURESH CSFJUSTINAKIN CSFRICHARDMITCH SEP005060048C6F	

Figure 6-2: CUCM Application User Configuration

Note: For large environments, there may be a prohibitively large amount of devices to move into the controlled group. If that is the case, please contact support@vyopta.com for an alternate solution.

7. Save the user account.



- 8. Once you have added the account, ensure that the following services are enabled by navigating to Cisco Unified Serviceability > Tools > Service Activation on each CUCM Publisher:
 - Cisco Call Manager
 - Cisco CTI Manager
 - Cisco SOAP CDRonDemand Service
 - Cisco CAR Web Service
 - Cisco AXL Web Service

CM Se	ervices	
	Service Name	Activation Status
2	Cisco CallManager	Activated
	Cisco Messaging Interface	Deactivated
	Cisco Unified Mobile Voice Access Service	Deactivated
	Cisco IP Voice Media Streaming App	Deactivated
2	Cisco CTIManager	Activated
	Cisco Extension Mobility	Deactivated
	Cisco Extended Functions	Deactivated
	Cisco DHCP Monitor Service	Deactivated
	Cisco Intercluster Lookup Service	Deactivated
	Cisco Location Bandwidth Manager	Activated
	Cisco Dialed Number Analyzer Server	Deactivated
	Cisco Dialed Number Analyzer	Deactivated
	Cisco Tftp	Activated
CTI S	ervices	
	Service Name	Activation Status
0	Cisco IP Manager Assistant	Deactivated
	Cisco WebDialer Web Service	Deactivated
CDR S	Services	
	Service Name	Activation Status
	Cisco SOAP - CDRonDemand Service	Activated
2	Cisco CAR Web Service	Activated
Datab	base and Admin Services	
	Service Name	Activation Status
0	Cisco Bulk Provisioning Service	Deartivated
Ø	Cisco AXI. Web Service	Artivated
0	Cisco IXI Web Service	Deartivated
0	Cisco TAPS Service	Deartivated
	Server in a second	ocollivated
Perfo	rmance and Monitoring Services	
	Service Name	Activation Status
	Cisco Serviceability Reporter	Deactivated
	Cisco CallManager SNMP Service	Deactivated

Figure 6-3: CUCM Unified Serviceability Service Activation



- 9. Make sure parameters are correctly enabled under Cisco Unified CM Administration for Active Publishers:
 - a. Navigate to Cisco Unified CM Administration -> System -> Service Parameters.
 - b. Select Active Publishing Server(s).
 - c. Select the Cisco Call Manager Service.
 - d. Under System section set CDR Enabled Flag and CDR Log Calls with Zero Duration Flag to *True*.

Note: The CDR Enabled Flag and CDR Log Calls with Zero Duration Flag **must** be set to True on every Publisher and Subscriber – Subscribers do not inherit these values from Publishers, and these values are not set by default. If not set correctly, CDRs will not be transmitted to vAnalytics and data loss is likely.

> e. Under Cluster Wide parameters (Device - General) set Call Diagnostic Enabled to *Enabled Regardless of CDR Enabled Flag* and the two Show Line Group Member parameters to *True*.

Industry Cisco Unified CM Administration		
stem + Call Routing + Media Resources + Advanced Features + Device + Application	• User Management • Bulk Administration • Help •	•
nice Parameter Configuration		
System -		
CDR Enabled Flag *	True	
CDR Log Calls with Zero Duration Flag.*	True	1
Digit Analysis Complexity *	StandardAnalysis	
Database Debounce Timer.*	0	
Maximum Phone Fallback Queue Depth.*	10	
Maximum Number of Registered Devices	5000	
System Initialization Timer	60	
There are hidden parameters in this group. Click on Advanced button to see hidden p	arameters.	
SOL Trace		
SDL Trace Data Flags	0×08000111	
SDL Trace Flush Immediately.*	False	
SDL Trace Data Size	0	
SDL Trace Flag.*	True	
SDL TraceType Flags	0x8000EB15	
There are hidden parameters in this group. Click on Advanced button to see hidden p	irameters.	
Clusterwide Parameters (Device · General)		
Call Diagnostics Enabled.*	Enabled Regardless of CDR Enabled Flag	
Show Line Group Nember DN in finalCalledPartsNumber CDR Field	True	
Show Line Group Member Non Masked DN in finalCalledPartyNumber CDR Field	True	
CTI New Call Accept Timer *	4	_
CTI Generate Digits Interval *	250	
CTI Dial Digits Interval *	250	
CTI Await Further Digits.*	False	
CTI Use Wildcard Pattern as calledPartyDN	False	*
Retain Media on Disconnect with PI for Active Call	False	1
Station and Backup Server KeepAlive Interval	60	
Station Keep Alive Internal *	30	_

Figure 6-4: Cisco Unified CM Administration Service Parameters



- 10. Make sure the following parameters are enabled under Cisco Unified CM Administration for Subscribers (if applicable)
 - a. Navigate to Cisco Unified CM Administration -> System -> Service Parameters.
 - b. Select Subscribers.
 - c. Select the Cisco Call Manager Service
 - d. Under System section set CDR Enabled Flag and CDR Log Calls with Zero Duration Flag to *True*.

Note: The CDR Enabled Flag and CDR Log Calls with Zero Duration Flag **must** be set to True on every Publisher and Subscriber – Subscribers do not inherit these values from Publishers, and these values are not set by default. If not set correctly, CDRs will not be transmitted to vAnalytics and data loss is likely.

CISCO For Cisca Unified Communications Solutions	
ystem + Call Routing + Media Resources + Advanced Features + Device + A	pplication = User Management = Bulk Administration = Help =
rreice Parameter Configuration	
System	
CDR Enabled Flag.*	True
CDR Los Calls with Zero Duration Flag.*	True
Digit Analyziz Complexity.*	StandardAnalysis
Databara Debrutca Timer.*	0
Maximum Phone Fallback Queue Death.*	10
Maximum Number of Registered Devices.*	5000
System Initialization Timer.*	60



- 11. For large Call Manager deployments (i.e., More than 5 nodes or with multiple clusters) it is recommended to adjust the following parameters under Cisco Unified CM Administration > System > Enterprise Parameters from their default values in order to facilitate timely CDR collection:
 - a. CDR File Time Interval: By increasing this value from the default of 1 minute to 5 minutes, the number of CDR files will be reduced by a factor of 5 with no impact on CUCM performance. Please ensure that any other CDR reporting / billing solutions will not be adversely affected by changing this parameter.
 - b. Allowed CDRonDemand get_file Queries per Minute: For larger Call Manager deployments (greater than 20 total nodes) it is recommended to increase this value from the default value of 10 to 20, which will assist in CDR collection with no impact on CUCM performance.



6.3 Add CUCM Connectors for the Publisher

To add a CUCM Connector requires the following:

- Access to the FQDN/ IP address of the video device from the vAnalytics Data Collector
- Previously created user service account credentials on each video device

Note: **Only Publishers should be added**. (No Subscribers should be added.) If Publisher services cannot be enabled, please contact <u>support@vyopta.com</u>.

Please follow the instructions below to add each CUCM Publisher:

- 1. Select Cisco Unified Communications Manager (CUCM) from the Infrastructure Type menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the video device. This can include the device type, location, and other unique identifiers.
- 4. Enter the infrastructure hostname or IP address.
- 5. Enter the username and password created on the video device.
- 6. Click Validate to ensure that the vAnalytics application can connect to the video device.
- 7. If the connection to the video component succeeded, click the Save button.

Vyopta vAnalytics ¹⁴ Data C	ollector Configur	ation Wizard			×
Setting Started Au	hentication	Validation	Infrastru	cture Components	Next Steps
Infrastructure Ty Nat	pe Cisco Unifie ne CUCM - Pro	ed Communications aduction	: Manager (C	UCM)	•
Descript	on				
Hostnar	ne cucm.prod	vyopta.com	Protocol	xTTPS	
Usernar	ne vyoptaprod	ł.	Password	•••••	
		Remember crede	ntials for next o	emponent(s)	

Figure 6-6: CUCM Configuration Example

vyôpta

6.4 Cisco Unified Communications Manager (CUCM) Reference Table

Cisco Unified Communio	cations Manager (CUCM)
Version	CUCM version 10.0 or above
Device Access	Call Manager Publisher(s) IP/FQDN; Subscribers not required.
User/Service Account	CUCM Application User with Standard CCM Read-only, AXL User Group, and Standard CTI Enabled, and Standard CTI Allow Control of Phones supporting Connected Xfer and conf
	vAnalytics Data Collector to CUCM TCP 443, 8443, 2748, 2749, 2789
TCP Ports	Passive FTP (21) or SFTP*
	*FTP requires that passive FTP be open and allowed from CUCM to the Vyopta Data Collector. If SFTP is selected then only port 22 must be open. SFTP requires using a third party SFTP client on the Vyopta Data Collector.
Call Manager Service Requirements	Cisco Call Manager CISCO CTI Manager Cisco SOAP – CDRonDemand Service CISCO CAR Web Service Cisco AXL Web Service
Call Manager Service	'CDR Enabled Flag' and 'CDR Log Calls with Zero duration' to True
Parameters	'Call Diagnostic Enabled' to Enabled Regardless and 'Show Line Group Member' parameters to true



7 Cisco Meeting Server (CMS; formerly Acano Server)

7.1 Set up a Service Account for Cisco Meeting Server (CMS)

To utilize CMS meeting and user reporting APIs, a service account with read-only administrator access must be created:

- 1. SSH into the CMS box using any convenient command line utility.
- 2. Login with the Administrator account (e.g. admin@10.10.10.200).
- 3. Enter the following command: user add vyopta_svc api
- 4. Type in the vyopta_svc user account password.

Note: By default, CMS provisions new account passwords with a 180-day duration, meaning that you will need to update the password on the service account twice yearly. If your corporate service account policies permit, you may want to extend this default duration **before** adding the vyopta_svc account.

To change the default user account password duration, after logging into the CMS command line interface with your administrator account, **but before adding the vyopta_svc account**, enter the following command:

user rule password age NNNN

where NNNN is the number of days before a password expires. So to set the default expiration to yearly, enter:

user rule password age 365

If you have already added the Vyopta service account but want to extend its expiration duration, you still enter the above command, followed by:

passwd vyopta_svc

You'll then be prompted to confirm your administrator password to allow you to do this, then simply reenter the existing password on the vyopta_svc account. It does not need to change to be refreshed -- and if you do change it, you will need to update it on the vAnalytics apps management portal.



- 5. To verify that the API role is set (and the password expiration, if changed), enter the following command: user list
- 6. Close the SSH session.

acano> user add t	vyoptasvc api		
Please enter new	password:		
lease enter new	password again:		
luccess			
acano> user list			
USERNAME	ROLE	PASSWORD EXPIRY	LOGGED IN
admin	admin	2015-Oct-01	yes
vyoptasvo	api	2016-Mar-29	no
acano>			



7.2 Add a CMS Connector

To add a CMS Connector requires the following:

- Access to your organization's CMS Webpage from the vAnalytics Data Collector
- Credentials for the CMS read-only API service account established in the previous step (*Section* 7.1, Set up a Service Account for Cisco Meeting Server (CMS))

Please follow the instructions below to add the CMS instance:

- 1. Select either *Cisco Meeting Server (CMS)* or *Acano Server*, depending upon your version of the vAnalytics Data Collector, in the Infrastructure Type drop-down menu. (Only one of those two choices will be available.)
- 2. Enter the server name.
- 3. Enter the CMS URL into the Hostname.

Note: Please include any non-standard port number in the URL. For example: 10.200.30.24:445 (where 445 is the port number).

- 4. Enter an optional description of the video device in the Description field.
- 5. Enter the username and password of the service account established in the prior section.
- 6. Select Server Type (X2, X3 or VM). If VM, enter the number of ports for which your CMS is licensed in the 'Max concurrent 720p calls' field.



Note: If you are on a fractionally licensed X2 / X3 then please add as a VM instead and specify your max concurrent HD calls.

Setting Started	Auther	ntication	Validation	Infrastruc	ture Componen	ts Next Ste
Infrastruc	ture Type:	Acano Serv	ver			-
	Name	My Acano	Server #1			
D	escription					
ŀ	lostname	12.345.67.	89:445	Protocol	HTTPS	
L. L.	Jsername	vyoptasvc		Password	•••••	
			Remember cred	lentials for next co	imponent(s)	~
Acano Capacity Server Type X3	•	Max con	current 720p HD	calls 250	Media tok	en limit 6000
Please paste the	following l	JRL in Acano	Admin Portal			
http://		'acano _/			Cop	y to Clipboard
Engward CDR	to URL					

Figure 7-2: Adding CMS to vAnalytics

- 7. Click Validate to ensure that the vAnalytics can connect to your CMS.
- 8. If the connection to the video component succeeded, click the 'Copy to Clipboard' button in order to capture the CDR URL which needs to be entered in CMS and then click the Save button.
- 9. Login to the CMS configuration portal using administrator credentials.
- 10. Navigate to Configuration > CDR Settings tab
 - a. If the Receiver URI 1 field is blank then paste the URL that you copied in step 8 into the 'URI 1' field. Otherwise paste the value into the 'URI 2' field.
 - b. Click Submit.

acano		
Status 🔻 Configuration 🔻 Logs 🔻		User: admin 🔻
CDR configuration		
CDR receiver settings		
Receiver URI 1	http://10.100.10.27:22280/adr/acano/332999de-314f	
Receiver URI 2		
	Submit	
L		



11. For Acano versions prior to 1.8 or for deployments which require more than 2 CDR streams, please contact support@vyopta.com



Note: Port 22280 is the default port over which the vAnalytics Data Collector will listen for inbound CMS CDR data. If this port is not open in your network environment then please reach out to support@vyopta.com for further assistance.

7.3 Cisco Meeting Server (CMS) Reference Table

CMS	
Version	Acano 1.7 or above, CMS 2.0.0 or above
Device Access	Server IP/FQDN of CMS device(s)
User/Service Account	Local account with read-only API access enabled.
	vAnalytics Data Collector to CMS TCP 443*
TCP Ports	CMS CDR forward push to vAnalytics Data Collector TCP 22280
	Note: the management port can be set to a separate port such as TCP so please confirm the correct port with your CMS administrator.



8 Cisco WebEx

8.1 Set up a Service Account for Cisco WebEx

To create a service account for Cisco WebEx, perform the following:

- 1. Log into the WebEx Web Portal using an existing site administrator account.
- 2. Select Site Administrator tab to open the Administration page.
- 3. Use the appropriate tab under Manage Users to create a new WebEx account:
 - a. Select the *Site Admin View only* privilege.
 - b. Enter Vyopta for the First name.
 - c. Enter Service for the Last name.
 - d. Enter vyoptasvc for the User name.
 - e. Enter vyoptasvc@vyopta.com for the Email address.
 - f. Set and confirm the password for the service account.
- 4. Select Update to save the service account information.

cisco Web	Ex Adr	ministration			
Site Information	-	Account Type			
Configuration	*	O Host O Site administrator	 Site Admin - View only 		
		* Denotes required fields			
Users	=	Account Information			
Add User		First name:	Vyopta	•	
Edit User		Last name:	Service		
Import/Export Users		Laber Harrier.			
		User name:	vyoptasvc@vyopta.com	•	
Reports	ω	Email:	vyoptasvc@vyopta.com	•	
		Password:		•	
		Confirm password:		•	
		Personal Room URL:	https://vyopta.webex.com/meet/		
		Department:	Select code from list	Select Code	
		Language:	English ¢		
		Time zone:	Chicago (Central Daylight Time, C	3MT-05:00)	+

Figure 8-1: WebEx User Account Information



8.2 Add a WebEx Connector

To add a WebEx Connector requires the following:

- Access to your organization's WebEx Site URL from the vAnalytics Data Collector
- Credentials for the WebEx Site Admin View only account

Please follow the instructions below to add your WebEx site:

- 1. Select *Cisco WebEx* in the Infrastructure Type drop-down menu.
- 2. Enter the WebEx site name.
- 3. Enter WebEx into the Description field; you may also add the WebEx type, location, or other unique identifiers.
- 4. Enter the WebEx Site URL in the Hostname field.
- 5. Enter the username and password of the Site Admin View only account.
- 6. Click Validate to ensure that the vAnalytics application can connect.
- 7. If the connection succeeded, click the Save button.

Note: You must repeat the procedure above for each WebEx site.

setting started	Auther	vication	Validation	Infrastru	cture Components	Next Step
Infrastruc	ture Type	Cisco WebE	x			•]
	Name	Webex				
D	escription	Vyopta We	xEx			
H	lostname	vyopta.web	ex.com	Protocol	HTTPS	
U	Isername	vyoptasvc@	vyopta.com	Password	•••••	
			Remember cred	entials for next o	omponent(s)	

Figure 8-2: Adding a WebEx Site



8.3 Cisco WebEx (Cloud only) Reference Table

Cisco WebEx (Cloud only)				
Version	Version T28 or above			
Device Access	FQDN of WebEx sites			
User/Service Account	Local Site Admin - View-only WebEx account			
TCP Ports	vAnalytics Data Collector to the WebEx Cloud TCP 443 (https)			



9 Pexip Infinity

9.1 Validate the Service Account for Pexip Infinity

The account used by vAnalytics for connection to Pexip Infinity is the Pexip Management Node admin account that is used to log into the Pexip Management Web Portal. To verify the credentials for the Pexip Management Node, please follow these steps:

- 1. Open a web browser and navigate to the domain name or IP address of the Pexip Management Node.
- 2. Enter the admin username and password for the Pexip Management Node.
- 3. Ensure you can successfully log into the Pexip Management Node.

Pe Confer	exip Infinity encing Platform	
		_
Username:	admin	
Password:	•••••	
	Log in	

Figure 9-1: Pexip Management Node Login Page

Note: If the Pexip Management Node is LDAP-integrated, only a local admin account can be used for the Vyopta vAnalytics Pexip Connector. If the User Authentication Source is set to LDAP database only, the Pexip admin account must be used.



9.2 Add a Pexip Connector

To add a Pexip Connector requires the following:

- Access through a web browser to the Pexip Node from the vAnalytics Data Collector
- Credentials for the admin account on the Pexip Management Node from the previous section

Please follow the instructions below to add a Pexip Infinity device:

- 1. Select *Pexip Server* in the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the video device. This can include the device type, location, and other unique identifiers.
- 4. Enter the Pexip Management Node hostname or IP address.
- 5. Enter the username and password for the administrator account.
- 6. Click Validate to confirm that vAnalytics can connect to the Pexip Management Node.
- 7. If the connection to the Pexip Node succeeded, click the Save button.

Wyopta vAnalytics [™] Data Collect Vyopta vAnalytics [™] Data Vyopta vAnalytics [™] Data Collect Vyopta vAnalytics [™] Data Vyopta vAnalytics [™] Data Collect Vyopta vAnalytics [™] Data V	- ×		
Getting Started Auther	ntication Validation	Infrastructure Compor	ents Next Steps
Infrastructure Type Name Description	Pexip Server Pexip Infinity		•
Hostname	pexipprod.vyopta.com	Protocol HTTPS	
Username	admin Remember cre	Password	
Cancel		Validate	Save

Figure 9-2: Adding Pexip infrastructure to vAnalytics



9.3 Pexip Infinity Reference Table

Pexip Infinity	
Version	Pexip Infinity 10 or above
Device Access	Server IP/FQDN of Pexip Management Node(s)
User/Service Account	Local account with full Administrator access
TCP Ports	vAnalytics Data Collector to Pexip Management Node(s) TCP 443*



10 Skype for Business (SfB)

10.1 Set up a Service Account for Skype for Business (SfB)

Note: **Requires (at least) version** <u>3.3.0.101</u> of the vAnalytics Data Collector.

The service account for this component will be added to two (2) SfB SQL Server databases, with readonly privileges. You must determine where the SfB SQL Server databases are located in your environment; on the SfB server(s) or elsewhere.

Note: The database account must be a local SQL account; AD accounts are not permitted.

Once you have identified where the SQL Server is located, you must verify that the server has Microsoft SQL Server Management Studio or download the software application to your local computer. To create a service account on the SfB SQL Server, perform the following:

- 1. Using SQL Server Management Studio, connect to the database used by SfB.
- 2. Log in with a SQL Server Administrator account or Local Administrator account.

Note: The administrator account must have write privileges to create a service account.

- 3. Navigate to the Security > Logins folder.
- 4. Right click on the Logins folder and choose New Login, which should display the following:

8	Login-	New		- • ×
Select a page	Scolpt 💌 🌄 Help			
de Sanon Palen 19 Uarrillestrig de Sanonable de Sanonable de Salour	Login hann: Windown authentication StQL Generature authentication Prainmit Cardin pranscot Cardin pranscot Chi prenevost Oth prenevost Diff prenevost	for col d net hgin		Seach.
	Mapped to asymmetric key			
Connection	Map to Dederitial			
Sarvas: SBL Canvestian BJ Yee canvestian conserves	Mapped Dederkals	Dodential	Provider	
Progeniti				Fienove
O 144	Default database Default language	narim cakituato		v v
			DK.	Cancel

Figure 10-1: SQL User Creation Screen



- 5. Create a local database user account with the following information:
- 6. Fill in the Login Name. We recommend using a descriptive name like *vyopta_svc*, as has been done in this example.
- 7. Select SQL Server Authentication.
- 8. Assign a Password and confirm the password.
- 9. Uncheck Enforce Password Policy.
- 10. Select User Mapping in the left-hand column.
- 11. Select the *LcsCDR* database to provide the account access to the database.
- 12. Once the database has been selected, you must identify the role membership. Select the *db_datareader* and *public* roles.
- 13. Repeat steps 12 and 13 for the *QoEMetrics* database in the database List.
- 14. Click OK to create the user.

8	Login Propertie	·S	-	- 🗆 X
Select a page	🖳 Script 🔻 📭 Help			
Server Roles User Mapping Securables	Users mapped to this login: Map Database cpsdyn UcsCDR lis master model QoEArchive QoEMetrics QoERepositoryDb ReportServer	User vyopta_svc vyopta_svc	Default Schema dbo dbo	
Connection	Database role membership for:	LcsCDR		
Server: SQL Connection: View connection properties Progress	db_accessadmin db_backupoperator db_datareader db_datawriter db_datawriter db_denydatareader db_denydatawriter db_owner db_securityadmin db_ice			
C Ready	ReportsReadOnlyRole ServerRole			
			ОК	Cancel

Figure 10-2: SQL User Role Mapping Screen

15. You will need to identify the Instance Name of the SQL Server hosting the Skype for Business database that will be the target of the vAnalytics Data Collector. Your database administrator may be able to provide this information directly, or you can perform the following:



a. Open the Microsoft SQL Server Configuration Manager application and select the SQL Server Services tab as displayed below:

🗇 🔿 🖻 🗟 🔽 🕑 🕕 💌 🕙			
😵 SQL Server Configuration Manager (Local)	Name	State	
SQL Server Services	SQL Server (LYNCLOCAL)	Running	
. 🖳 SQL Server Network Configuration (32bit)	SQL Server (RTC)	Running	
	SQL Server (RTCLOCAL)	Running	
	SQL Server Reporting Services (RTC)	Running	
	SQL Server Agent (LYNCLOCAL)	Stopped	
	SQL Server Agent (RTC)	Running	
	SQL Server Agent (RTCLOCAL)	Stopped	
	5QL Server Browser	Running	
	TISQL Server Browser	Running	

Figure 10-3: SQL Server Configuration Manager

- b. Identify the Instance Name of the SQL Server hosting the SfB Database. In the example above the SQL Server Instance Name is RTC.
- c. Document this information to use in adding the vAnalytics SfB Connector.

You have now created a new database read-only user account on the SfB database. This account is configured to be a service account for use in the vAnalytics System Configuration Utility to set up the connection to the appropriate service.

10.2 Add a Microsoft Skype for Business Connector

To add a Microsoft Skype for Business Server Connector requires the following:

- Access to the FQDN/IP address of the Server hosting the Skype for Business SQL Databases from the vAnalytics Data Collector
- Credentials for the Microsoft SQL Server service account created in the previous section
- Knowledge of the SQL port type (static or dynamic) and if dynamic, the port value defined within Microsoft SQL Configuration Manager
- TCP/IP Connectivity enabled for the SQL Server within SQL Configuration Manager

Please follow the instructions below to add Microsoft Skype for Business:

- 1. Select *Microsoft Skype for Business* in the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in vAnalytics.
- 3. Enter the description of the video device. This can include the device type, location, and other unique identifiers.
- 4. Click Next.
- 5. Enter the SQL Server Database hostname (or IP address).

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Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 6. Leave the Port Number of the SQL Server blank (unless changed from default value).
- 7. Click Validate to ensure that the vAnalytics application can connect to the host.
- 8. Click Next.
- 9. Add the LcsCDR SQL Server Instance Name and Database Name.
- 10. Enter the username and password of the Microsoft SQL Server service account created previously.
- 11. Click Validate to ensure that the vAnalytics application can connect to the **LcsCDR** database.
- 12. If the connection to the LcsCDR database succeeds, click the Next button.
- 13. Repeat steps 9 through 11 for the **QoEMetrics** database.
- 14. If the connection to the **QoEMetrics** database succeeds, click the Next button.
- 15. Enter the Front-End Server Hostname, Username, and Password.
- 16. Click Validate and, if successful, click the Save button.

10.3 Microsoft Skype for Business

Skype for Business	
Version	Version 2015 or above
Device Access	Server IP/FQDN of S4B/Skype for Business database server/cluster responsible for reporting
User/Service Account	Local read-only database account that has access to the 'LcsCDR' and 'QoEMetrics' databases.
TCP Ports	 * vAnalytics Data Collector to SQL database server/cluster TCP 1433* * Port can vary depending on customer environment; Exact port to be provided by Customer Skype for Business DBA team



11 Polycom RealPresence Distributed Media Application (DMA)

11.1 Verify API Licensing and Set up Service Account for Polycom RealPresence Distributed

Media Application (DMA)

Note: The Polycom DMA must have the appropriate API License in order to activate the API for use with external applications. Confirm that the RealPresence Platform API is licensed through the DMA management interface as shown below:

7803
developersandbox-dma-1 🔻
Licensed
204
0
 Licensed

Figure 11-1: Polycom API Licensing

To confirm that the RealPresence Platform API is licensed, please complete the following:

- 1. Log into the DMA Management Interface.
- 2. Navigate to the Dashboard.
- 3. Add the License Status Panel (not added by default).
- 4. Ensure that the RealPresence Platform API displays *Licensed*.

Once the API has been verified or activated, a service account, which must be a local account with administrator credentials, is required. To add and verify the credentials for Polycom DMA, complete the following:



- 1. Open a web browser and navigate to the domain or IP address of the Polycom DMA.
- 2. Log in as an administrator using your username and password.
- 3. Navigate to the User > Users tab to open up the User Administration Panel.
- 4. Select Add to add the required user vAnalytics service account.
- 5. Enter the Name, User ID, and Password for the service account.
- 6. Select the Associated Roles tab and add the Administrator role.
- 7. Click OK to add the user account.
- 8. Log out of the Polycom DMA and verify that you can successfully log in using the service account credentials.

	First name:	Vvonta	
General Info	Last name:	Service Account	•
Associated Endpoints	User ID:	vyopta_svc	•
Associated Roles	Password:	•••••	•
Conference Passcodes	Confirm password:	*****	•
	User pass-through to CDR:	1	
	Account disabled:		
	Conference room territory:	Default DMA Territory (s	andbox-dma1) 🛛 🔻
	Class of service:	Bronze	
	Maximum bit rate (kbps):	2048 🛛 🔻	
	Minimum downspeed bit rate (kbps):	384 🛛 🔻	



11.2 Add a Polycom DMA Connector

To add a Polycom DMA Connector requires the following:

- Access to the FQDN/IP address of the DMA from the vAnalytics Data Collector
- Port 8443 must be open between the vAnalytics Data Collector and the Polycom DMA
- Credentials for the user service account on the Polycom DMA
- Registered and operating Polycom API License for each DMA



Please follow the instructions below to add each DMA instance:

- 1. Select *Polycom DMA* from the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the device. This can include the device type, location, and other unique identifiers.
- 4. Enter the hostname or IP address followed by : 8443
- 5. Enter the username and password for the user service account.
- 6. Click Validate to ensure that the vAnalytics application can connect.
- 7. If the connection to the Polycom device succeeds, click the Save button.

Over the second sec	tor Configuration Wizard		Ŀ	- • ×
Getting Started Auther	ntication Validation	Infrastructi	ure Components	Next Steps
Infrastructure Type Name Description	Polycom DMA Sandbox DMA			•
Hostname	sample.host.domain	Protocol H	TTPS	
Username	vyopta	Password •	•••••	
	Remember c	edentials for next com	ponent(s)	
Cancel		Valida	ate	Save
Contest		Valida		Jave

Figure 11-3: Polycom DMA Configuration Example



11.3 Polycom RealPresence Distributed Media Application (DMA) Reference Table

Polycom RealPresence Distributed Media Application (DMA)		
Version	DMA version 6.2 or above	
Device Access	Server IP/FQDN	
User/Service Account	Local account with full Administrator read/write or Provisioner privileges.	
TCP Ports	vAnalytics Data Collector to the DMA device(s) TCP 8443	
API License	Note: Requires the RealPresence Platform API license per DMA device	



12 Polycom RealPresence Collaboration server (RMX)

12.1 Set up a Service Account for Polycom RealPresence Collaboration server (RMX)

The required service account must be an account with full read/write administrator credentials. The Polycom API will not allow an administrator account with read-only privileges to retrieve CDR data. To add and verify the credentials for the Polycom RMX, complete the following:

- 1. In the Polycom RMX Manager application click Users.
- 2. Click New User to open the User Properties dialog box.
- 3. Enter the username <code>vyopta_svc</code> in the User Name field for the vAnalytics user service account.
- 4. Enter the password in the Password field.
- 5. Select *Administrator* in the Authorization Level drop-down field.
- 6. Click OK to add the user account.
- 7. Log out of the Polycom RMX Manager application and verify that you can successfully log in using the service account credentials.

User Properties	×
	wonta svc
User Name:	vyopia_svc
Password:	******
Authorization Level:	Administrator
Associate with a mac	chine
Common Name (CN):	
	OK Cancel



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12.2 Add a Polycom RMX Connector

To add a Polycom RMX Connector requires the following:

- Access to the FQDN/IP address of the RMX from the vAnalytics Data Collector
- Port 80/443 must be open between the vAnalytics Data Collector and the Polycom RMX
- Credentials for the user service account on the Polycom RMX

Please follow the instructions below to add each RMX instance:

- 1. Select *Polycom RMX* from the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the device. This can include the device type, location, and other unique identifiers.
- 4. Enter the hostname or IP address.
- 5. Enter the username and password for the user service account.
- 6. Click Validate to ensure that the vAnalytics application can connect.
- 7. If the connection to the Polycom RMX device succeeds, click the Save button.



Over the second sec	tor Configuration Wizard		- • ×
Getting Started Auther	tication Validation	Infrastructure Componer	nts Next Steps
Infrastructure Type Name	Polycom RMX Polycom Sandbox RMX		•
Hostname	sample.host.domain	Protocol HTTP	
Username	vyopta	Password ••••••	
	Remember cre	dentials for next component(s)	
Cancel		Validate	Save

Figure 12-2: Polycom RMX Configuration Example

12.3 Polycom RealPresence Collaboration server (RMX) Reference Table

Polycom RealPresence Collaboration server (RMX)		
Version	RMX 8.5 or above	
Device Access	Server IP/FQDN	
User/Service Account	Local account with full Administrator read/write or privileges. Note: unable to use RMX read-only administrator due to limitation with API for CDR access.	
TCP Ports	vAnalytics Data Collector to the RMX device(s) TCP 80/443	



13 Polycom RealPresence Resource Manager (RPRM)

13.1 Verify API Licensing and Set up a Service Account for Polycom RealPresence Resource Manager (RPRM)

Similar to Polycom DMA (see Section 11.1 - Verify API Licensing and Set up a Service Account for Polycom RealPresence Distributed Media Application (DMA)), the Polycom RPRM must have the appropriate API license in order to activate the API for use with external applications. Once the API has been verified or activated, a service account, which must be a local account with administrator credentials, is required. To add and verify the credentials for Polycom RPRM complete the following:

- 1. Open a web browser and navigate to the domain or IP address of the Polycom RPRM.
- 2. Log in as an administrator using your username and password.
- 3. Navigate to the User > Users tab to open up the User Administration Panel.
- 4. Select Add to add the required vAnalytics user service account.
- 5. Enter the Name, User ID, and Password for the service account.
- 6. Select the Associated Roles tab and add the Administrator role.
- 7. Click OK to add the user account.
- 8. Log out of the Polycom RPRM and verify that you can successfully log in using the service account credentials.



Figure 13-1: Polycom RPRM Add User Associated Roles Menu



13.2 Add a Polycom RPRM Connector

To add a Polycom RPRM Connector requires the following:

- Access to the FQDN/IP address of the RPRM from the vAnalytics Data Collector
- Port 8443 must be open between the vAnalytics Data Collector and the Polycom RPRM
- Credentials for the user service account on the Polycom RPRM
- Registered and operating Polycom API License for each RPRM

Please follow the instructions below to add each RPRM instance:

- 1. Select *Polycom RealPresence Resource Manager* from the Infrastructure Type drop-down menu.
- 2. Enter the infrastructure name. This will be the name displayed for the video device in the Configuration Utility and within Vyopta's Applications Management Portal.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the description of the device. This can include the device type, location, and other unique identifiers.
- 4. Enter the hostname or IP address followed by :8443
- 5. Enter the username and password for the user service account.
- 6. Click Validate to ensure that the vAnalytics application can connect.
- 7. If the connection to the Polycom device succeeds, click the Save button.

Vyopta vAnalytics™ Data Colle	ctor Configur	ration Wizard		*
Getting Started Authe	ntication	Validation	Infrastructure Com	ponents Next Steps
Infrastructure Type	Polycom R	ealPresence Resou	urce Manager	-
Name	Polycom RI	PRM		
Description	Polycom Ri	PRM		
Hostname	sample.hos	st.domain	Protocol Immes	
Username	vyopta		Password	•••
		Remember cred	entials for next component(s)	
Cancel			Validate	Save

Figure 13-2: Polycom RPRM Configuration Example



13.3 Polycom RealPresence Resource Manager (RPRM) Reference Table

Polycom RealPresence Resource Manager (RPRM)		
Version	RPRM version 8.2 or above	
Device Access	Server IP/FQDN	
User/Service Account	Local account with full Administrator read/write, device administrator or Operator privileges	
TCP Ports	vAnalytics Data Collector to RPRM TCP 8443	
API License	Note: Requires the RealPresence Platform API license	



14 Vidyo Management Portal

14.1 Enable CDR Access in the Vidyo Management Portal

CDR Access for the vAnalytics Data Collector must be enabled using a Super Admin account as outlined below:

- 1. Open a web browser and navigate to the domain or IP address of the Vidyo Router Super Admin portal.
- 2. Log in with a Super Admin account.
- 3. Select Settings > Maintenance > CDR Access.
- 4. Perform the following to configure the **cdraccess** account for CDR collection:
 - a. Ensure the CDR Collection is *Enabled*.
 - b. Set the Access Password to the cdraccess account.
 - c. Enter the IP address or Hostname of the vAnalytics Data Collector in your environment.
 - d. Verify that the "Allow Delete" is not Enabled (i.e., the checkbox is unchecked).
- 5. Select Save to finish the CDR Account configuration.
- 6. Log out of the Vidyo Management Portal.

🛄 Database System Upgrade 🕕 Sy	ystem Restart CDR Access Audit Logs Status Notify
CDR collection:] Enabled
CDR format:) v2
Allow CDR Database Access Cor	ntrol
Username:	cdraccess
Access Password:	
IP or Hostname:	10.10.123
Allow Delete:	Enabled
CDR Export/Purge	Save

Figure 14-1: CDR Account Configuration Settings



14.2 Configure a User Account in the Vidyo Management Portal

- 1. Navigate to the Standard Vidyo Admin Portal
- 2. Log in with an Admin Account
- 3. Under *Manage Users* select *Add User* and fill in the following information:
 - a. Select Admin for User Type.
 - b. Enter in *cdraccess* for the *User Name*, this must match the DB service account username.
 - c. Enter in the same *Password* used above for the DB service account password above.
 - d. Enter in cdraccess for the *Display Name*.
 - e. The E-mail Address must be entered, but does not need to be a live email address. It is recommended *cdraccess@domain.com* be used.
 - f. The Extension must also be entered, but does not need to follow any dial-plan. It is recommended *1000* or *9999* be used.
 - g. All other fields can be set to the default value.
 - h. Verify that the Status and Allowed to log in to user portal are both *Enabled*.
- 4. Once the User has been created, select Save to finish the User Account configuration.
- 5. Log out of the Vidyo Admin Portal.

14.3 Verify that API Access is enabled

Please ensure that the following licenses are enabled for Vidyo. The API licenses (User & Admin) feature keys are required to support third-party software integration. These are not enabled by default and you will have to reach out to Vidyo to enable them.

- 1. Log into the Vidyo Super Portal and go to Settings > System License.
- 2. Scroll down to Admin API Access on the System License page.
- 3. Confirm that the Admin API is enabled (as shown below).

System License (Lines License Model)	
Feature	License
User API Access	Enable
Admin API Access	Enable
Encryption	None
MultiTenant	Disable
Allow UC Clients	Disable

Figure 14-2: Verifying if Admin and User API Access is enabled



14.4 Add a Vidyo Management Portal Connector

To add a Vidyo Management Portal Connector requires the following:

- Access to the Vidyo Management Portal and database from the vAnalytics Data Collector
- Credentials for the cdraccess account on the Vidyo Management Portal

Please follow the instructions below to add the video appliance:

- 1. Select *Vidyo Router* in the Infrastructure Type drop-down menu.
- 2. Enter a suitable name and description into the appropriate fields.

Note: We recommend using hostname rather than IP as IP addresses are subject to change. It is also helpful to name the infrastructure in a 'friendly' or easily understood way.

- 3. Enter the Vidyo Management Portal IP address or Hostname.
- 4. Enter cdraccess for the Username and the appropriate Password for the Account.
- 5. Click Validate to ensure that the vAnalytics application can connect.
- 6. If the connection to the video component succeeded, click the Save button.

Getting Started	Auther	tication	Validation	Infrastru	cture	Components	Next Steps
Infrastruct	ture Type	Vidyo Route	er.				
	Name	Vidyo					
De	scription						
н	ostname	12.34.56.78		Protocol	HTTP]	
U	sername	vyoptavidyo	prod	Password	••••		
			Remember crea	fentials for next o	ompone	ent(s)	
Database Server H / IP Address	Hostname	12.34.56.78			Port	leave blank if d	efault
Instan	ce Name			Database	Name	leave blank if d	efault
U	sername	vyoptavidyo	prod	Passv	vord	******	
		1-2-2 U	-		222222		10

Figure 14-3: Vidyo Infrastructure Information Example



14.5 Vidyo Management Portal Reference Table

VIDYO Management Portal		
Version	Vidyo version 3.1 or above	
Device Access	Server IP/FQDN of Vidyo Management Portal	
User/Service Account	Local read-only account named 'cdraccess'	
TCP Ports	vAnalytics Data Collector to Vidyo Management Portal TCP 443 & 3306	



15 Zoom Server

15.1 Create API Key and API Secret

To create an API Key and API secret for Zoom, login as an administrator and perform the following:

- 1. Login to Zoom using an existing administrator account (must be an admin account).
- 2. Select 'Zoom for Developers' under the 'Advanced' heading.
- 3. In the new window that opens (Zoom for Developers), select the **REST APIs** button.
- 4. Select the 'Credential' tab.

Note: From the 'Credential' tab, you can verify whether the Zoom API Key is enabled. If you see 'Disable API Integration', proceed using the API credentials already generated.



5. From the credential tab, click [Enable API Integration].

Figure 15-1: Enabling API Integration for Zoom

That's it! You should now have your API Key and API Secret, with which Zoom can be added to the vAnalytics Data Collector.

Note: Make sure to record your API Key and API Secret as they will be used to connect Zoom via API.

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15.2 Add a Zoom Connector

To add a Zoom Connector requires the following:

- Access to your organization's Zoom API URL
- Credentials for your API Key and API Secret
- Vyopta Data Collector version 3.4.1 or higher

Please follow the instructions below to add your Zoom instance to Data Collection:

- 1. Select *Zoom Server* in the Infrastructure Type drop-down menu.
- 2. Enter the Zoom name and description as desired.
- 3. Next, enter the default API URL and make sure SSL is checked.
- 4. Click Validate and Next if the API URL passes validation.

Note: **The default Zoom API URL is "api.zoom.us", however this** should reflect the URL of the Zoom infrastructure and **may vary for on-premise deployments**..

- 5. After that, enter the API Key and API Secret.
- 6. Click Validate to ensure that the vAnalytics application can connect.
- 7. If the connection succeeded, click the Save button.

Vyopta vAnalytics [™]	Data Collector Conf	iguration Wizard		
Getting Started	Authentication	Validation	Infrastructure Compone	ents Next Steps
		Adding Zoom	Server	
	API Key: key			
	API Secret: ••	••••		
< Back			Validate	Add

Figure 15-2: Adding a Zoom Server



Note: Enabling Zoom Rooms for data collection may require adjustments in the Zoom Room name and display name used by your organization. **To enable Zoom Room tracking and matching, please note that all Zoom Room names and display names must be identical.** Additionally, all Room Names must be unique.

This page lets your Account S	you override the settings for your room at the highest ettings page. Additional information is available in the	evel in the hierarchy. To globally change the settings to Zoom Rooms location hierarchy topic	all Zoom Rooms, go to
loom Settings	Meeting Settings Display Settings Noti	fication	
Room Profile	Room Profile		
Room Setup	Room Avatar This is what other people see wh	en they join	
Devices	ration		
	Any problem? Click here to send prob	fem to us. Change	
	Display Name	Zoom Room 1	Œ
	Room Name		

Figure 15-3: Setting up matching Zoom Room name and display name

15.3 Zoom Server Reference Table

Zoom Server	
Data Collector	Vyopta Data Collector 3.4.1 or higher
User/Service Account	Zoom admin account with full Administrator privileges. Please note that admin rights are required to generate API key and shared secret.
TCP Ports	vAnalytics Data Collector to the Zoom Server TCP 443 (https)



16 Saving the vAnalytics[™] Configuration and Starting the vAnalytics[™] Service

16.1 Saving the vAnalytics[™] Configuration and Starting the vAnalytics[™] Service

After you have successfully added all of your video devices into the vAnalytics Configuration Utility, click the Next button and you will see the wizard starting the vAnalytics Service.



Figure 16-1: Vyopta vAnalytics Configuration Wizard

Congratulations! You have now installed and configured Vyopta's vAnalytics Data Collector within your video collaboration environment. It will take approximately 2 days to populate historical data in vAnalytics™, but you should be able to start seeing real-time data immediately, so go ahead and log in at <u>http://vanalytics.vyopta.com</u> now! If you have any questions or require assistance, please contact support@vyopta.com.



16.2 Troubleshooting a Failed Connection

If you receive an error while adding a video infrastructure device, there are a number of components that could be the result of the issue. Depending on your IT Organization, this typically requires involvement from your Network Administrator. There are, however, steps that you can use to troubleshoot your network connection.

Attempting to connect to the video device from a web browser will determine if the issue is with the connection to the infrastructure, a problem with the account on the video device, or information entered while adding the video device to the vAnalytics Configuration Utility. Please try the following steps to resolve these issues:

- 1. Open a web browser such as Chrome, Firefox, or Internet Explorer.
- 2. In your browser, type in the host name or IP address of the video device, then press enter. Wait for the webpage to load.
- 3. If you are unable to connect to the video device through a web browser, please verify that you are using the proper protocol (HTTP or HTTPS).
- 4. If you are able to connect to the video device through a web browser, verify that the web protocol matches the protocol used while adding the infrastructure.
- 5. Log into the video device using the configured username and password on the video device that was set up as part of the configuration process.
- 6. If you are unable to log in, ensure that you have the proper credentials for the account on the video device.
- 7. If you are able to log into the video device with the account credentials, ensure that the account is properly configured on the device.

If you continue to have issues connecting to the video device, you may have a network configuration issue or network proxy in place that needs to be addressed in the vAnalytics configuration. Please reach out to your network administrator to troubleshoot the network connection or contact support@vyopta.com for further assistance.



17 SolarWinds Integration

The Vyopta SolarWinds Integration allows you to monitor video conferences in coordination with your SolarWinds environment by enabling single click access to the network interface from video endpoints in Vyopta vAnalytics. This in turn enables faster resolutions to video issues by equipping UC managers and video team engineers with the ability to jump directly from real-time video issues to underlying network data. **Please note that there must be at least one Cisco switch in your environment to proceed.**

17.1 Requirements

To begin setup for the SolarWinds integration, please have:

- Credentials for a local SolarWinds account with Read Only Access (without account restrictions).
- The IP of the SolarWinds server:8787

Please also note the following prerequisites:

- 1. Interfaces on Cisco switches must be enabled.
- 2. CDP must be enabled on switches and endpoints.
- 3. Endpoint Monitor Software version must be version 3.1.3.15 or higher.



Figure 17-1: The Endpoint Monitor Version as seen in Status tab

Note: To verify Endpoint Monitor version, log into <u>apps.vyopta.com</u> and check Admin \rightarrow Status. If you need to upgrade Endpoint Monitor, or do not have Endpoint Monitor, please contact <u>support@vyopta.com</u> for assistance.

4. Endpoint Monitor service should have the **vControl Config** left blank



User Information	1
Username*	admin
Name *	Administrator
Phone Number	
Token	Generate New Token
	Note: User password must have at least 8 characters with upper/lower case, numeric and special characters.
Password	(Leave it blank if no change)
	✓ Administrator
Bolog	Professional
Roles	vAnalytics Viewer
	Service Role
vControl Config	 (Leave it blank to use Default)

Figure 17-2: The Endpoint Monitor Version as seen in Status tab

17.2 Configuration

Configuring and enabling the SolarWinds integration can be accomplished by doing the following:

- 1. Log into apps.vyopta.com with an account provisioned for Administrator access
- 2. Navigate to vControl → vControl Configs → Default Config → Config Item
- 3. Enter the SolarWinds Server URL/IP:8787, Username, and Password as indicated below

Control Configs			
Control Configs		Default Config	
Default Config Advance Educator Full Alfredo Andrew S vControl Config	l	Name * Description	Default Config
Anthony Anthony backup Config	π	Config Item	Setting
BIOMET		Hide layout tab	
Chevron Layout		Solarwinds Server URL	http://X.X.X.X:8787
Client Acano		Solarwinds API Username	admin
Client Yahoo		Solarwinds API Password	•••••

Figure 17-3: View of vControl configuration

Note: For the SolarWinds URL, it should have the default SolarWinds Information Service port in the url(SWIS): 8787



17.3 Verification

The integration should now be configured and should sync within a few hours. Once it has, it can be verified by logging into vAnalytics Realtime and navigating to the **Endpoints** tab. From there, you should be able to select a SolarWinds connected device by clicking on it. Then you can verify that the SolarWinds icon is shown in the Endpoint Details.

Codec Calls		
 Available 		
Hardware Details		Softwa
Model	C40	Firmw
Serial Number	PB0522610	CUCM
Network Details		User D
IP Address	✓ 1 .123.45.678	Tags
VLAN	20	Locat
Duplex	Full	Price
Primary Mgmt	123.45.6.7	

Figure 17-4: SolarWinds icons in Endpoint Details of vAnalytics Realtime-> Endpoints tab

The icon will only be visible for SolarWinds connected devices from the Endpoint Details tab. However, if the SolarWinds icon \checkmark does not appear by the following day, reach out to support@vyopta.com for further assistance. If you can see the SolarWinds logo, the integration is now ready to go!